SPECIAL TAPE ISSUE •

TAPING AND THE LAW . BARGAIN TAPES . TAPE'S FUTURE

EQUIPMENT TEST REPORTS

- B&W DM10 Speaker System
- Empire ICS/400 Phono Cartridge
- Micro Seiki MB-38 Turntable
- Phase Linear DRS 900 Power Amplifier

FIRST TEST

Technics SV-P100 Digital Cassette Recorder

DISC SPECIALS

Neil Young 😐 George Jones 😐 Tim Hardin John Entwistle 🎍 Ringo Starr 🎐 Frank Sinatra

PURCELL: Choral Works MOZART: Four symphony discs WAGNER: Philips' New *Ring* SCHOENBERG: *Erwartung* BRAHMS: Piano Trios LISZT: Late Piano Music



торованиее ил 01052 25 мезенан ок 260156 JKE 0055моэт 7411 N0V83 Hear perfect reproduction from the lowest ranges of the bassoon...



Philadelphia Oschestra phono by Bon Hunstein for Columbia Records.

/ide Fidelity Sound h tape that makes it possible.

major technological advances. (The kind you expect from Sony.) First, ultra-fine magnetic particles that are significantly smaller than any other conventional Type II tape particles. And a unique orientation process that aligns the particles so they are pointed in the same direction. (No mean feat when you consider there are some 500,000,000,000 magnetic particles in one <u>millimeter</u> of tape.) And third, a never-before-manufactured binder and process to assure a uniform, high density of particles.

If you want to get technical about it, here are the incredible specifications: Retentivity and Squareness higher than any other high-bias tape. Retentivity of 1800 Gauss, and that means greater Maximum Output Level and dynamic range. Squareness of 93%, an astounding figure, for better recording efficiency. (When you consider that no other tape of this type has ever reached even <u>90%</u>, you'll realize just how phenomenal UCX-Ss <u>93%</u> is.)

Of course, the real test of ŬCX-S is not a question of numbers or percentages. It comes when you lean back, close your eyes and listen. You'll hear subtleties in the music you could only hear until now in the concert hall. You'll hear <u>every</u> instrument in the orchestra. You'll hear more than you've ever heard on a high-bias tape. You'll hear it on UCX-S, with Wide Fidelity Sound.

SONY. © 1982 Sony Tape Sales Co., a Div of Sony Corp of Amerika Sony is a trademark of Sony Corp CIRCLE NO. 31 ON READER SERVICE CARD Hear booming lettle drums with virtually no distortion.

Hear quiet flute passages free of hiss.

Sony introduces W and UCX-S, the breakthroug



Sony's UCX-S is a revolutionary new audio cassette tape. A high-bias tape with a wider dynamic range than any other tape of its type. So wide, it actually <u>expands</u> the sound you can hear. (With minimal distortion, hiss or print-through.) That's why we call it Wide Fidelity Sound.

With new UCX-S, you can record the very high notes — as well as the very low. Either way, you'll hear everything with a clarity you've never heard before on a highbias tape. And you can also record at higher volume levels, so you can record and hear the very soft sounds you lost before in background noise.

How did Sony do it? With three



Sony is about to change your idea of what you can expect from an audio tape.

Stereo Review BULLETIN

Edited by William Livingstone

• OIL AND MUSIC MIX. Texaco, Exxon, and other oil companies have been so generous in supporting classical music on PBS that wags sometimes refer to it as the Petroleum Broadcasting System. Now oil companies are subsidizing the release of records. The new digital recording of Tristan und Isolde issued at the end of 1981 was presented by London Records and Amoco Oil and had an Amoco logo on the cover. The state of Veracruz in Mexico is now investing some of its oil income in recordings of standard classics played by the Orquesta Sinfónica de Xalapa. The Moss Music Group has some of the tapes under consideration for release this year in the Vox Cum Laude line. Vinyl is, after all, a petroleum product.

• EARTH, WIND AND FIRE has received CBS International's Crystal Globe Award for sales of more than 5 million records outside the United States. This is the eleventh such award the company has given. Previous winners are Santana, Simon and Garfunkel, Paul Simon, Ray Conniff, Andy Williams, Johnny Mathis, Bob Dylan, Neil Diamond, Billy Joel, and Julio Iglesias. We are betting on Roberto Carlos to be the next Crystal Globe recipient.

ACOUSTIC RESEARCH'S "ROBOT LISTENER" compensates for aberrations in room acoustics and in speakers by digitally analyzing and altering the output of an audio system so that the response is acoustically flat. According to AR, the new unit can notch out a single frequency with 1/50th-octave accuracy or apply a gentle slope, as correction may require. Adjustment is made while the stereo audio signal is in digital form, using a high-speed, sixteen-bit computer-on-a-chip that runs a program developed by AR. Other adjustments that can be programmed into the device include distortion reduction. Consumer and professional versions of the unit are planned.

• GERMAN TOP BANANA PLAYS THIRD PIANO. If Prince Charles can be on Columbia Records, there's no reason why West German Chancellor Helmut Schmidt can't record for EMI. Just before Christmas Schmidt flew to London, and in EMI's Abbey Road studios he played the third piano part in a recording of Mozart's Concerto for Three Pianos in F Major. Christoph Eschenbach conducted the London Philharmonic from the keyboard of the first piano, and Justin Frantz was on second. Schmidt, who said he found it "thrilling," is donating his fee to charity. Angel Records hopes to release the album here this year.

• ENRICO MACIAS' North American tour this month is being sponsored by the manufacturers of Sasson jeans! Like the pop singing star Macias, Sasson's founder Paul Guez was born in North Africa and emigrated to France. This is his first venture into promoting concerts. The tour will begin in New York with concerts at Madison Square Garden on March 6 and 7. Other cities included are Washington, D.C., Chicago, Los Angeles, Montreal, and Mexico City. Macias currently records for the French label Trema, which will release his next album early in 1982-and will then probably come out with a line of designer jeans.

• PAVAROTTI'S "O HOLY NIGHT" GOES GOLD. After coining a great deal of money for London Records, the tenor Luciano Pavarotti has won a gold record from the Recording Industry Association of America, which has certified sales of more than 500,000 copies of his album of sacred music. Hot on his heels is rival tenor Placido Domingo whose CBS album "Perhaps Love" with John Denver is turning gold as we go to press.

• IN 1981, 7,717 NEW STEREO LISTINGS were added to the Schwann catalogs, down from 8,062 in 1980. Of the 1981 new listings 2,873 were classical and 4,604 were non-classical LPs and tapes. Nudging out Beethoven and Mozart, Bach was the composer with most new records, and with forty-six (!) new listings Herbert von Karajan displaced Neville Marriner, 1980's classical artist with the most new recordings. The pop act with most new listings was the "rock" band the Residents with eight.



Five Reasons You Should Step Up to Our New Realistic Digital Receiver

1. Digital Synthesized Tuning System

Tuning takes just a touch of the feather-action bar to go up or down to the exact center of every AM or FM channel. A search feature tunes up or down automatically, stopping on the next station. No pointer, no dial, no tuning meter — there's no need for them! Instead, a preci-



Easy-to-Read Digital Display Shows The Exact Frequency You've Tuned

sion quartz crystal, like the ones used in computers, locks in each station. The STA-2290 can't drift or be mistuned. You get pure music, *not* distortion.

2. Computer Control

Up to 12 stations — six AM and six FM — can be program-

med into the microprocessorcontrolled memory for instant, pushbutton recall. Memorized frequencies are automatically protected for up to an hour in case of power loss. And with dual-gate MOSFET tuning and CMOS LSI frequency synthesis, you get superb FM stereo listening.



Detented Bass, Treble and Midrange Tone Controls Tailor Sound Perfectly

3. Clean and Powerful

There's plenty of power to reproduce the most demanding music without distortion — even through two pairs of speakers! The 90watt amplifier delivers a wide dynamic range so the depth and "live" quality of your music is recreated with stunning clarity. Protection circuitry prevents damage from overload or thermal problems.

4. Human Engineering

All controls and indicators are designed for convenience and ease of operation. You get bright color-coded LED function indicators, LED signal strength and power meters. And what versatility! — you can add two tape decks with monitoring and dubbing capabilities, two turntables and an aux source.



24-LED Power Indicators Read 0-1.5 Or 0-150 Watts — Help Prevent Overdriving

5. Priced Right

The computerized STA-2290 brings music to your ears for only \$599.95. And it's *designed*, *engineered* and *built* by us—the company that also builds the world's best-selling computer line—TRS-80.®



Stereo Review (ISSN 0039-1220) MARCH 1982 • VOLUME 47 • NUMBER 3

Ge Equipment -

NEW PRODUCTS Roundup of the latest audio equipment and accessories		
AUDIO NEWS The Digital-audio Age Begins		
AUDIO QUESTIONS AND ANSWERS Digital Readiness, Long/Short Leads, MM/MC Damage		
CAR STEREO The Microcassettes Are Coming!	Ivan Berger	
TAPE TALK The Testing of Tape Recorders		
TECHNICAL TALK Consumer Reports' Speaker Ratings	JULIAN D. HIRSCH	
EQUIPMENT TEST REPORTS Laboratory test results on the Phase Linear DRS 900 power amplifier, Technics SV-P100 digital cassette recorder, B&W DM10 speaker system, Empire ICS/400 phono cartridge, and Micro-Seiki MB-38 turntable	JULIAN D. HIRSCH	34
TAPE FUTURES Tape manufacturers are gearing up for another step forward		
BARGAIN TAPES You can't go wrong—if you stick with the name brands		
TAPING AND THE LAW The Betamax home-TV-recording case could have audio repercussions		



BEST RECORDINGS OF THE MONTH	
Purcell: Choral Works	Mark Murphy: "Bop for Kerouac"
Liszt: Late Piano Music	Wagner: The New Philips Ring
Martin Briley: "Fear of the Unknown"96John Entwistle: "Too Late the Hero"102Frank Sinatra: "She Shot Me Down"104Tim Hardin: "Memorial Album"106	94Ringo Starr: "Stop and Smell the Roses"

The Regulars -

BULLETIN	WILLIAM LIVINGSTONE 1
SPEAKING OF MUSIC	WILLIAM ANDERSON A
LETTERS TO THE EDITOR	C
GOING ON RECORD	
ADVERTISERS' INDEX	JAMES GOODFRIEND
	110

COVER: Design by Borys Patchowsky; photo by Bruce Pendleton. See page 62.

COPYRIGHT © 1982 BY ZIFF-DAVIS PUBLISHING COMPANY. All rights reserved. Stereo Review, March 1982, Volume 47, Number 3. Published monthly by Ziff-Davis Publishing Company. Editorial and Executive Offices at One Park Avenue, New York, New York 10016; Telephone: 212 725-3300. Richard P. Friese, President; Furman Hebb, Executive Vice President; Selwyn Taubman, Treasurer; Bertram A. Abrams. Secretary. Also publishers of Backpacker, Boating; Car and Driver, Cycle. Fly Fisherman, Flying. Popular Electronics, Popular Photography, Psychology Today, Skiing, Stereo Directory, and Tape Recording & Buying Guide. One-year subscription rate for the United States and its possessions, 59.98; Carada, 510.98. All other countries, one-year subscription rate \$14.98, cash orders only, payable in U.S. currency. Second-class postage paid at New York, New York 10016 and at additional mailing offices. Authorized as second-class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash. POSTMASTER: Forms 3579 and address changes should be sent to Stereo Review, Circulation Department, P.O. Box 2771, Boulder, Colorado 80302. SUBSCRIPTION SERVICE: All subscription correspondence should be addressed to Stereo Review, Circulation Department, P.O. Box 2771, Boulder, Colorado 80302. Please allow at least eight weeks for change of address. Include old address as well as new-enclosing if possible an address label from a recent issue. PERMISSIONS: Material in this publication may not be reproduced in any form without permission. Requests for permission should be directed to John Babcock, Rights and Permissions, Ziff-Davis Publishing Company, One Park Avenae, New York, New York 10016.

Speaking of Music...



THE NEXT BIG THINGS

ARCH issues of magazines are generally put together from mid-December to mid-January, which is why they often have a forward-looking "new year" aspect. This one certainly does, and it is a particular pleasure, after the past year's cries, alarums, and pervasive nay-saying, to contemplate an impressive little catalog of imminent audio delights that promise to lift us out of the doldrums before 1982 is over.

There is, first of all, the good news that the digital-audio age has "officially" begun following the Audio Engineering Society's drafting of standards for professional digital audio equipment (see "Audio News," page 16). Enormous technical (and many proprietary) complications had to be overcome, but their resolution means that most of the hard problems are now out of the way and the industry can move ahead with professional (recording) and consumer (playback) hardware without falling witlessly into another War of Incompatibility.

There is good news on the videodisc front as well, for at the Las Vegas Consumer Electronics Show in January Pioneer Videodisc was proudly screening excerpts from three new musical programs planned for early release: Peter Grimes (Jon Vickers), Tales of Hoffmann (Placido Domingo), and an evening with Ray Charles. All three will receive the benefits of the new CX system of sound encoding, so if you route the audio through your hi-fi system you are in for a treat (you've certainly never heard the like on broadcast TV). This suggests that the rights-and-permissions logjam that has been holding up a lot of video software is at last beginning to loosen-and not a moment too soon.

Even greater sound delights are available from the Technics SV-P100 digital cassette recorder tested for this issue (page 40). Home digital recording has been possible previously using the "component" approach, but this is the first *integrated* allin-one-breadbox unit to reach our test lab; it will surely not be the last. The future promises significant advances on the analog recording front as well, some of them in the equipment area, but more in tape formulation and manufacture. As Ralph Hodges makes clear in his examination of "Tape Futures" (page 60), industry ingenuity in the field is not nearly exhausted, and tapes already on the drawing boards, so to speak, will easily surpass the performance of last year's best.

It is, of course, advances in metal-tape technology that have made it possible for the cunning little "microcassette" format to move so rapidly into hi-fi precincts. [A quibble: I would be pleased if the industry would move closer to standard English usage in naming the format before this "micro" business goes too far. The better nomenclature is "minicassette" (as in "miniature," a small version of something larger), not "microcassette" (we use "micro," as in "microscopic" to mean something very small indeed).] Matsushita (see page 24) has only recently unveiled a whole line of these teeny-tiny units, the first examples of what seems destined to be the standard format for car stereo if not (quite yet) for the home. And once established on wheels it will doubtless go on to take over in the "personal cassette" field as well, not so much for hardware as for software reasons: these little efforts are only one-fifth the size of standard cassettes.

And what of *musical* concerns for the future? Well, the Next Big Thing in pop music is still struggling to be born, but I learn from a CBS informant that the new Great Performances line of basic-repertoire works sold to the tune of \$1.2 million in its first six months. What the baby-boomers want the baby-boomers will get.

Stereo Review

PUBLISHER

J. SCOTT BRIGGS EDITOR IN CHIEF WILLIAM ANDERSON EXECUTIVE EDITOR WILLIAM LIVINGSTONE MANAGING EDITOR LOUISE GOOCH BOUNDAS ART DIRECTOR BORYS PATCHOWSKY

TECHNICAL DIRECTOR LARRY KLEIN ASSOCIATE TECHNICAL EDITORS DAVID RANADA, GORDON SELL

MUSIC EDITOR JAMES GOODFRIEND POPULAR MUSIC EDITOR PAULETTE WEISS SPECIAL PROJECTS EDITOR STEVE SIMELS

ASSOCIATE EDITOR DAVID STEIN ASSISTANT EDITOR, RESEARCH RICHARD SARBIN EDITORIAL ASSISTANT BARBARA AIKEN

LONDON EDITOR HENRY PLEASANTS

CONTRIBUTING EDITORS

CHRIS ALBERTSON IRVING KOLODIN PAUL KRESH **IRV COHN** STODDARD LINCOLN NOEL COPPAGE RICHARD FREED MARK PEEL LINCOLN PERRY PHYL GARLAND PETER REILLY ROBERT GREENE EBET ROBERTS DAVID HALL JULIAN D. HIRSCH CHARLES RODRIGUES ERIC SALZMAN GEORGE JELLINEK CRAIG STARK IGOR KIPNIS JOEL VANCE

ASSOCIATE PUBLISHER ROBERT JOHN UR, SR.

ASSISTANT TO THE PUBLISHER JEAN ANDERSON

Editorial and Executive Offices: 212 725-3500 Ziff-Davis Publishing Company One Park Avenue, New York, New York 10018 National Adventising Manager: Richard J. Halpern Eastern Advertising Representative: Charles L. P. Watson

Midwestern Office, The Pattis Group: 312 879-1100 4761 West Touhy Ave., Lincolnwood, Illinois 80646 Arnold S. Hoffman, David W. Palcek

Western Office: 213 387-2100 3460 Wilshire Boulevard Los Angeles, Californis 90010 Western Advertising Menager: Marge Doherty-Wilhite Japan: Iwai Trading Co., Ltd. J. S. Yagi 603 Ginza Sky Helghts Building 18-13, Ginza 7-Chome Chuo-Ku, Tokyo, Japan 104 Telephone: (03) 588-0185, 545-3908

Circulation Office P.O. Box 2771, Boulder, Colorado 80302

EDITORIAL CONTRIBUTIONS must be accompanied by return postage and will be handled with reasonable care; however, publisher assumes no responsibility for the return or safety of art work, photography, or manuscripts.

Member Audit Bureau of Circulations





ZIFF-DAVIS PUBLISHING COMPANY

President: Richard P. Friese President, Consumer Magazine Division: Albert S. Traina Executive Vice President: Furman Hebb Senior Vice Presidents: Phillip T. Hetternan, Sidney Holtz, Edward D. Muhifeld, Phillp Sine Vice Presidents: Robert Bavier, Beird Davis, George Morrissey Tressurer: Selwyn Taubman Secretary: Bertram A. Abrams

OUR AMP DOESN'T PUT THE SQUEEZE ON YOUR MUSIC.

Most amplifiers just can't handle the highs and lows of today's sound. They "clip" it, distorting

They "clip" it, distorting the peaks and valleys and leaving you without the full musical experience.

But that's not the case at Phase Linear. Our DRS 900 and DRS 400 amplifiers and our DRS 250 integrated amplifier have all the power and headroom necessary to deliver the full dynamic range.

Encoded CX and dbx records, digital and direct discs, ½ speed mastered and future PCM discs. No matter the source, our amplifiers are designed to deliver sound exactly as



Today's source materials require an amplifier with adequate power and headroom.

the sound engineer recorded it. A full musical experience. Which is something we feel we do better than anyone else.

But don't listen to us, listen to our amps. The DRS 900, with up to 900 watts into 8 ohms; the DRS 400, with up to 400 watts into 8 ohms; and the DRS 250, with up to 400 watts into 8 ohms.

Take your favorite record to your nearest Phase Linear dealer and compare.

Listen to the music come out of the flatlands of sound, up to Phase Linear.





LETTERS TO THE EDITOR

Camelot and Politics

• As a long-time reader and subscriber to STEREO REVIEW, I have always enjoyed reading the Editor's monthly columns of informative chat. December's and January's efforts, however, merit a letter. I am already enjoying the Christmas album recommendations, having had good luck with a mail-order service from Minneapolis. Mr. Anderson's January exploration of "Camelot" and its implications and the "beaut" (as the Aussies would term it) light putdown of Mailer were right on the mark. I'd like to suggest that in addition to myth, *romance* is also painfully scarce these dreary days.

JOHN G. MACLEOD Orchard Lake, Mich.

• My January STEREO REVIEW fresh in hand and William Anderson's perceptive editorial on "Refurbishing Camelot" fresh in mind: Bravo! Well said. We do need mythic content in life—to raise us, to inspire us, to link us to the past and make us brave for the future. How pitiful are the people who have no pride, who tear down because to build is hard, whose life's blood is thinned by thoughtless criticism of others and blank misunderstanding of the power of symbols. To be great, we must feel great.

TOM BUTTS Playa del Rey, Calif.

• Much of January's editorial, "Refurbishing Camelot," is devoted to a highly charged meditation on the myths of politics, and to this I wish to take exception.

The myths of politics have been, by and large, historically disastrous. There is the myth of the proletariat, which upholds, and masks, a brutal, repressive autocracy in the Soviet Union, and there was the myth of the Aryan superman, which contributed to the slaughter of some ten million Europeans during World War II. The modern mind evidently does not often enough "deliberately reject" its secular myths; indeed, what is needed is precisely the sort of vigilance toward myth in political contexts that is to be found in the American tradition of "debunking."

To be more specific: Nancy Reagan's chi-

na cannot be conflated with the pageantry of the British Royal Wedding. The reference to the identity in Arthurian romance "between the health of the king and the health of the kingdom" has no bearing in the American political context. Even granting the perennial "royalism" of the American mind, we could never give assent (consciously or unconsciously) to such a mythic identification. In American mythology, the health of the nation proceeds from the nation, and the Reagan administration has been anxious to affirm this principle in its own rhetoric.

JAMES DI LORETO New Haven, Conn.

The Editor replies: It is a compliment to its power that the word "myth" has attracted the adulterators of language, each bent on hitching some little ideological wagon of his own to this inexhaustible source of psychic energy. And so we have "secular" myth, "political" myth, the "American" myth, and the assorted myths of the Proletariat, the Common Man, and the Superman. But they are not myths at all, only mischievous demagogic fictions addressed to those looking not for answers but an end to questions.

There are those who would like to shy a rock at Nancy Reagan in hopes of hitting her husband. The impulse has a long, if not particularly honorable, tradition: older readers will remember the Eleanor stories-and, indeed, the notorious "Eleanor Clubs"-of the Thirties and Forties. I, on the other hand, would like to persuade Americans to bone up on the Arthurian legend(s), read James George Fraser (The Golden Bough) and Joseph Campbell, and study the Good Book so that they can, among other things, see the mythic element in the White House china, understand why we call George Washington the Father of His Country, and know why this nation was racked by paroxysms of grief and fear following the assassinations of Abraham Lincoln and John Kennedy. To amend reader Di Loreto's last sentence, the health of the nation proceeds from its understanding of itself; myth, not politics, is the key to that, and it is a "conflation" devoutly to be wished.

"Multiple-mike Mono"

• I am compelled to respond to Maron Horonzak's letter in the January issue. The stock "attack" phrases Mr. Horonzak uses really have no application here. Of course, I know that he is wrong, but I know this only from my twenty years of experience making recordings of all types-and learning my craft from experiments both successful and unsuccessful. If a producer turns out a record so closely miked that the sound of each instrument of the orchestra is contained only in the output of its own private mike, then that would be "multiple-mike mono." I guess Mr. Horonzak didn't read the part of my article concerned with the "large blended picture"-or the part about "listening with one's eyes.'

I cannot be held responsible for the misuse of multiple miking any more than I would be justified in attacking the whole technique of minimal miking just because I can cite a few examples of its use in which the producer was not competent at his craft.

ANDREW KAZDIN Jamaica Estates, N.Y.

• Debate over the relative merits of various stereo microphone techniques will probably go on forever. The ability to make A-B comparisons between simultaneous stereo recordings using different miking setups is a luxury record producers are seldom if ever afforded. When such comparisons are made, they may not indicate any hard and fast rules; they may even suggest that more than one miking technique can produce good results (see Carl Ceoen's tests reported in the January 1972 Journal of the Audio Engineering Society).

Some "purists" consider their approach superior on theoretical as well as empirical grounds, maintaining that use of more than a single mike per channel invariably distorts the signal, causing fuzziness of the stereo image and poor localization due to the same sound's arriving at different times and the resulting disturbance of the natural relation between an impulse and its reverberation. Even ambiance information mixed into the primary stereo signal from distant mikes should be avoided, they say, because ambiance may be of largely random phase, which is just another way of saying that the effect on the primary signal is unpredictable.

Whether or not these points are entirely valid, it is good to be aware that such forms of distortion do exist, however subtle their effect may be in a particular recording session. But purists also make a mistake if they overlook the phase anomalies that may occur naturally at any given point due to room nodes; most recordings are made in less than ideal acoustic settings, as Andrew Kazdin knows very well. Also, purists have perhaps put too much emphasis on localization, as though the quality of a music recording could be characterized solely in terms of this one feature.

> DOUG POMEROY Brooklyn, N.Y.

David Ranada replies: I agree that some "purists" go too far in their theoretical jus-

(Continued on page 8)

No stereo system is better than its first 3/10 ounce!

No matter how much you spend on your record playing system, it can't be better than its first component: the phono cartridge. Because, unless the cartridge tracks the groove faultlessly, and precisely reproduces all the recorded sound, no amount of electronic wizardry can make up for its faults.

Which is why you'd do well to start your system with an Audio-Technica Vector-Aligned[™] stereo phono cartridge. Constructed with the same unique geometry as the cutting head which engraves every stereo groove, A-T cartridges are outstanding for wide range, low distortion,



Model AT155LC \$225. Other models from \$40 to \$275.

excellent tracking, and superb stereo separation.

There is an Audio-Technica model to match every tone arm and every budget. And each meets our high standards of uniformity and quality...unsurpassed in the industry.

Every great stereo system can use a little Audio-Technica at the start. Insist on nothing less. At leading high fidelity stores or write for our catalog today. AUDIO-TECHNICA U.S., INC. 1221 Commerce Drive • Hirsch-Houck Labs Test Report Steres Review. Sept. 1981

Clearly. the Audio-Technica AT155LC excels in just about every area of cartridge performance, and it came as no surprise to find that it was as silky smooth and "forgettable" when playing music as its measurements would suggest. We would have difficulty describing the "sound" of the cartridge, since it contributes so little of itself to the final sonic quality. Good records often sound superb when played with the

Write today for a copy of the complete test report and descriptive literature.



tifications of their favorite mike technique. Advocates of the Blumlein system in particular often give overemphasis to localization. In a good hall, such as Boston's Symphony Hall, precise subjective localization of instruments is difficult with one's eyes closed even sitting close to the stage. Also, purists who adore phase coherence above all else seem to forget that a multi-miked, pan-potted, "multiple-mono" recording is naturally the most phase-coherent type of program imaginable, the only differences between channels being in intensity. (The Blumlein coincident-microphone system actually gives a 180-degree phase shift to any sound hitting the microphones from the rear.) Personally, I recommend no particular "ideal" mike technique. I only require that the end result sound plausibly realistic—that the "fidelity" be present in hi-fi.

List Price

• I do believe that in inflationary times we must all learn to accept certain inconveniences and uncertainties, but offering a product to the public while refusing to put a price tag on it is ludicrous. The "no list price" policy of CBS Records reflects a total lack of concern for those of us who must buy records for institutions. How in the world can anyone make purchases within a set budget under such a system? If CBS is not itself taking unfair advantage of contrived public ignorance, it is certainly creating opportunities for retailers to do so in their pricing of CBS products. Perhaps CBS will make the purchase of their products so inconvenient that the public will simply buy records from other labels—and intelligent talent will become increasingly reluctant to sign with CBS.

MARK CAMERON BOLLES Elkhart, Ind.

The Editor replies: Publication of list prices is no guarantee that retailers will restrain their rapacity. A West Coast producer of audiophile records told me that his records were being offered (if not sold!) at \$2 over list price by a New York retailer.

Billy Burnette

• Joel Vance's January review of Billy Burnette's "Gimme You" refers to it as his second album. It is actually his third, the first two being "Billy Burnette" (Polydor PD-1-6187) and "Between Friends" (Polydor PD-1-6242).

> ALLEN PASTERNAK Houston, Tex.

String Quartets

• Thank you for the compliment to Canada's foremost string quartet on page 122 of the December issue, where Richard Freed refers to their "magical recording of [Mendelssohn's] Opp. 12 and 13" string quartets. But, please, it's the Orford Quartet, not the Oxford! So far as I know, none of the members of the Orford Quartet has ever been to Oxford; the group's name comes from the summer music school at Mt. Orford in Quebec where they first played together.

We were also tickled to see the "Best of the Month" review of the Bartók Quartet's recording of the Brahms F Minor Quintet, since the Bartók will be performing a regular concert in my living room on March 30. We have an extensive series of chambermusic concerts here, some (such as that one) by very eminent performers. The room seats about sixty nominally, though we have managed as many as seventy-five on some occasions. I am just an ordinary professor at the University of Waterloo, and the concerts are funded by ticket sales and donations from our enthusiastic subscribers. I've heard of only one other concert series in a private home (in Indianapolis, I understand). In terms of acoustical presence, there is really nothing quite like it!

JAN NARVESON President, K-W Chamber Music Society Waterloo, Ontario

Review of the Year

• The best record review that I have ever read in the past fifty years is the first paragraph of Noel Coppage's review of Robin Trower's "B.L.T." on page 118 of the September 1981 issue. It's a classic and deserves a gold medal—or something!

> JOHN WASSO SR. Pen Argyl, Pa.

Bring your music into focus... ...with the B&W DM10.



The DM10 is a sophisticated, compact 2-way loudspeaker — the product of B&W's uniquely advanced computer and laser design, measurement and manufacturing techniques. Its performance thus goes beyond simple spectral accuracy to reproduce music with space, depth and focus — qualities dis-



tressingly absent from loudspeakers costing many times more than the DM10.

So be prepared for a bit of a shock when you audition the DM10 at your B&W Loudspeaker Dealer. Write today for more information and the name of the authorized B&W Dealer nearest you.





Anglo American Audio Co., Inc. Dept. SR-382, P.O. Box 653, Buffalo, New York 14240

Now at your B&W Dealer: the DM23, a compact 3-way loudspeaker . . . also surprisingly affordable, and also unmistakably B&W. The DM10 and DM23 are available in four superb finishes: walnut, teak, black ash, and rosewood.

Dolby is a trademark of Dolby Laboratories. Awa America Inc. 35 Oxford Drive, Moonachie, New Jersey 07074. In Canada, Shriro (Canada) Ltd.

Aiwa introduces 3-head and Dolby C performance with auto-demagnetizing and auto-replay convenience. CIRCLE NO. 2 ON READER SERVICE CARD



electronic soft touch controls. For easy maintebar meters. While for the touch, Aiwa adds alldemagnetizes the heads so you don't have to. The AD-3500 even replays music over again, than reproduce music. It recreates it. Simply. automatically. Aiwa's AD-3500. It does more nance, try Aiwa's A.D.M.S. It automatically

convenience will bedazzle your senses. For the All you need to get startling cassette deck per-Degree in engineering? Swiss bank account? not the tape. For the eyes, 24 section, tri-color ears, there's Dolby C. So you hear the music, formance is Aiwa's startling cassette deck... the 3-head AD-3500. Its performance and

SIMPLY ADVANCED



Now recreating it is.

New Products latest audio equipment and accessories



□ Teac claims that recordists can realize a 100-dB signal-to-noise ratio with its X-1000R 101/2-inch open-reel deck by using the new Extra Efficiency (EE) tapes and the built-in dbx noise-reduction system. The results obtainable with EE tapes recorded at 3¾ ips are said to be equal to those previously obtainable only at the 71/2-ips speed. At 71/2 ips, the X-1000R's overall frequency response is 30 to 34,000 Hz (30 to 24,000 Hz at 3¾ ips). Wow-and-flutter is 0.03 per cent (wrms) at the higher speed, 0.04 per cent at the lower. Signal-to-noise ratio with EE tape is 65 dB without noise reduction.

The transport system uses a dual-capstan, closed-loop drive with servo control of tape tension. Bidirectional recording and off-thetape monitoring are made possible by a sixhead arrangement. The five-digit counter reads elapsed time. Additional features include a pitch control, mic/line mixing, and separate-channel input and output controls. Price: \$1,400.

Circle 120 on reader service card



□ "The Radio" (left above) from Proton Corporation is an AM/FM unit adaptable for stereo operation that is said to have "specs equivalent to, if not better than, the best home hi-fi system." Special tuner circuitry originally developed for Proton's Model 100 portable stereo FM radio is said to provide superior capture ratio and FM sensitivity. The FM-tuner specifications include an IHF usable mono sensitivity of 1 microvolt, a capture ratio of 1 dB, frequency response from 30 to 15,000 Hz \pm 0.5 dB, and stereo signal-to-noise ratio of 75 dB.

"The Radio" includes a two-way, biamplified speaker system. A 20-watt amplifier drives the woofer and a 5-watt amplifier drives the tweeter; crossover is at 2,500 Hz. The amplifier section's total harmonic distortion is 0.03 per cent. Built-in equalization boosts bass output for a flat response down to 60 Hz. For stereo operation, it is used with a separate powered speaker system called "The Speaker" (right in photo).

The unit's stereo line-level inputs and outputs have a frequency response of 20 to 20,000 Hz ± 0.5 dB and a signal-to-noise ratio of 90 dB. Front-panel controls include the tuning knob, AM/FM/tape selector switch, volume control, and bass and treble tone controls. Rear-panel facilities include a stereo/mono switch, tape/aux input and output, and outputs for the powered speakers. Prices: the Radio, \$280; the Speaker, \$150. Proton Corp., Dept. SR, Pacific Tower Plaza, 1431 Ocean Avenue, Santa Monica, Calif. 90401.

Circle 121 on reader service card



Top-of-the-line Onkyo Preamplifier

Onkyo's P-3090 preamplifier has an uncluttered front panel because most of the controls are hidden behind a hinged door. Only the power switch, input-selector pushbuttons, and volume control are ordinarily visible. The variable-gain phono preamp can be switched to accept either movingmagnet or moving-coil cartridges and has user-adjustable input resistance and capacitance. The passive bass and treble tone controls have a range of ± 8 dB at 70 and 20,000 Hz, respectively. A high-cut filter slopes at 6 dB per octave above 7,000 Hz, and an infrasonic filter drops at 6 dB per octave below 15 Hz. A separate volume control adjusts the level at the headphone jack. Frequency response through the highlevel inputs is given as 0.8 to 170,000 Hz ±3 dB. Moving-coil phono signal-to-noise ratio is 76 dB; moving-magnet S/N is 82 dB. Phono-overload level through the moving-magnet input is 380 millivolts at 1,000

Hz with 0.05 per cent total harmonic distortion. Price: \$1,249.95.

Circle 122 on reader service card



□ The three heads of the Sansui D-570 cassette deck make possible an immediate comparison between input and recorded result. They also permit optimization of head characteristics for a claimed overall frequency response with metal tape of 30 to 21,000 Hz ± 3 dB (30 to 18,000 Hz with CrO, tape). Signal-to-noise ratio (without noise reduction) exceeds 60 dB. Switching in the Dolby-B circuitry adds 10 dB to that figure above 5,000 Hz; Dolby-C adds 20 dB above 1,000 Hz. Feather-touch pushbuttons control the two-motor transport through digital circuitry. The unit's capstan is directly driven, resulting in a wow-and-flutter specification of 0.03 per cent (wrms). Other features include microcomputer control of selection repetition, an Automatic Music Program Search facility allowing rapid access to any selection, and twelve-segment peak-reading level indicators. A four-digit electronic tape counter can be switched to show elapsed tape time. Price: \$525

Circle 123 on reader service card



Can Correct for Off-center Discs

□ Nakamichi's two-speed TX-1000 computing turntable reduces wow caused by off-center pressings and/or oversize center holes in discs. The unit has two platters, a massive main platter driven by a brushless, coreless, slotless, direct-drive motor and a lighter "Center Search" platter that rides on the main platter and can shift horizon-

Introducing TDK AD-X. The normal bias tape with Super Avilyn technology.

New TDK AD-X is the first normal bias audio cassette to use TDK's Avilyn magnetic particle-based on the renowned Super Avilyn formulat on that has kept TDK the leader in audio and videotape technology.

The Avilyn advantage offered in AD-X is demonstrably clear. You now can record and play back-in the normal bias/EQ position

with complete compatibility for any cassette deck over a wider dynamic range and with far less distortion. Even at higher recording levels, the increased headroom in

new AD-X can easily handle strong signal input without oversaturation.

When you hear the brilliant playback resulting from the higher MOL and



Record at higher levels with far less distortion.

"improve" so much. truly versatile applications. Its higher sensitivity makes it ideal for all-round home entertainment use and also suitable for any cassette player.



lower bias noise vou won't believe that your deck can The new AD-X has

Avilyn magnetic particle achieves higher saturation and lower noise.

To ensure years of reliable use, AD-X is housed in TDK's Laboratory Standard Mechanism, and protected by TDK's lifetime warranty. With its distinctive packaging, vou won't miss it.

So for high quality recordings in the normal bias EQ position, snap in the new TDK AD-X. You'll discover that the Avilyn advantage means superior overall performance





In a world where sound reaches new levels every day, ADC delivers the ultimate high.

The ultimate high is total control. And an ADC Sound Shaper⁸ Frequency Equalizer lets you control your sound and custom-tailor your music with the mastery of a pro.

And no better way demonstrates the benefits of an ADC Sound Shaper than taping. Even without a studio environment, you can recreate your personal recordings by changing the frequency response curve of the source material — making the sound more like the original and more agreeable to your ears.

Our complete ADC Sound Shaper IC line * has an equalizer that is right for you and your system. The SS-110 ten-band full octave equalizer, a step up from our SS-1, features LED-lit slide controls and one-way tape dubbing. If you desire even more control, our twelve-band SS-II and top-of-the-line SS-III include two-way tape dubbing and sub-sonic filters. Our SS-III Paragraphic[™] with 24 ancillary switches that enable you to control 36 bands per channel combines



the ease and control of a graphic equalizer with the precision and versatility of a parametric. All at a price you can afford.

All of our equalizers feature LEDlit slide controls allowing for visual plotting of the equalization curve. And all ADC Sound Shapers embody the outstanding ADC technology that has made us the leaders in the industry.

To really complete your customtailored control-ability, our ADC Real Time Spectrum Analyzer is a must. Equipped with its own pink noise generator and calibrated microphone, the SA-1 provides a visual presentation of the changing spectrum through 132 LED displays. So you can actually see proof of the equalized sound you've achieved.

With an ADC Sound Shaper and an ADC Real Time Spectrum Analyzer, you can attain a new level of control. And ultimately, isn't that the musical high you've always wanted?

Sound Shaper

Frequency Equalizers and Spectrum Analyzer



Sound thinking has moved us even further ahead.

BSR (USA) Ltd., Blauvelt, N.Y. 10913, BSR (Canada) Ltd., Rexdale Ontario Write for a free 24-page booklet "Shaping Sound At Home: A Guide to Equalization" (a \$2.50 value). Sound Shaper is a registered trademark of Audio Dynamics Corporation. "IC indicates new Sound Shaper" series.

CIRCLE NO. 6 ON READER SERVICE CARD

New Product latest audio equipment and accessories

tally along two perpendicular axes. The disc to be played is placed on the Center Search platter (which is made from metallized glass to provide a flat, smooth, electrically conductive surface that is said to drain off static charge). When the "Absolute Center Search System" is activated, a special sensor arm traces the disc's lead-out groove. Eccentricity is measured by the sensor arm, digitized, and fed to a microcomputer, which determines the required correction and drives two servomotors in the main platter that relocate the Center Search platter until the eccentricity is minimized.

The TX-1000 turntable will take two tone arms (neither supplied) and has a physically separate power supply. It sits on four "Hydro-Suspension" air-piston vibration isolators. A pitch control varies turntable speed by ±9.9 per cent in 0.1 per cent increments. Wow-and-flutter is 0.003 per cent (wrms); signal-to-noise ratio is given as greater than 70 dB. Dimensions are 263/8 x 61/2 x 201/2 inches; weight is 811/2 pounds. Price: \$7.000

Circle 124 on reader service card



Protone Industries offers lightweight, compact nylon "music wallets" to protect, store, and organize tape cassettes for onthe-go use. Available in three-, six-, and twelve-cassette versions, the carriers can be strapped to a belt, fastened to an automobile sun visor (passenger side, please), or attached directly to a portable cassette player.

Fastening is by means of a Velcro strip, so there are no mechanical snaps or hooks to fuss with. Eleven different colors are available. Prices: three-cassette wallet, \$6.95; six-cassette, \$9.95; twelve-cassette, \$13.95. Protone Industries, Inc., Dept. SR, 8960 Glenoaks Boulevard, Sun Valley, Calif. 91352

Circle 125 on reader service card



Sony Headphones Fasten to the Ear

Sony's MDR-33 consists of two MDR drivers, such as are used in the company's conventional lightweight headphones, designed to "hang comfortably from each ear." Advantages of this arrangement include no head band to add bulk or to interfere with hair styles. The MDR-33 is also said to be suited for listeners to portable stereo cassette players who are also involved with active sports. Frequency response is rated from 40 to 18,000 Hz. Each earphone weighs about 12 grams, and the total system weighs less than one ounce without the connecting cord. It comes with a stereo mini phone plug only. Price: \$34.95.

Circle 126 on reader service card

Audiophile Disc Catalog from RealTime

□ RealTime Records' four-page, full-color catalog shows and describes twenty-five audiophile albums: twelve direct-to-disc and thirteen digitally mastered recordings. Among these are eight jazz titles, a digital jazz sampler, ten classical albums, two "sonic spectaculars," four musical enter-

The powerful Speakerlab Super 7 returns, now dramatically improved with an open and clear sound that's so awesome you'll sourid that's so awesome you in soon understand why they call it "legendary". The 10" and 12" polypropylene/Polylam™ woofers, a 6-1/2" mid-bass/mid-range and the LT 215S Samarium Cobait Leaf Tweeter car handle up to 200 watts of power if you can. Available in lacquerec oak or rosewood Clearseal® finish.



Dept. SR23 Dept. SR23, 735 N. Northlake Way Seattle, Washington 98103 Zip address Jame City



CIRCLE NO. 33 ON READER SERVICE CARD

New Product/ latest audio equipment and accessories

tainment titles, and several sampler discs, some of which are dbx encoded. Request Catalog RT from RealTime Records, Dept. SR, 10391 Jefferson Boulevard, Culver City, Calif. 90230.



Digital-synthesis AM/FM Receiver

□ Hitachi's HTA-3000 receiver is rated at 30 watts per channel with no more than 0.05 per cent total harmonic distortion (THD). It has a quartz-locked digital-synthesis tuner section with programmable presets for six AM and six FM stations in addition to a scanning feature. The tuner section has a usable mono sensitivity of 1.9 microvolts, a stereo signal-to-noise ratio of 69 dB, and THD of 0.25 per cent in stereo. Other features include connections and switching for two tape decks and two pairs of speakers, a loudness switch, bass and treble controls, a headphone output, and an AM loop antenna. Price: \$249.95.

Circle 127 on reader service card



Two-way, Floor-standing KEF Speaker

□ KEF's Model 204 floor-standing loudspeaker is intended for use in average-size living rooms with amplifiers having a minimum output of 15 watts and a maximum of 100 watts. Sensitivity is 86-dB sound-pressure level at 1 meter with a 1-watt input. The system will give peak sound levels of up to 106 dB in typical rooms. A two-way system with Bextrene-diaphragm drivers, the Model 204 has an auxiliary passive radiator to extend the low-frequency range down to 47 Hz; the bass loading makes use of combined electromechanical circuits to maintain a low-distortion output down to 27 Hz. Upper frequencies are handled by a 1-inch dome radiator.

Specifications include a frequency response from 47 to 20,000 Hz ± 2.5 dB (-10 dB at 29 and 30,000 Hz). Secondharmonic distortion is less than 1 per cent from 60 to 20,000 Hz, and third-harmonic distortion is less than 1 per cent from 150 to 20,000 Hz. Nominal system impedance is 8 ohms. Finish is genuine teak or walnut veneer with a removable cloth grille. Dimensions are $271/2 \times 11 \times 123/8$ inches. Price: \$1,100 per pair.

Circle 128 on reader service card



□ The Woodmore Lowboy Cabinet by Custom Woodwork & Design is available in three finishes: natural oak (Model KD600, shown, with natural-oil finish), dark oak (KD700, with dark walnut-oil finish), and natural walnut (KD800, with natural-oil finish). The insides of the two compartments measure 277/8 x 221/2 x 181/2 inches. Each compartment holds several adjustable shelves. Doors are of tempered glass, and hardware and casters are chrome plated. Available accessories include a videotape drawer that can hold up to twenty-four videocassettes, a cassette drawer to hold up to sixty audio cassettes, a slide-out shelf, and stacking rails for stacking cabinets. Overall dimensions are 30 x 471/4 x 19 inches. Price: \$500. Custom Woodworking & Design, Inc., Dept. SR, 10843 Ursala Drive, Willow Springs, Ill. 60480.

Circle 129 on reader service card

MAGNIFICENT OBSESSION.

In our zeal to build superb tape recording equipment in the extreme, we at Teac are sometimes driven to steal. From ourselves.

The extraordinary X-1000R illustrates this very well. In it, we have incorporated professional features originally designed for our TASCAM recording studio equipment.

These include a linear LED counter which measures tape in hours, minutes, and seconds. A Search To Cue (STC) and Search To Zero (STZ) capability. In addition, there's Auto Reverse in both directions, in play or record.

The X-1000R, as is current professional practice, employs DBX* noise reduction. An exclusive in home reel-to-reel. And also, as in professional recording equipment, full-tension servos guarantee high stability and accuracy. And low wow and flutter specs of just .03% @ 7½ IPS.

All of which add up to an impressive collection of features, we think you'll agree. And if we happened to borrow a lot of them from our professional designs, well that shouldn't bother you one bit.



COPYRIGHT 1982, TEAC CORPORATION OF AMERICA. 7733 TELEGRAPH ROAD, MONTEBELLO, CA 90640 * dbx* IS THE REGISTERED TRADEMARK OF dbx, INC., NEWTON, MA. CIRCLE NO. 36 ON READER SERVICE CARD





Full-range performance is possible from loudspeakers that can be used as bookends on an open shelf.

Revue du Son, in a feature review, *said "La 'petite' Allison:Six est une grande enceinte [loudspeaker]." *No. 32 (Nov. 1979).

For literature and information call (800) 225-4791 [in MA (617) 237-2670] or send coupon

The Allison:Six costs \$160 in walnut vinyl, \$172 in black or white lacquer.



Name

Address		

City	
CITY	

State Zip



By David Ranada

THE DIGITAL-AUDIO AGE BEGINS

WITNESSED the birth. In the Barron Suite of New York's Waldorf Astoria Hotel between 4:30 and 5:00 p.m. on November 2, 1981, the first professional digital-audio standard was drafted by the Technical Committee on Digital Audio of the Audio Engineering Society. It was proposed that "the preferred sampling frequencies for professional digital audio equipment which requires a 20 kHz audio bandwidth shall be 48 kHz for professional [program] interchange and compatibility with television and motion picture systems, and 44.1 kHz for applications directly relating to certain consumer digital audio systems."

This draft recommendation for a standard marks "the real start of the digital audio age," as Dr. Toshi Doi, general manager of Sony's digital-audio division, put it. With widespread international acceptance of this standard, design of compatible professional digital-audio systems (recorders, editors, mixers, equalizers, and other signal-processing devices) can begin in earnest. A standard for sampling rates (the rate at which a digital audio system measures an analog voltage and turns that voltage into a number) simplifies circuit design. In fact, some devices (a digital equalizer, for example) cannot be built without knowing what the sampling rate is. For the home consumer, standards for digital audio will eventually mean increased component capability and versatility (in the form of integrated circuits incorporating the standards in their design) and lower digital-audio costs.

The road to this standard was rocky, and at the beginning it seemed to have hit a dead end. There was some question three years ago, when the AES started investigating standards for digital audio, whether such cooperative activity would not violate U.S. antitrust laws. So discussions continued overseas. But in November there were several digital audio recorders already in the marketplace, and it was felt that there were no remaining legal barriers to the establishment of digital-audio standards.

The final minutes of the meeting were filled with OPEC-like negotiations ("arguments") as various companies fought for their own technical positions. A "win" would have saved considerable amounts of money already spent on equipment and engineers. What most impressed me, however, was that the level of "discussion" had evolved far from the typical audiophile concerns of frequency response, distortion, noise, and the like. While the average audiophile may not have decided whether digital encoding is beneficial, at the meeting it was taken for granted: the discussions were concerned mainly with compatibility with non-audio media and with the coming home digital systems.

HE compatibility issue has a complex technical history, much of it sounding like an episode out of James Burke's PBS TV series "Connections," for the choice of these two sampling rates was greatly influenced by decisions made quite some time ago in only remotely related areas.

For example, the requirements leading to the 48-kHz standard were that the sampling rate be (1) at least twice the desired audio bandwidth and (2) related mathematically simply to the frame rate for motion pictures (twenty-four frames per second) and the field rates for television (50 Hz for PAL and SECAM used overseas, 59.94 Hz for the NTSC system used in the U.S. and Japan). The first requirement is relatively easy to meet, but the second is not, primarily because of that 59.94-Hz rate. Were it not for the NTSC system of color-TV broadcasting, a sampling-rate standard would probably have been possible several years ago.

Why is the NTSC field rate 59.94 Hz and not the easily synchronized 60 Hz so commonly quoted as the field rate in oversimplified explanations of television? The answer here also involves compatibility, this time with black-and-white television. Back in the 1950s, when the NTSC system was developed, it was necessary for any color broadcasting system to be compatible with the thousands of b/w televisions already in American homes. The NTSC system broadcasts a color subcarrier along with the b/w signal, much as stereo FM is broadcast with a stereo subcarrier. In color TVs, the color signals are derived by matrixing techniques (just as stereo is derived from an FM (Continued on page 18)

Here's how we kiss the hiss goodbye.

BASF Chrome. The world's quietest tape.

With BASF Chrome, you hear only what you want to hear—because we "kissed the hiss goodbye."

In fact, among all high bias tapes on the market today, only PRO II combines the world's lowest background noise with outstanding sensitivity in the critical high frequency range for superior dynamic range (signal-to-noise ratio).

PRO II is unlike any other tape because it's made like no other tape. While ordinary high bias tapes are And like all BASF tapes, PRO II comes encased in our new ultra-precision cassette shell that provides perfect alignment, smooth, even

> BASF designed and developed the world's only Measurement Reference Tape Cassette. And our new ultra-precision cassette shell is the logical culmination of that development.

tape movement, and consistent high fidelity reproduction.

So when you want to hear all of the music and none of the tape, turn on to BASF Chrome.

It's the one tape that kissed the hiss goodbye.

Perfectly shaped and uniformly sized particles of pure chromium dioxide provide a magnetic medium like no other tape in the world

Magnified

15.000 X

made from modified particles of ferric oxide, only PRO II is made of pure chromium dioxide. These perfectly shaped and uniformly sized particles provide a magnetic medium that's truly superior—so superior that PRO II was chosen by Mobile Fidelity Sound Lab for their Original Master Recording[™]High Fidelity Cassettes—the finest prerecorded cassettes in the world.

PRO II—a tape so superior, a cassette so reliable, that it was the one chosen by Mobile Fidelity Sound Lab for their Original Master Recording™High Fidelity Cassettes.



CIRCLE NO. 5 ON READER SERVICE CARD

THE ROI* FACTOR (* Return On Investment)

A small investment can upgrade the sound of your entire hi-fi system.

If you're one of the millions who have bought a Shure V15 Type III, M97 Series, M95 Series, or M75 Series phono cartridge, we have a way of making it perform *better* than it ever has before. It's the Shure Hyperelliptical (HE) upgrade stylus (needle) series. We've taken al the high trackability/low distortion benefits of the HE stylus tip (first introduced on the famous V15 Type IV), and put them into styli that will match perfectly with your cartridge, for an audible improvement in your system's sound at an absolutely minimal cost to you!

Upgrading your phono cartridge with an HE replacement stylus will give a large return on a very small investment. You already own a phono cartridge with proven performance; now you can get even better performance from that same cartridge. Ask your dealer for the Shure HE replacement stylus that's right for you, and take advantage of the ROI factor.



Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204 In Canada: A. C. Simmonds & Sons Limited Manufacturer of high fidelity components, microphones, speakers, sound systems and related circuitry.

broadcast). The color subcarrier had to fit within the pre-existing 6-MHz-wide b/w television channel and yet cause no interference with either b/w reception or TV sound. Specifically, the color subcarrier had to be an odd multiple of half the horizontal scanning rate, it had to be near 3.6 MHz, and it could not interfere with the TVsound subcarrier at 4.5 MHz. To do this, the horizontal scanning rate was lowered from 15.750 kHz to 15.73426 kHz, and this in turn meant that the field rate came down from 60 to 59.94 Hz. These alterations were small enough for b/w sets to tolerate, and they permitted color TV to get on the air. And they also, almost thirty years later, held up the adoption of a digital-audio sampling-rate standard.

As it turns out, the 48-kHz standard proposed isn't simply related to 59.94 Hz. But shortly before the AES meeting, the SMPTE (the television and motion-picture equivalent of the AES) concluded that TV and movie engineers could, with little technical difficulty, synchronize TV and movies with digital audio sampled at 48 kHz.

T would have been simpler for all concerned if there were only a single 48-kHz standard sampling rate. But the CD system, which appears to be the de facto standard for home digital playback, cannot be raised from 44.1 to 48 kHz. Why? Raising the sampling rate for the CD system while still attempting to have 60 to 75 minutes of continuous playing time would involve shrinking the size of the "pits" engraved on every digital disc. This would make the laser optics harder to build, and, more important, would decrease the number of defect-free discs produced to a tenth of their expected total. As Dr. Doi observed, the CD system was designed for high reliability, and CD discs should never have to be inspected except for a cursory visual check which can be done by machine.

If one wanted to maintain disc yields and playing times but still have a 48-kHz sampling rate, the disc size would have to be increased to more than the present 12 centimeters (43/4 inches). This cannot be done because the size of the required player would then not fit in many automobile dashboards! The CD system's developers see the laser-read digital-audio disc as being a universal playback medium that will eventually be used in portable and mobile equipment as well. The CD engineers were therefore limited in the choice of maximum disc size by international standards regulating cutouts for in-dash radio equipment. Ignoring these standards would have instantly ruled out a large potential market place for the CD system.

In both these cases we can see that engineers have been constrained not only by the laws of sampling theory but by decisions made in other fields concerning seemingly unrelated matters. And there are other standards still to be written: for digital-audio signal formats, for a standard digital-audio connector, for digital-audio tapetrack layouts. Let's hope that these standards will not in future decades cause similar unforeseen problems for other technologies. Digital TV, high-resolution wide-screen TV, direct-to-home satellite transmission, and home computers promise too much to be delayed unnecessarily.

The 79 Cent FM Problem

Don't blame your FM tuner if the stations you try to tune in are hissy and have sound that seems to break up.

Radio signals move fast. They travel at 186,000 miles per second. The same as the speed of light.

Just like light, radio signals travel only in straight lines. But unlike light, they are reflected and distorted by buildings, hills and even passing airplanes.

So, your FM tuner is engulfed in a veritable echo chamber of reflected and distorted radio signals.

The fact is, your FM tuner can't tell a distorted signal from the real thing. Nor can it stop a distorted reflection from mixing in with the original.

That's why many of the FM stations that you try to tune in are hissy and the sound appears to break up.

FREE HELP

You can solve part of the problem for free. Check the piece of wire, worth just about 79 cents, called a dipole antenna that came with the receiver. Is it simply junked behind your receiver or is it nicely spread out like a big 'T' on the wall. If your dipole wasn't already stretched

If your dipole wasn't already stretched out you'll immediately notice a significant improvement in both the background noise level and distortion in your music. In fact, the improvement on many stations will be enough to make you very glad you read this ad.

So much for the free help. Your dipole is directional. It is most sensitive to FM broadcasts that are coming at it directly through the wall it's mounted on.

If you are receiving some stations now that you only hear with so so quality, you are probably picking up the distorted signals that are being reflected at you from distant buildings rather than the direct beam of the radio station.

It's a pretty good bet that you can dramatically improve the bad stations by repositioning your antenna at a different angle so that it is aimed at the station you want to receive. You'll improve the sound for 2 reasons. 1) You'll be aimed at the real signal. 2) Your antenna will reject the reflected signals coming at it from different directions.

The problem is that once you re-aim your antenna to pick up a station that was weak, the stations that were strong will now most likely be weak.

Here's the story of a new component

that doesn't look in the slightest like an antenna, but will let you electronically aim your antenna where the signal is best, snuff out distorted reflected signals, and add up to 16 times the selectivity to the particular station that you want to tune in.

THE LAST COMPONENT

B.I.C. has invented (and patented) an FM antenna so revolutionary that it looks like a new HiFi component.

It's called the Beam Box. It actually contains 4 separate antenna elements.

You electronically aim the elements as you switch a directional control switch on the front panel. Unlike the dipole antenna which picks up signals from only 2 directions (front and back), the Beam Box can be aimed in all directions.



The dipole antenna at left pulls in signals only from the front and back. The Beam Box covers all points of the compass while it snuffs out distorted reflections from other directions. Something your tuner can't do alone.

You can easily tell when you've aimed properly as your signal strength meter will rise. Plus, you'll hear the sound quality go up and distortion go down.

The Beam Box virtually snuffs out reflections that cause distortion and improves stereo separation and signal to noise ratio. So, you'll get cleaner sound. A TUNER

IN FRONT OF YOUR TUNER

FM radio waves vary in size from 9 feet to 11.1 feet in length, depending on their frequency. Other antennas have to make a compromise as to their sensitivity to the different sized frequencies.

Once you tune in a station on your tuner, you can dramatically improve the sound by switching in the Beam Box's 4 gang tuning capacitor. It's just like the one you'll

find in most FM tuners. It matches the antenna to the exact frequency of the station you select.

The Beam Box becomes 16 times as responsive to the signal at the frequency it's tuned to, than to any other signals.



The oscilloscope picture at the left shows the uniform response to radio station frequencies between 88 and 108 on the FM dial before switching in the Beam Box tuner. At right the scope shows a 16 time greater response to a 98Mhz signal tuned in on the Beam Box.

You'll get a brighter, cleaner signal and thus your receiver can produce a brighter cleaner sound. When you're making cassette copies from FM broadcasts, you'll really appreciate the clean sound.

The Beam Box is covered by a 2 year limited factory warranty by B.I.C. It is 12-7/8" wide by 14" deep and 3-1/2" tall. It is housed in a beautiful woodgrain cabinet and comes complete with connecting wire to your tuner. No external power is required.

TRY THE BEAM BOX RISK FREE

Connect this antenna component to your tuner. Tune in several FM stereo stations. You'll notice the improvement in signal to noise, clarity and stereo channel separation on each station.

If for any reason you aren't 100% satisfied, simply return the Beam Box within 30 days in its original box to DAK for a courteous refund.

To order the patented Beam Box FM-8 risk free with your credit card, call the DAK toll free hotline, or send your check not for the regular \$59 price, but for only \$39 plus \$3.50 for postage and handling to DAK. Order No. 9301.(CA res add 6% tax).

With the Beam Box, you'll get more FM stations, and you'll get them better.





CIRCLE NO. 41 ON READER SERVICE CARD

lue 150! cpert!	
er best va ollar. -the-art or under \$ IAD audio e)	Technica avoidin Pioneer o in a Tou
NAD introduces another best value for your high fidelity dollar. The NAD 1020 state-of-the-art preamplifier is yours for under \$150! Incredible? See your local NAD audio expert!	Digital F Q. An aud ceiver today ity that duri uct consum sources will seems to me fully anticipo well-equippe ready have to a tuner, and into his pre center" concu- facturers be several addit Even moru- output-signa or tape playa their analog ate efficientl preamp input
	A. Reader preamps alr cope with dig they didn't y on multi-inpubecome avail them develop
If you cannot readily find an NAD dealer in your neighborhood, where the control literation on the Model 1020 and other the NAD home entertainment products, as well as a dealer list, to: NAD NO 675 Canton Street, Norwood, MA 02062 Name Address City	In regard home digital technical rea pletely comp of existing ee for any manu to 1-volt ran the auxiliary sensitivity of past twenty y However, equipment <i>in</i> patibility tha low-power (s or receiver. I ance in a co <i>available</i> is mined by th ground noise

Iudio Q. and A.

By Larry Klein

Technical Director Klein avoiding a low-hanging Pioneer cassette-deck ad in a Tokyo subway car.

Digital Readiness

Q. An audio enthusiast selecting a new preamp, integrated amplifier, or receiver today must reckon with the probability that during the useful life of the product consumer digital-audio playback sources will become widely available. It seems to me that current equipment has not fully anticipated digital sources in that the well-equipped audiophile today may already have two tape decks, a record player, a tuner, and a TV audio source plugged into his preamp. As the "entertainment center" concept emerges, shouldn't manufacturers be planning ahead by providing several additional inputs?

Even more to the point, what will the output-signal characteristics of digital disc or tape players be? Will they be similar to their analog counterparts? Will they operate efficiently into existing high-quality preamp inputs?

> MARTY BARRACK Burke, Va.

A. Reader Barrack's fears are unjustified. Most well-designed top-of-the-line preamps already have enough inputs to cope with digital contingencies, and even if they didn't you can be sure that small addon multi-input switching accessories would become available as soon as a demand for them developed.

In regard to the output-signal level of home digital tape or disc players, there is no technical reason why it should not be completely compatible with the input demands of existing equipment. It would be absurd for any manufacturer to go outside the 0.1to 1-volt range that has been standard for the auxiliary (tape, radio, tuner, TV) input sensitivity of every amplifier made in the past twenty years or so.

However, the dynamic range of digital equipment is an area of potential incompatibility that should concern anyone with a low-power (say, 40 watts or less) amplifier or receiver. During a live classical performance in a concert hall the dynamic range *available* is perhaps 90 dB. This is determined by the (perhaps) 30 dB of background noise during the quietest musical passages and the 120-dB levels achieved during the loudest ones. A similar 90-dB figure is claimed as the dynamic range (and signal-to-noise ratio and separation) of the 4¾-inch compact digital audio disc and player. Depending on the acoustic conditions in your immediate environment, the kind of music you like to listen to, and how loud you like to hear it, you may find that your amplifier (and speakers) are unable to cope with the power demands of the music. The super-fidelity potential of digital technology can be compromised by distortion from overdriven low-power amplifiers and speakers. The solution, of course, is amplifiers that can deliver large amounts of power and speakers that can take it.

CT-980

Long/Short Leads

Q. I'm thinking of moving my power amplifier over next to my speakers to keep the speaker leads as short as possible and running long (about 40 feet) shielded leads from the preamp to the power amp. What are the technical considerations?

KERRY L. SMITH Plano, Tex.

A lthough there are manufacturers out intended to be interconnected as you describe, I've never found their technical justifications to be very convincing. It seems to me that 40 feet of shielded wire is likely to cause more problems (r.f. pickup, hum, and loss of highs) than 40 feet of speaker wire. However....

In general, capacitance in speaker leads plays a much more significant negative role than resistance, yet the resistance (and inductance) is what most "super-cable" manufacturers choose to focus on. Many amplifiers react badly to speaker-lead capacitances of 0.01 microfarad or so—which happens to be the value presented by some recent "low-inductance" braided cables. The amplifiers' "bad reactions" range from instant output-transistor destruction to instability—otherwise known as a tendency to oscillate. The instability is audible in some cases and apparently heard by some audiophiles as an "improved" high end.

Let's look, then, at the purported benefits of the reduced resistance of those special (Continued on page 22)

Pocket Concert Plus NOW WITH FM STEREO JUST \$6950

DAK was in trouble. Orders were coming from everywhere. Our Pocket Concert Cassette Player was selling like crazy. We were guaranteed 20,000 players. We finally got 24,000. But it wasn't enough. We stopped advertising but the orders still kept coming.

We were in a jam. We offered more cash to our supplier. We researched other suppliers. But, we couldn't find a new Pocket Concert good enough to satisfy our customers, or for that matter ourselves. After all, we had advertised a product to be equal or superior to the Sony Walkman. And, we had lots of customers who expected us to deliver.

Well, not only did we finally find a great replacement, but we've even got one with FM. Now you can have the new 'Pocket Concert Plus' complete with FM stereo module for just 50 cents more than our original cassette player. It's the newest model. It's smaller, lighter and the sound's fabulous.

EXTRA HOME BONUS—We've made a special matching cable system so you can plug the Pocket Concert Plus into any line (aux) inputs in your home stereo. Now you can make copies of cassettes by playing them on the Pocket Concert Plus and recording on your main cassette deck, or just listen to your favorite cassettes through your home stereo. The sound is great. Just \$4 (\$1P&H) Order no 9200.

It's uncanny. You can sit, walk, ski or mow the lawn. And think of it, you can do it all in an environment controlled totally by YOU.

You can be doing the most mundane task, but your mind may be soaring thousands of miles away. It's no fluke that Sony has sold hundreds of thousands of their Walkman Cassette Players.

The power of music has been used for centuries to rouse the troups and relax the kings. But, only now with the new 1½ oz. Samarium Cobalt headphones are you able to get such a kaleidoscope of sound that the outside world seems to literally disappear.

And, the effect is so total that there are even laws to stop you from wearing these remarkable players while you drive a car or ride a bike.

WHAT SOUND

And what sound you'll hear. It's easily equal to a several thousand dollar home stereo system. Yet, the new Pocket Concert Plus with both cassette and FM stereo is so small you'll hardly know that you're wearing it.

If you were on a diet yesterday, you probably lost more weight than the trifling 12½ oz. of the Pocket Concert Plus.

The Pocket Concert Plus goes where you go with a protective leatherette case that easily hangs on your belt or rides comfortably in your pocket. It also comes with an adjustable shoulder strap.

So, whether you're into long walks, sitting in airplanes or washing your car, you'll enjoy the unbelievably rich stereo sound of the Pocket Concert Plus.

ENGINEERED FOR STRESS

Most fine stereo equipment is designed to be lovingly placed on a shelf and never moved. Obviously, this isn't a practical way to listen when you're walking your dog or weight lifting.

The Pocket Concert Plus incorporates a special shock mounted drive system. And, like any of the new smaller cassette players, such as the Sony Walkman II, it is subject to some flutter and wow when it's vigorously shaken. But for walking and jogging your music will be smooth and rock stable.

The Pocket Concert Plus is specifically designed for rough treatment. Many other machines are really redesigned dictation recorders. The Pocket Concert Plus is designed to provide superb stereo music while you're on the move.



MUSIC AT YOUR COMMAND

You won't be 'roughing it' when you leave home. You can play all your cassettes since there is an equalization switch for Metal/Chrome or standard.

The sound is crisp and clean with a wide clean frequency response. The entire system is operated by 3AA batteries (not included).

There are convenient lock-in fast forward and rewind buttons, plus cue and review. If you want to listen to a song CIRCLE NO. 41 ON READER SERVICE CARD again, just press the review button without ever leaving play.

You can listen to the outside world by pushing the Mute—FM/Tape switch without taking off the feather-light stereophones. Dual volume controls, autostop and a LED operation indicator round out the convenience features.

PLUS FM STEREO

Just pop in the FM stereo module instead of a cassette and you'll be tuning in your favorite FM stereo stations.

The FM module automatically directcouples with the cassette deck so it works off the deck's power. It feeds the FM signal directly to the amplifier, not through the head for great fidelity.

The headphone cable is used as the antenna for FM reception that is equal to the 'FM only' units on the market.

The Pocket Concert Plus utilizes a state of the art tape transport and superb electronics. It is manufactured by Unipacific and backed by a limited factory warranty.

TRY THE POCKET CONCERT PLUS RISK FREE

Take your Pocket Concert Plus on walks, to the mountains or as you commute to work. Enjoy your favorite music wherever you are and experience the incredible concert hall realism.

If for any reason you aren't 100% satisfied, simply return it in its original box within 30 days for a courteous refund.

To order your Pocket Concert Plus including the FM module, risk free with your credit card, call our toll free hotline, or send your check for just **\$69.50**. Plus **\$2.50** postage and handling Order No. 9303. (CA res add 6% sales tax).

You'll be in control of your own environment and enjoying your favorite music with the new Pocket Concert Plus.

DAK INDUSTRIES INCORPORATED

Call TOLL-FREE (800) 423-2636 In California Call (213) 984-1559 10845 Vanowen St., North Hollywood, CA 91605





SAVE • MONEY • TIME • FREIGHT ON NAME BRANDS

	1
AKAI CASSETTE DECKS	SONTY S
MODEL GXP-35 GX HEAD DECK ****\$ TOO LOW MODEL GX-F80 SOLENOID CASS DECK TO SHOW	SONY E SONY F TOK MA
ADC SOUNDSHAFER EQUALIZERS MODEL SS-110 [C NEW EQUALIZER • \$150.00 MODEL SS-2 IC - 12 BAND EQ •••• 200.00 MODEL SS-3 IC - TOP OF THE LINE 329.00	TDK NA TDK SA TDK OD TDK SA TDK C- BASP J
B.I.C SPECIALS	BASE I
MODEL T FR-200 TOWER LOUDS FEAKER \$ 90.00 MODEL T FR-400 TOWER LOUDS FEAKER 150.00	MAXELL MAXELL MAXELL
DUAL TURNTABLES - LOW MASS UNITS!	MAXELL
MODEL 506 SEMI-AUTO BELT DRIVE \$ 99.00 MODEL 606-55 DD TABLE W/CART. • WRITE WRITE OR CALL FOR ALL OTHER DUALS!!!!!!	SCOTCH TTK LJ
JVC BLECTHONICS - DECKS - ETC. MODEL DD-5 NEW DECK W/ Dolby Be \$WRITE LA-31 NEW TURNTABLE BARGAIN ! CALL!	TTK LJ MAXELJ MAXELJ MAXELJ MAXELJ
KENWOOD DEALS - WRITE FOR OTHER MODELS! KR-6050 SUPER RECEIVER DEAL *** \$269,00	900TC
KX-2060 TOP CASSETTE DECK DEAL 410.00	PWI
SR-6000 SUPER RECEIVER DEAL *** \$350.00	PUJT
SD-6000 TOP CASSETTE DECK ••••• 340.00 SD-8000 FROGRAMMABLE CASSETTE • 425.00	AUDIO MODEL
PIONEER DEALS	MODEL
SX-7 NEW DIGITAL RECEIVER ***** \$341.00 SX-3700 SUPER RECEIVER DEAL**** \$219.00 HIM-500 LOUDS FEAKER SYSTEM **** CALL!!!	SHURE V-15 V-15 M-97
SANSUI ELECTRONIX	SHURE
39002 DIGITAL RECEIVER DEAL •••• \$WRITE 89002-DB RECEIVER W/ DOLBY®NR •• WRITE	PLONE
SONY SUFERDEALS!!!	PIONE TS-69
STR-V55 RECEIVER CLOSEDUT! •••• \$329.00 REX-65 TURNTABLE CLOSEDUT ! ••• 254.00 WRITE OR CALL FOR NEW 1982 MODELS AND \$	TS-69 WRITE JENSE JENSE
TEAC CASSETTE DECK DEALS !!	JENSE
MODEL CX-400 SUPERDEAL CASSETTE 199.00	WRITE
MODEL A-770 3 HEAD DOLBY® NR ** 260.00 MODEL V-3RX NEW dbx® RECORDER * 305.00	KOSS
TECHNICS ELCETRONICS	KOSS
MODEL RSM-240X DBX CASSETTE DK. 232.00 RSM-260 NEW 3 HEAD CASSETTE DK. 237.00 SLB-101 NEW BELT URNTABLE **** 71.00 SLD-202 SEMI AUTOMATIC TABLE ** 109.50	SENN
SEE A BETTER FRICE ? LET US KNOW !!!!!!	
	Delaw
Phone Now S (312)	end f
664-0020 Name	

TOLL FREE

(800)

621-8042

City

State

	CASSETTE TAPES
	SONY SHF-90 STANDARD BIAS TAFE \$26.00/10
TOO LOW	SONY EEP-90 HIGH BIAS TAFE ****** 27.00/10 SONY FER-90 HIGH BIAS REMIUM **** 28.00/10
TO SHOW	SONY PER-90 HIGH BIAS FREMIUM 28.00/10
	TOK MA-C90 METAL CASSETTE TAFE *** \$49.50/10 TOK SAX-C-90 NEW FREMIUM TAFE **** 38.00/10
\$150.00	TDK SAX-C-90 NEW FREMIUM TAFE **** 36.00/10 TDK OD-C-90 OPTIMUM STD. BIAS **** 30.00/10
200.00	TEK CD-C-90 OPTINUM STD. BIAS •••• 30.00/10 TEK SA-C90 SUFER AVALIN TAFE ••••• 29.50/10 TEK C-90AD NEW AUDUA TAFE ••••••• 22.00/10
329.00	TOK C-90AD NEW AUDUA TAFE 22.00/10
	BASF FERFORMANCE C-90 QUALITY TAFE \$16.00/10 BASF FRO II OR III C-90 SPECIFY ** 26.00/10
	BASE FRO II OR III C-90 SHECTEY ** 28.00/10 MAXELL C-90 LN LOW NOISE TAPE **** \$23.50/12
\$ 90.00	MAXELL C-SOUD ULTRA DYNAMIC 23.00/12
150.00	MATELL C-90HD HETRA DYNAMIC ****** 29,50/12
t	MAXELL UD-XL-COD TYPE I OR II **** 29.50/12
-	MAXELL UD-XL C-90 TYPE I OR II *** 39.50/12 SCOTCH C-90 MASTER TYPE 2 OR 3 *** 31.50/10
\$ 99.00	
WRITE SIIIII	REFL TO REFL TAPE
3	TOK LX-35-90 NEW 71N \$80.00/10
	TTK LX-35-90 NEW /18
\$WRITE	
CALL!	MATEL UP-30-760 Sole: We 10 12 12 13:50/10 MATEL UP-30-806 SAME ON 10 1/2 198:50/10 SOUTCH 2078-90 FUCK UP-1051TMAK *** 55:00/10 SOUTCH 2077 R-180 10 1/2 1N ***** 170.00/10
NODFLS!	MAXELL UD-XL-1908 SAME ON 10 1/2 198.50/10
	SCOTCH 207R-90 FOLY-FOSITRAK *** 55.00/10
\$269,00	
410.00	VIDED TAFE
	PUJI L-500 BETA TYPE ******* \$110.00/10
P350 00	PUJI L-750 RETA TYPE 145.00/10 SCOTCH T-120 VHS TYPE 140.00/10
\$350.00 340.00	
425.00	AUDIO TECHNICA CARTS. STANTON CARTRIDGES
420.00	MODEL 155-LC \$105.00 MODEL 881-3 \$79.00 MODEL 140-LC 68.00 681-EEES 59.00
	MODEL 125-LC 44.00 681-EEE 49.00
\$341.00	SHERE CARTRIDGES EMPIRE CARTRIDGES
\$219.00	V-15 TYPE 4 WRITE! 208-9 5110.00
CALL	V-15 TYPE 3HE 70.00 LAC-800 80.00
	M-97 HE 48.00 2000E-3 25.00 SHURE 9095ED \$22 WITH TURNTABLE FURCHASE !!!
\$WRITE	AUTOMOTIVE STEREO
WRITE	PLONEER KE-2100 ELECTRONIK READOUT SWRITE!
	PLONEER KP-8500 AM-PM CASSETTE *** 140.00 TS-895 6x9 3-WAY SIRE, SYSTEMS**** 82, FR
\$329.00	T3-695 619 3-WAY SRCR, SYSTEMS++++ R2, FR TS-696 619 2-WAY SRCR, SYSTEMS++++ 64.00
254.00	WRITE FOR ALL PROMEER AUTOMOTIVE PRICES 111
S AND \$	JENSEN R-405 AM-PM IN DASH CASS. ** \$168.00 JENSEN J-1033 6*9 TRIATE IL SECES* 79.00
	JENSTEN J-1033 6x9 TRIAX® II S RORS 79.00 JENSTEN J-1037 6x9 CO-AX II® S RORS 80.00
	WRITE OR CALL, FOR OTHERS INCLUDING SONY!!!!!
199.00	HEAD FHONES
260.00	
305.00	KOSS MODEL HV-X STEREOFHONES ***** \$41.50 KOSS FRIO-4X NEW 2-WAY SYSTEM ***** 49.50
	SENNHEISER HD-224 LIGHTWEIGHT ···· 81.00
222 00	SENNHEISER HD-414 HEAD FROMES ***** 45.00 SONY MOR-SOT NEW SUPERINNES ***** 33.00
232.00 237.00	SONY MDR-50T NEW SUPER PHONES 33.00
71.00	
109.50	
111111	
	mana charge
الارو د	
- 352	
4.0.5	
12 E.	Delaware Pl., Chicago 60611
	-
C	end for free catalog
5	end for thee catalog-
Name	
Addre	SS
City	

Zip

speaker cables that do not have capacitance problems. Maintenance of the amplifier's damping factor is usually cited as a basic advantage. But, when analyzed, the resistance seen by the amplifier's output circuit (aside from the speaker wire) consists of at least 6 ohms for the drivers and crossover network in an 8-ohm speaker system. Considered in electrical terms, those 6 ohms are in series with whatever wire is used, so the damping-factor advantage of extra-heavy low-resistance speaker cable vanishes.

A 4-ohm speaker does need somewhat heavier wire for long runs simply because its internal resistance is lower. Normal lamp cord (which is usually 18 gauge) will work well for runs up to, say, 10 feet for 4-ohm systems and double that for 8-ohm systems. For longer lengths—or, as the ads say, "just to be sure"—you might try pairs of "light-wall" single-conductor stranded (not solid) 14-gauge wire. I find it much easier to install and less obstrusive than a heavy two-conductor wire.

There's lots more to be said about super cables, but I've never seen any test data that prove any advantage in audio use, although waveforms and tone-burst photos in some manufacturers' literature suggest that a few may be helpful in certain non-audio (r.f.) applications.

For readers who might think my views on this matter somewhat arbitrary, I recommend the article "Amplifiers and Speaker Cables" in the June 1981 issue of Audio Canada (481 University Avenue, Toronto, Ontario M5W 1A7). And for a more technical treatment, see "Amplifier-Loudspeaker Interfacing" in the May 1980 Journal of the Audio Engineering Society. After extensive mathematical analysis and measurements, the author concludes that for runs under 100 feet there is no reason to use wire larger than 12 gauge for even the highest-fidelity applications.

MM/MC Damage

Q. My receiver has a two-position selector for one phono input; one setting is for moving-magnet (MM) cartridges and the other for moving-coil (MC) cartridges. Can I damage my receiver or speakers by accidentally playing my MM cartridge using the MC position or vice versa?

> THOMAS HAUGSNESS Merrillan, Wis.

If the designer of your receiver made it A. that susceptible to damage, I would suggest he go back to the drawing board. The moving-magnet/moving-coil story is this. In general, MC cartridges have about one-tenth the output-signal voltage of MM cartridges; therefore, the phono-preamplifier stage must supply ten times the gain to achieve equivalent loudness levels. If a MM cartridge is fed to a MC input, the resulting signal will be excessively loud and distorted because of improper impedance match and overload. Conversely, if a MC cartridge is fed to a MM input, the amplifier's output signal will be weak and noisy because of the lack of required gain. In any case, damage is unlikely unless you persist in driving your speakers with the output signal of an amplifier overloaded by a MM cartridge feeding a MC input.

WHO JUST INTRODUCED AN AMPLIFIER WITH 750 WATTS/CHAN. DYNAMIC HEADROOM FOR JUST \$799?



Who else but Carver. Meet the new M-1.5. Bob Carver's Penultimate Power Amplifier.

*750 watts/chan. dynamic headroom; 600 watts/chan. long-time-period reserve; 350 watts/chan. continuous





By Ivan Berger



THE MICROCASSETTES ARE COMING!

JUST saw a sign of how the car-stereo industry has changed. Where once the big car-stereo trade show was the APAA (Automotive Parts and Accessories Association) show, the action has now shifted to the two Consumer Electronics Shows. Unfortunately, I didn't discover that till I flew out to see the last APAA show in Chicago. But even with only five or so car-sound exhibitors (ARA-Motorola, Audiovox, Kraco, Lake, and Sparkomatic), I was able to confirm at least one trend I'd spotted at last summer's CES-low-cost systems that include an in-dash unit, speakers, and (usually) an equalizer-booster, all in one readyto-take-home package. Audiovox, Kraco, and Sparkomatic all showed such systems in about the \$100-\$130 price range.

Kraco's KAS-2 (cassette) and KAS-4 (eight-track) systems even come in clever boxes that can double as a display and have handles for easy carrying. For \$130 (suggested retail), they include two shallow (11/8 inches deep), 5-inch-diameter coaxial speakers and a booster rated at "20 watts RMS per channel." That's "maximum" power, though; at 10 per cent total harmonic distortion, the systems deliver 15 watts per channel. Extrapolating from the more detailed specs of Kraco's new KE-4 equalizer, I'd guess the power at 1 per cent or less distortion to be about 12 watts per channel. (This sort of incomplete specification is more the rule than the exception in low-price car stereo.) The KE-4, by the way, is extremely compact (only 11/4 inches high and four inches wide) and includes a front/ rear fader and LED power indicators.

Sparkomatic's new LC 52 booster amp has pleasantly clean styling, as does the matching LC 102 three-band equalizer/ booster (it has a power meter, which I find less distracting than LED arrays; you have no business watching either while you drive). Both are rated at "40W total stereo power," which is more realistically detailed as 20 watts per channel at 10 per cent distortion. Power at 1 per cent distortion isn't specified for these units; it was, however, specified for the new SR 306 digital-dial in dash unit, which is rated at 45 watts (presumably for both channels together) at 10 per cent distortion and 40 watts at 1 per cent. By that standard, the LC models would probably deliver about 17 or 18 watts per channel at 1 per cent. Sparkomatic also introduced its SK 300 speaker, a 3^{1/2}-inch model with the company's perforated whizzer cone for augmented high-frequency response. It's rated at 40 watts power-handling capacity, partly because its center pole piece is vented to allow air cooling.

Audiovox's TP-707 system (\$100) includes an AM/FM/cassette unit, power booster, and two speakers. The company also showed new powered equalizers, the 100-watt AMP-700 and the 50-watt AMP-775, both seven-band models. Outputs at 1 per cent total harmonic distortion were 30 and 12 watts per channel, respectively.

HERE was bigger news far afield from the APAA show, in Osaka and New York. Matsushita (parent company of Panasonic, Technics, and Quasar) made the biggest splash with what was physically the smallest news, a slew of home and car equipment



using microcassette tape instead of conventional cassettes. The two mobile items included a conventional-size in-dash tuner/ tape unit and an under-dash tape player billed, at about 3 inches wide, $1^{1/2}$ inches high, and 5 inches deep, as the world's smallest car-stereo deck. The in-dash model had auto reverse, power loading, a music finder, and an unspecified noise-reduction system, plus a PLL-synthesizer FM/AM tuner and an amplifier rated at 6 watts per channel. Other specifications included response from 30 to 15,000 Hz with metal tape, a signal-to-noise ratio of 56 dB with noise reduction, and 0.15 per cent wow and flutter. That's not as good as the best fullsize cassette equipment, but it's not bad either. Since prerecorded microcassettes are scarce (though some are available in Japan already), there was also a home tuner/recorder unit that appeared to have wells for two tapes at once. (Fisher, of course, already has a microcassette deck for sale in this country.)

The other big splash was Clarion's, the unveiling of a whole new line of fifteen models. The accent was on smaller chassis to fit today's smaller cars. Since there's not enough room to go into detail on them all, let's look at the most expensive of the new units, the \$410 Model 9300T (the top of Clarion's line remains the programmable PE959A at \$715). The 9300T is a preamplevel system that requires a separate amp. Its auto-reverse cassette system has switches for Dolby noise reduction and tape equalization, plus a music finder called APC (Auto Program Control), but the big emphasis is on the FM section. The 9300T is one of several models with Clarion's "Improved Magi-Tune" FM, which adds keyed AGC (eliminating the manual local/distant switch) and an FM noise canceler to the features in last year's Magi-Tune. The digital tuner also has five-button, ten-station tuning presets plus seek and scan. Also new this year is the capability of receiving traveler's advisory AM stations at 530 and 1610 kHz.

New announcements from Sony explain the puzzling "Bass Drive" switch that I spotted on their new amplifiers back at CES. That switch cuts off response above 100 Hz so that the amplifiers which have it can drive Sony's new XS-L20 SuperWoofers (\$200 per pair). A complementary "SubSonic Filter" in various Sony amps and equalizers cuts sound below 100 Hz out of the signal fed to the main speakers. It's similar to the biamplified systems that other companies have offered, with the important difference that the crossover point is low enough that the woofer's sound will blend into the main signal no matter where it is installed in the car. (Other biamp systems usually cross over to their "woofers" between 1,000 and 2,000 Hz, well into the midrange.) Also new were three doormount Sony speakers, including one, the DX-301 (\$90 per pair), whose tweeter is angled to allow a bit of aiming.

O_{THER} new speakers came from Altec Lansing and AFS Kriket. Altec's SK2 Duplex (\$100) is a 5¹/₄-inch coaxial unit capable of sustained output as high as 107 dB. AFS Kriket has added four new models to its Domax II coaxial series: a $4^{1}/_{2}$ -inch shallow-mount (15% inch) for \$113 per pair, a 5¹/₄-inch (\$130), a 4 x 10-inch (\$150 per pair), and a 5 x 7-inch (\$57.50 each). All have ferrofluid-damped, polycarbonatedome tweeters.

Radio Shack's latest is a five-band equalizer/booster (catalog number 12-1864) at \$70. It's rated at "40 watts," which turns out to be a quite-respectable 15 watts per channel at 1 per cent total harmonic distortion. The unit is quite compact (only $1\frac{1}{4}$ inches high by $5\frac{1}{2}$ inches wide) and has a front-rear fader built in.

Free details on a different kind of record club

offering... BACH, BEETHOVEN, BRAHMS, FLEETWOOD MAC, LINDA RONSTADT, CHICAGO, KANSAS BARRY MANILOW, BOSTON, ELTON JOHN, JAMES TAYLOR, JEAN-LUC PONTY, CROSBY, STILLS & NASH, STEVE MILLER BAND, PETER FRAMPTON, BARBRA STREISAND, EAGLES, CHUCK MANGIONE and every other composer and artist in print.

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 print—no "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.

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 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 noobligation 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 moneysaving reasons to write for free details. You can't lose so why not fill out and mail the coupon for immediate information.

dmc	Dept. 9-0382 Discount Music Club 650 Main St. P.O. Box 2000 New Rochelle, NY 10801
ADDRESS	
CITY	
STATE	ZIP
CIRCLE NO. 4	O ON READER SERVICE CARD



iape Talk

By Craig Stark

THE TESTING OF TAPE RECORDERS

BEGINNING with this issue, readers will notice (see page 34) a slight change in STEREO REVIEW'S test reports. To ease an overcrowded schedule at Hirsch-Houck Laboratories, Starksonic Studio—that is to say, myself—will take over the task of testing and reporting on tape equipment. This is a good opportunity to discuss my method of going about it, though it does not differ from Julian Hirsch's test technique in any significant way.

l usually begin with some rather mundane, uncontroversial checks: the fast-forward and rewind times for an ordinary C-60 cassette, the input-signal level necessary to produce a 0-dB indication on the machine's meters, the output from the deck at this level, the maximum signal the microphone input will accept before producing obvious distortion as seen on an oscilloscope, etc. These checks give me a chance to handle the operating controls, to note how much mechanical noise the deck makes while running, and to ensure that the test unit has incurred no shipping damage that might harm the expensive calibrated tapes I use in subsequent measurements.

The next step is to measure the deck's playback frequency response both for regular ferric (120-microsecond) and for CrO,type and metal (70-microsecond) tape formulations. This is a vital test, for it has a great deal to do with how a prerecorded tape will sound when you play it. Over the years, Julian Hirsch and I have both used a variety of calibrated playback tapes to make these measurements. A few tapes are quite accurate, but their upper (and sometimes lower) frequency-response limits fall far short of the overall record-playback capability of typical machines. However, I recently obtained a pair of new BASF test tapes that range from 31.5 Hz to 18 kHz within ± 0.5 dB of the IEC standard, and these have become my current cassettedeck playback references.

I next check the accuracy of the Dolbylevel indication of the meters (or LED displays), and for this I use a calibrated Teac MTT-150A test tape that tells me both how accurate the meter calibration is and, if no Dolby-level marking is provided, how closely it corresponds to 0 dB. If the deck has "VU" meters, I then test their ballistic characteristics—how fast the needles move and how much they overshoot or undershoot their intended reading—using the standard 1,000-Hz tone pulsed every 0.3 second.

When a tape-deck manufacturer is invited to submit a sample of his product for a test report, he is also asked to supply the results of his *own* engineering check-outs of the machine, together with the names of the specific brands of tape (and the actual samples, if possible) used in making the factory adjustments. The manufacturer's test data provide a valuable starting point for my own measurements and help me to discover the occasional unit that has been thrown out of alignment by rough handling during transit.

Record-playback frequency response is measured both at a machine's indicated 0dB level and at a level 20 dB below that point. The -20-dB readings are traditionally taken as the "frequency response" of the deck; the 0-dB level shows primarily the high-frequency limitations of the machine. Ideally, both lines in the graph should be ruler-flat, and with some professional 15- or 30-ips open-reel decks as well as with digital (PCM) recorders this ideal can very nearly be met. With cassette decks, on the other hand, the slow tape speed (17/8 ips) invariably introduces a high-level high-frequency rolloff (far less with metal-particle tapes than with ferric or CrO2-type formulations). In testing cassette decks, therefore, I always use either the manufacturer's specified tapes or those I have found to give the flattest frequency response, for my task is to tell the reader what the machine can do if used as its maker intended. I also check the machine's response with a number of other popular tapes (as many as five for each bias/equalization switch setting on the machine) to ensure compatibility with a representative sample of the cassettes that are available to tape buyers in various parts of the country.

He next test I make, using my GenRad sweep-frequency audio generator and chart recorder, is of the frequency response of the deck at input levels of -20, -30, and (Continued on page 28)



If you think "dropouts" lead to street gangs, you're not ready for Memorex.

What dropouts can do to cassette recordings is criminal.

Dropouts are the annoying moments of signal loss that steal the clarity – and the life – from vour music.

So every part of a Memorex cassette tape is specially engineered to help eliminate dropouts



We developed an extraordinary binding process called Permapass[™] to protect against dropouts caused by oxide wearoff. Permapass locks each oxide particle, each musical detail, onto the tape. For true sound

reproduction play after play, even after 1000 plays.

Our tape transport mechanism is tooled to such precise tolerances, it virtually eliminates signal loss caused by tape-tracking error.

And to prevent those dropouts MEMORE

caused by dust, fingerprints and other mishandling of the inside, we reinvented the outside: a unique fumble-free album that accepts the cassette upside down or right side up. So don't risk your

good music to a bunch of dropouts. Record on

Memorex. In HIGH BIAS II METAL IV or normal bias MRX I Each gives you true sound reproduction even after 1000 plays. In fact, a Memorex cassette will always deliver true sound reproduction, or we'll replace it. Free. To settle for anything less would

be a crime.

NOW MORE THAN EVER WEASK: IS IT LIVE, OR IS IT MEMORE

HBI HEAH ICTONI Ba

high Dias I

-12

© 1981, Memorex Corporation, Santa Clara, California 95052, U.S.A

TENSEN CASE IN DAS	SH	IVC	PORTABLES w/beadpl	
N200	. 199		SONY SRF 60 SONY Walkman WM1	
R425	\$259	CONCORD	SONY Walkman WH2	.813
71606	.\$197		MURA HISTEPPER	.83
RE512	.8256	AIWA	AIWA HSPI	
SPEAKERS Priced Per I	Patr	SHARE & A TURNED	AIWA CSII	.516
1)033 SES Triax D		FENWOOD	ELH SOLO	.\$12
1037 623 Coux 0			HOME AUDIO	
11065 629 Trtax		TOK.	PIONEER SE3700 Rec	.\$21
1089 829 Coux	. \$42		TECHNICS SA222 Rec	.\$20
11042 5% Cours II	. 854	BIBASE	SONY STR VIA Rec	\$28
			PIONEER SIS Rec	\$25
PIONEER CASS IN-DA	LSH .	JENSEN	PIONEER PL7 Traib	\$10
With RADIO			DUAL 1258 Changer	\$10
EPX \$500	.\$173	(MURA	DUAL 1288 Changer	.812
EP6500	.\$155			
	\$170		VIDEO & VIDEO TAP ATARI CII 2000 Console	
EE5100	\$214		MATTEL Intellivision	
AD 30	.\$234	ATAR	PIONEER VP 1000 Lamer	8561
AD 50		1-10-0AL	SONY SLS800 Beta Rec.	.8825
AD 160	\$105	maxell	SONY SLMOD Beta Rec.	
BLAUPUNET		IIIOAGII	SONY LSOD Tape	
CR3001	\$4.19	-	SONY L750 Tape	
CR5001	\$329	TU JIN	FUTI T120 Tape	
CR2001	\$229		TDE T120 Tape	
	1289		CARTRIDGES/HEADPH	
	.\$107	KLH	SHURE V 15 IV	
BEA200	\$160		SHURE MITTHE	. \$52
SONT		Duat	SHURE MISHED	
	CALL	Utter	AUDIO TECH. AT ISSLC.	=10
	CALL	-	AUDIO TECH ATI MLC.	.14
	CALL	Technics	AUDIO TECHL ATHY	. 591
	CALL		AUDIO TECH. ATHS	. 835
	CALL	SONY	MURA RED SET	. \$2
	CALL		SENNHEISEN HD420	
Concord, Visonik Son		AIWA	SENTIMEISER HEALA	
Panamonia, also availa		SIMPLY ADVANCED	SEMAREISER HEHOO	
AUDIO TAPE			SORY MDR 70T.	89.
NAXELL LINK	\$1.99	0 PHONEER	SONY MDR 2	\$21
NAXELL LN90 NAXELL UDC90 NAXELL UDXL1, II C90	\$2.48		A C 101 1400 1 11 1	.13
		ELEPTROPUTS	SONY MDR E33	.\$21
TDE DIO	\$1.89	SPEED MARINES		
TDE AD90	\$2.49	All orders shine	ed in factory sealed	COT.
THE SASO SONY ENF CND.	\$1.99		monulocturers' warr	
SONT ENF CNO.	\$2,79		d and C.O.D. orders	
SONT FECH CNO	37.09			
FUTI FIEL SO	\$1.89		g charges are 4% o	
FUT MET AL 90	\$5 49		act quotes and availab	itity.
		Prices subject to	o change.	
Call (301)434-5573-	-Cas	stamer Service		5
To Order call 800-			VER -	
to other cam one.	036.	0333	A	4
1000 1101 2011		-	V / 111 1	11
1362 HOLTON			V/ III I	- 1

NEW-1982 Stereo Directory & Buying Guide!

Before you shop for stereo gear, get the new issue of *Stereo Review's* 1982 STEREO DIRECTORY & BUYING GUIDE. Thousands of equipment listings with full specs and prices, plus tips on buying and using gear. Save time, trouble and money –order today!

Stereo Directory & Buying Guide P.O. Box 340, Broomall, PA 190 Send me the 1982 STEREO DIREC BUYING GUIDE. Enclosed is \$3.9 plus \$1.00 post. & hand.). \$5.00 outside Mr.	tion
P.O. Box 340, Broomall, PA 190 Send me the 1982 STEREO DIREC BUYING GUIDE. Enclosed is \$3.9 plus \$1.00 post. & hand.). \$5.00 outside	
BUYING GUIDE. Enclosed is \$3.9 plus \$1.00 post. & hand.). \$5.00 outside	08
	5. (\$2.95
Mrs Ms(please print full name)	
Address	Apt
City	
State Zip	
*Residents of CA, CO, DC, FL, IL, MA, MI, N State, OH, SC, TN and VT add applicable sal	10, NJ, NY

(sometimes) -40 dB with the noise-reduction system(s) switched in. While these results are not presented graphically (because any noise-reduction system can introduce or magnify frequency-response variations), any deviation of more than ± 2 dB from the response without noise reduction will be noted in the text of my report.

Distortion and signal-to-noise-ratio measurements come next. I use the same test tapes for these as for the frequency-response measurements (manufacturers don't always do this), together with a low-distortion Sound Technology 1700B audio generator and a General Radio 1900A wave analyzer. The wave analyzer allows one to "tune in" (and measure) any specific distortion component. With tape, the third harmonic (3,000 Hz if, say, a 1,000-Hz input signal is used) is by far the dominant distortion product, so this is what I measure, using a 315-Hz input signal for cassette decks and 400, 700, or 1,000 Hz for open-reel, depending on tape speed.

HIRD-HARMONIC distortion is first measured using an input level that produces a 0-dB (or 0-VU) indication on the deck's record-level meters or display, for this is what a user unequipped with a lab full of test instruments must rely on. Technically, however, the signal part of a signal-to-noise ratio is referred not to a 0-dB meter indication but to the playback level that results when the input is raised sufficiently to produce 3 per cent third-harmonic distortion. The difference between the 0-dB and the (usually) higher 3 per cent distortion output levels is called headroom, and it represents the leeway or safety margin the recordist has available between what his meters are telling him and the onset of audibly serious distortion.

With VU meters, a 6- to 10-dB safety margin is normal, for these indicators underread the brief but powerful transients in music and speech that would overload the tape. Less leeway is needed for peak-reading record-level indicators, and with "equalized" peak-reading meters the 0-dB and 3 per cent distortion points may coincide as the indicator takes into account the treble boost (equalization) that is part of the record circuitry. Headroom is neither good nor bad, but rather appropriate or inappropriate as a means of ensuring that a 0-dB indication is, in fact, a realistic record level that will not produce either severe distortion from recording at too high a level or high hiss levels from recording at too low a level.

After the maximum permissible signal has been determined, the output of the audio generator is shorted and the tapes are recorded with no input signal. The playback level of this recorded non-signal is the noise part of the signal-to-noise ratio. I measure this recorded noise in three ways: unweighted, in which all frequencies (up to about 80,000 Hz) register equally on the meter, and A-weighted and CCIR/ARMweighted, in which the frequency distribution of the noise is weighted so that it takes account of the sensitivity of the ear to very low-level sounds. The A-weighting method has been used for many years and is internationally accepted (not least because it gives the best-looking numbers in a S/N measurement!). The CCIR/ARM noise

measurement is newer and tends to display the action of a noise-reduction system such as Dolby-B to better advantage. To report all possible signal-to-noise ratios—with at least three tapes per deck and three noiselevel measurements per tape, each with and without one or more noise-reduction systems—would clearly overload the patience of all but the most technically minded. Therefore, I select and identify only the most meaningful numbers to be included in the text.

Wow-and-flutter (to which my ear is particularly sensitive) is measured both on the wrms (weighted, root-mean-square) basis most frequently used in cassette-deck specifications (again, because it gives betterlooking numbers) and on the DIN/IEC/ IHF peak-weighted basis used for professional equipment; I find that the latter more accurately indicates the audibly objectionable aspect of unstable tape motion. When a deck's wow-and-flutter comes out lower than the reliability limits of my TDK and Teac wow/flutter test tape, I measure on a record/rewind/play basis.

At this point in my testing, a great many hours and many thousands of dollars of test equipment have gone into checking the performance of a tape deck from which I have yet to hear a single note of Mozart. The fi-



nal stage of my test procedure is to use the deck as a consumer would use it-for recording and playing back music. (Julian Hirsch tends to listen first and then test; I tend to test first and then listen, but since we are equally attuned to the pitfalls of either procedure, we're each, we hope, able to offset our biases.) Any good cassette deck should be able to make nearly indistinguishable copies of FM broadcasts and of most LPs on the market, and this is what most prospective buyers want to know. Dubbing direct-to-disc records or my own master tapes (analog or digital) made in a hall with whose acoustics I am thoroughly familiar is a more severe test which only the finest cassette decks can pass. But a good approximation to this testing challenge is afforded by interstation FM hiss, a signal that is technically neither "white noise" (equal energy per cycle) nor "pink noise" (equal energy per octave) and which Julian and I long ago agreed to call "rosé noise." If you don't hear a difference between the record and playback performance of a deck using FM hiss recorded at a level of -10dB or higher, you don't need to worry about the frequency response of the deck.

In general, I suspect that most readers will notice little or no difference between a Hirsch-Houck Laboratories report submitted by Julian Hirsch and one submitted by Craig Stark. That is as it should be, for we are in basic philosophical agreement as to the factors important in tape-machine performance and how to test them. This is no drill. This is the Air National Guard. The professionals who keep watch on the skies over America. All day. Every day.

vhen you

ponsible

 \mathbf{O}

It's serious business, because it's for real. And everyone from the jet engine mechanic to

the weather technician knows it.

That's why they're here. They know every time a pilot leaves the ground, they're riding with him. Their

communications network, his ears. Their radar scopes, his eyes. Their aircraft maintenance, his life.

And whether it's a ground check on an

electronic circuit. Cr a steady hand on a refueling boom nine miles high, everything they do brings a special satisfaction. Because

it counts.

If you're looking for the chance to do something meaningful. If you've got what it takes to take on a real job. If you get that tingle down your spine when a jet engine fires up. Then maybe you should help us do what we do. We Guard

America's Skies

See your local We Air National Guard Guard recruiter. Or call us toll-free

800-538-0936

(except in Alaska, Division Hawaii and Puerto Rico); in Maryland call 301-981-3610.



EVERYTHING YOU HEAR IS TRUE.



For over 25 years, the Harman Kardon legend has been built on dedication to a single objective.

Musical truth.

From tape decks and turntables to receivers and separates, Harman Kardon represents the ultimate in sonic quality.

And pictured above is the ultimate in Harman Kardon electronics.

The hk775X2 dual mono amplifiers were created for the music lover who demands the sonic improvements that come from assigning separate highpowered* amplifiers to each stereo channel. Among the many leading design concepts they incorporate are three of particular note.

1. High Current Capability allows the hk775X2 to deliver nearly unlimited instantaneous power under heavy, low

impedance loads. Low frequency transients, such as the beat of a kick drum, are reproduced with their tight, solid attack and full dynamic power completely intact.

2. The use of Low Negative Feedback puts total TIM distortion at less than .007% for noticeably smoother, dramatically more open highs.

3. Ultrawideband frequency response keeps phase shifts well outside the audible spectrum, for an incredibly transparent, solid stereo image.

The hk725 preamplifier has an 8-stage phono section with an impressive .009% THD. It uses Ultrawideband and Low Negative Feedback design and FET front ends on both low and high level stages.

Marman/kardon ASK ANY AUDIOPHILE

Finally, the hk715 offers Digitally Synthesized Quartz-Locked tuning for accuracy and 8 presets for convenience.

Like all Harman Kardon components, the hk700 series achieves its extraordinary openness and depth through attention not only to bench test specs, but to how the designs sound while reproducing music.

Because ultimately, what must sound real is the music.

For your nearest dealer, call toll-free, 1-800-528-6050, ext. 870.

Or write Harman Kardon, 240 Crossways Park West, Woodbury, NY 11797-2057. In Canada, Gould Marketing, Montreal H4T 1E5.

*130 watts RMS per amplifier, into 8 ohms, 20Hz-20kHz, with less than .03% THD.



Consumer Reports' Speaker Ratings

PERHAPS because it is so difficult to describe the performance of a loudspeaker using terms that convey a sense of its sound qualities or overall merit, there have been many attempts to assign numerical "accuracy" ratings to speakers, the higher the number the "better" the speaker. The aim, of course, is to remove these judgments from the realm of personal taste.

It is possible, within certain limitations, to gauge the accuracy of a speaker "objectively." Speaker accuracy can be defined as the speaker's ability to put out an acoustic analog of the electrical audio-input signal. Unfortunately, acoustic output can be defined and measured in many different ways, as the IHF committee brought together to formulate a "Speaker Test Standard" soon learned. There are so many ways to measure the acoustic output of a speaker that even those engineers who agree that "accuracy" is the goal cannot agree on how to go about measuring it.

Consumers Union—the nation's (and possibly the world's) largest consumer testing organization—has designed a test technique and uses it to assign precise numerical "accuracy score" ratings to the speakers they test. The scores run from 0 to 100 (the latter for a "perfect" speaker), with most reasonably good speakers falling between 70 and 90. The text accompanying CU speaker reports is explicit about the organization's primary criterion for speaker perfection: uniform power output over the frequency range from 110 to 14,000 Hz.

Measuring a speaker's power response is a rather complex process. The CU technique involves hundreds of measurements around an imaginary sphere, with the speaker at its center, in an anechoic chamber. Computer processing of some 18 million pieces of data is used to develop the final power-response curve. That curve is then modified to account for the relative perceived loudness of different parts of the frequency range, and its deviations from an ideal flat response are further processed to derive the final accuracy score.

We are told that this procedure is further checked to confirm that it corresponds to how speakers really sound. To do this, a high-quality speaker in CU's listening room is carefully equalized to give a measured response in the room that is flat from 110 to 14,000 Hz. Blindfold A-B listening tests between the reference speaker and the various speakers under test show that speakers with high scores tend to sound more like the reference speaker than do the ones with lower scores. One could hardly expect otherwise!

His is admittedly an oversimplified account of what is really a very complex measurement procedure. My criticism of it lies not with the measurements per se, which are carefully done, but with the implication that the end result is a meaningful "accuracy" score or even a usable figure of merit. At best, all that CU can show is the uniformity of a speaker's power output over a limited 110- to 14,000-Hz bandwidth—a range that does not meet even minimal high-fidelity standards. In fact, the area below 110 Hz represents much of the manufacturing cost and design skill in high-fidelity speakers, and to discount it is to negate much of the reason for paying more for extended low-bass response.

The major speaker-testing problem (and CU's reason for the 110-Hz low-frequency cutoff) is that room effects are so pronounced at low frequencies that it is simply not practicable to rate speakers in that frequency range independently of the room and the speakers' placement in it. In fact, room acoustics have a profound effect on the sound of *any* speaker at almost *any* frequency, and especially at those below about 500 Hz. This is why it cannot be said unequivocally that any speaker, no matter how "good" it measures or sounds in a given room, will perform exactly the same way in another room. In fact, it will not!

To "compensate" for the effect of a room on low frequencies, CU also calculates a "room-corrected" response using a computer modeling program. Roy Allison of Allison Acoustics, in a recent letter to me, points out some deficiencies in CU's method. Here are a few of his salient points:

• "CU has finally realized that loudspeakers are used in real rooms. But the credibility of the most recent report [September 1981] is destroyed by what seem to be mindless inconsistencies:

1. In calculations of room-boundary corrections. CU assumed that loudspeakers would be located 5 feet from a side wall. This is *much* farther than would be typical. Loudspeakers placed this way on a 13-foot wall, for example, would be only 3 feet apart! If a more reasonable distance had

Tested This Month

Phase Linear DRS 900 Power Amplifier

B&W DM10 Speaker System Empire ICS/400 Phono Cartridge

Micro Seiki MB-38 Turntable Technics SV-P100 Digital Cassette Recorder

been assumed, the response curves would have been quite different-much worse for most of the speakers tested, perhaps better for some.

2. Loudspeaker directivity was not considered in arriving at accuracy scores.

4. Only the average deviation from flatness was counted in the accuracy-score computation. Thus a smooth [but not "flat"] loudspeaker was judged to have no advantage compared with one having alternating peaks and dips."

In my view, measurements in anechoic or reverberant environments are obviously useful for design engineers. But they do not tell us how "good" or how "accurate" a speaker may be, particularly when arbitra-ry "weightings" are assigned to various measured factors, as in CU's reports. CU's "accuracy rating" is arrived at by evaluating the factors they choose to regard as determining accuracy. Although we agree that accuracy is the primary design goal, we disagree as to how that accuracy is to be

determined and-particularly-whether it can be described meaningfully by a single numerical rating.

Another unsettling aspect of the CU accuracy-rating system is that the scores are accompanied by the statement that a difference of as much as eight points is not readily resolvable by ear (in other words, such a difference is meaningless to the consumer to whom the report is addressed). Nevertheless, it is nearly impossible for a lay reader to avoid being influenced by the supposed ranking order-which has in any case been influenced by arbitrary weightings.

In CU's September 1981 test of midprice speakers, nineteen of the thirty-two units fell within eight points of each other, and many of those matched within a couple of points. CU admits that two speakers with the same score do not necessarily sound alike (because their departures from flat occur at different frequencies).

I was struck by the fact that only two speakers had a reasonably flat power-response curve in these measurements, yet

neither ranked at the top, although they were within two or three points of the topranking model (whose response was far more ragged than either) and not too different from some of those falling far below it.

HERE is no point in belaboring this subject further. It is worthy of comment because of the influence of Consumer Reports on the public's buying habits and CU's (to me) rather incredible attempt to assign "objective" numerical ratings based on their subjective opinions of what is and is not important in loudspeaker performance-performance which in any case is influenced to a major degree by the listening room and the speaker's specific placement in that room. It would seem that Consumers Union's highly advanced and computerized test facility deserves to be better supported by common sense and good judgment.

A reply from Consumers Union will appear in the April issue.



Phase Linear DRS 900 Power Amplifier

Phase Linear DRS 900 Power Amplifier

- Power Rating: 150 watts per channel Size: $17\frac{1}{2} \times 13 \times 5\frac{3}{6}$ inches Weight: 38 pounds
- Price: \$1,095

THE new Phase Linear DRS series of am-plifiers employs a high-efficiency design with very high dynamic and clipping headroom. The amplifiers are of reasonable size and weight and run cool under normal operating conditions, yet they can supply very large power outputs when called on to do so.

Previous "high-efficiency" designs have all used switchable or "smart" power supplies that allowed the amplifier to operate with low d.c. supply voltages most of the time (avoiding the need to dissipate large amounts of wasted power in heat). At some

power level, above which the low d.c. voltage is not sufficient to allow undistorted output, the supply voltage increases to handle the signal requirements. This, of course, calls for some type of power-supply regulator that can respond to level changes even faster than the amplifier itself.

BLAND PECANARTS BEALE DUDIES

Phase Linear's DRS design differs from any of the earlier systems in important (Continued on page 38)

34
Professional quality breaks the cassette barrier.

A true professional recorder must do more than deliver superb sound reproduction. It must do so consistently, hour after hour, year after year.

Now, for the first time, you can buy a cassette deck with longterm performance comparable to the finest reel-to-reel recorders. Not surprisingly, It's from Revox. When you look inside a Revox 8710, you'll see the difference immediately. First, the tape

transport chassis is made from aluminum alloy die-castings

20110

9550

(not plastic or imprecise metal stampings), with parts machined to the same critical tolerances as in our pro recorders. And second, the B710's dual capstan tape drive employs *two* servo-regulated Hall Effect motors, with two additional microcomputercontrolled motors for tape spooling. No belts, pulleys, or clutches will be found in the B710, because such compromises are not acceptable in a professional machine.

Granted, the B710 does offer a Inglist of convenience features. A precise 4-digit LED counter, for example, A 24-hour timer for programmable start and stop in record or play, Mic/line mixing.

Automatic sensing of tape types. Automatic start-of-oxide cueing with counter reset to zero. And Dolby noise reduction. But don't let the features or

pretty face fool you. At heart, the B710 is a seasoned pro. Hear it today, along with aur other superlative audio components from Switzerland and West Germany, at your Revox dealer. For more information, contact: Studer Revox America, 1425 Elm Hill Pike, Nashville, "N 37210; (615) 254-5651.

STUDER REVOX

Professional standards in audio components



Nøbody does it better.

.

KING: 15 mg. "tar", 1.1 mg. nicotine, 100's: 15 mg. "tar", 1.0 mg. nicotine, av. per cigarette by FTC method. This is your world. This is your Winston. Smooth. Rich. Taste it all.

Warning: The Surgeon General Has Determined That Cigarette Smcking Is Dangerous to Your Health.

New 100's pack.

02

Winston

100's

FULL RICH



FULL RICH

STE

20 GIGARETTES

--



operating details. It uses two levels of power-supply voltage but controls the positive and negative supplies separately. The transition is determined by the instantaneous voltage across the output transistors. If that voltage becomes too low for linear operation, only the necessary supply voltage (either positive or negative, depending on the waveform being amplified) is increased to restore linearity. Phase Linear points out that their power supply has a very low output impedance (good regulation) and that all its dynamic switching is done after rectification and filtering and with sufficient speed to track a 20,000-Hz signal.

There are three models in the DRS series, rated at either 150 or 50 watts per channel (the lower power rating is available in both basic-amplifier and integrated-amplifier formats). We tested the higher-power unit, the DRS 900, which is a basic power amplifier rated at 150 watts per channel into 8-ohm loads from 20 to 20,000 Hz with no more than 0.015 per cent total harmonic distortion. Because of its DRS circuitry, the Model 900 has a dynamic power output of 450 watts per channel into 8 ohms, corresponding to an IHF dynamic-headroom rating of 4.77 dB. Up to its 150-watt rated output, the amplifier operates only with the lower of its two supply voltages.

The Phase Linear DRS 900 is finished entirely in satin gold, with a panel insert containing a power-output display. Two slanted (45-degree) lines of LEDs extend in length to show the equivalent power output into 8-ohm loads, with calibrations extending from 0.01 to 150 watts. Another scale, at right angles to the first, is calibrated in terms of peak output up to 300 watts, and for use with this a single peak-reading LED, moving ahead of the main line, shows the peak level simultaneously with the longerterm program variations. The decay time of the peak indication can be set to FAST or SLOW (the former corresponding to standard VU-meter ballistics). Also, there is a HOLD button on the panel that keeps the peak light at the highest reading it attains, which is a very convenient way to determine the true peak-to-average level requirements for any piece of program material. Other lights on the power-display panel glow at peak outputs of 500, 700, and 900 watts per channel, and there are clipping indicators

that show the onset of actual waveform clipping. The DRS 900 can drive either or both of two pairs of speakers, as selected by front-panel buttons.

• Laboratory Measurements. Our test sample of the Phase Linear DRS 900 was a pre-production unit essentially identical in appearance and circuitry to the production units to follow. Preconditioning it at a 50watt output left the top of the amplifier over the internal heat sinks fairly hot, and later full-power operation made it very hot though never too hot to touch.

With both channels driving 8-ohm loads at 1,000 Hz, the distortion was between 0.0015 and 0.002 per cent up to about 150 watts output, decreasing to 0.001 per cent from 130 to 400 watts. The output clipped at 400 watts, giving a clipping-headroom rating of 4.26 dB. With lower load impedances, the 10-ampere line fuse of the amplifier blew at or before the clipping point, so we had to make those measurements with only one channel driven. The 4-ohm clipping output was 690 watts, and the 2-ohm output was 420 watts. For comparison, we also checked the 8-ohm clipping output with one channel driven; it was 465 watts.

The 1,000-Hz distortion with 4-ohm loads was in the range of 0.002 to 0.003 per cent up to 400 watts output, reaching 0.008 per cent at 600 watts. With 2-ohm loads, the distortion was low up to 100 watts (under 0.0068 per cent) but increased gradually at higher power outputs before actual clipping occurred. At 300 watts the distortion was 0.25 per cent and at 400 watts it was 0.8 per cent.

When we drove both channels of the amplifier to their rated 150 watts into 8 ohms across the audio range of 20 to 20,000 Hz, the distortion was a minimum of 0.0006 per cent in the 80- to 200-Hz range, less than 0.0035 per cent from 20 to 7,000 Hz, and a maximum of 0.018 per cent at 20,000 Hz. At lower power outputs the general behavtor of the amplifier was similar, with slightly higher distortion readings at middle and high frequencies.

The dynamic-power output of the DRS 900 was also very high. Driving 8 ohms, the maximum output during a 20-millisecond burst at 1,000 Hz was 460 watts, and with 4- and 2-ohm loads the respective outputs were 670 and 430 watts. The 8-ohm IHF dynamic-headroom rating was 4.87 dB, slightly surpassing the amplifier's rating of 4.77 dB. The close similarity between the clipping and dynamic-power outputs is characteristic of a well-regulated power supply, confirming Phase Linear's claim that the DRS 900 has a "stiff," low-impedance power supply.

The slew factor of the amplifier was 11, with slew-limiting waveform distortion appearing at 220 kHz when we drove the amplifier to rated power output. An 80-millivolt input was needed for a reference-power output of 1 watt, and the A-weighted noise level was 78 dB below 1 watt (100 dB below 150 watts). The amplifier was stable with reactive loads simulating loudspeakers, although under some conditions the loads produced an insignificant ringing at about 75 kHz on a square-wave signal. The IHF intermodulation distortion, using input signals of 19 and 20 kHz, was extremely low and barely detectable on our spectrum analyzer. The 18-kHz distortion product was at -96 dB (referred to 150 watts), and the 1,000-Hz difference product was undetectable down to our measurement floor of almost - 100 dB. The low-level (1-watt) frequency response of the DRS 900 was perfectly flat in the audio range and down 3 dB at 5 Hz and 260 kHz.

• Comment. Phase Linear was evidently looking ahead to the anticipated growth of digital and other recording systems with large dynamic-range requirements when they designed the DRS series of amplifiers. The DRS 900 is certainly one of the most powerful amplifiers available to the home user, and few are likely to find it inadequate for reproducing today's most demanding recordings through most speakers. Even it can be clipped, we discovered, at a loud (but not overpowering) listening volume, but that will occur only with a few highly asymmetrical waveforms such as recordings of a trumpet played close to its original acoustic level through speakers of low to medium efficiency. (Needless to say, the speakers used with this amplifier should be well protected or rated to handle very high-power inputs.) We watched the clipping lights on the DRS 900 come on with such a signal, together (Continued on page 40)

ZX-7...puts you in complete control to unleash the potential of every cassette. Adjust not only bias and level but *azimuth*, too with Nakamichi's "Discrete" 3-Head system! Everything to optimize performance lies at your finger-tips: 400-Hz and 15-kHz test tones, peak-reading electronic meters, and a phase-sensitive azimuth indicator.

Dolby[±]C NR reduces tape hiss by 20 dB while B-Type NR maintains compatibility with your present library. An exclusive two-speed Master Fader creates smooth professional fades. The unique Nakamichi Asymmetrical, Dual-Capstan, Diffused-Resonance Transport—with a remarkable ability to suppress wow, scrape flutter, and modulation noise controls tension so precisely that the pressure pad isn't used! Its unique Motor-Driven Cam and N-MOS microprocessor features two-speed Easy Cue, Auto Play, and immediate access between modes even from Play to Record!

Why settle for less? If you're serious about recording, you owe yourself an audition of the ZX-7 at your Nakamichi dealer.

Puts You In Complete Control... Maximum Performance



TM Dolby Laboratories Licensing Corp. For more information, write Nakamichi U.S.A. Corp., 1101 Colorado Ave., Santa Monica, CA 90401

test reports

with the 200-watt lights on a pair of KEF 105.2 speakers, yet the sound betrayed no evidence of clipping (it was obviously a very brief overload).

The LED power indicators of the DRS 900 proved to be reasonably accurate when viewed from the front to avoid parallax errors. The indicators read within 20 to 30 per cent of the actual output at most points. which is close enough for their intended purpose. The "X1/10" button increased the display sensitivity by only four times at low readings and by more than ninety times near the upper end of its scale. Of course, that may have been an anomaly of the prototype test sample.

If the Phase Linear DRS 900 seems expensive for a 150-watt amplifier (it really isn't, compared with some we have seen), think of it as a very fine 450-watt amplifier. Viewed in that light, it is something of a bargain, especially when one considers that it can be picked up and carried by almost anyone without risking personal injury! Regardless of how one defines amplifier efficiency, it seems to us that Phase Linear has made a truly efficient amplifier in the DRS 900. It becomes only slightly warm in normal operation, yet it can deliver prodigious power outputs when necessary without distortion or strain. The high power of the DRS 900 is useful significantly longer than

the brief 20 milliseconds of an IHF dynamic-power measurement; even though the amplifier becomes quite hot during sustained high-power operation, it can outlast the longest of any demanding passages one is likely to find in musical material (our test unit never shut down for thermal reasons, only for blown line fuses).

This is a rugged, handsome amplifier that sounds as good as it looks. It represents a genuine step forward by a company whose name has been virtually synonomous with high-power, high-fidelity amplifiers since its inception. -Julian D. Hirsch

Circle 140 on reader service card



- **Technics SV-P100 Digital Cassette** Recorder
- Size: 17 x 10¹⁵/₁₆ x 13³/₈ inches
- Weight: 40 pounds Price \$3,000 .

HE Technics SV-P100 is the first integrated home digital recorder to be reviewed in these pages and possibly anywhere. Built to the recently adopted EIAJ

(Electronic Industries Association of Iapan) standard for consumer digital audio, it employs VHS videocassettes and is a selfcontained, one-piece unit.

Audiophiles who have followed the progress of the industry have long known that home digital tape machines were coming, but probably few readers are aware of the basic principles by which a deck such as the SV-P100 operates. In a regular analog open-reel or cassette recorder the attempt is made to produce tracks of magnetic fields on the tape that correspond, one-to-one, with the audio material being recorded. Even the best professional systems fail in this attempt, specific problem areas being the handling of high-level high frequencies, mechanical imperfections that lead to wow and flutter, and inadequate signal-to-noise ratio (Continued on page 42)

...and then came Super Feedforward.

Not many years ago a "high fidelity" amplifier delivered 5 watts with 5% harmonic distortion. Today, distortion levels of 0.05% — or even 0.005% — in amplifiers with hundreds of watts and a much wider frequency range are almost routine.

Reducing harmonic distortion has usually been achieved by using negative feedback. But too much negative feedback can introduce a new kind of distortion, TIM (Transient Intermodulation Distortion) that audibly degrades the musical sound.

To reduce TIM and other forms of residual distortion, Sansui developed its DD/DC (Diamond Differential/

Direct Current) drive circuit. Then, to eliminate the remaining vestiges of high-level, high-frequency distortion in the amplifier's output stage, Sansui engineers perfected a unique circuit which, though proposed years ago, has now been realized in a practical amplifier design. Super Feedforward, the new Sansui technique, takes the leftover distortion products present in even an optimally-designed amplifier, feeds them to a separate, error correcting circuit that reverses their polarity, then combines them so they cancel themselves out against the regular audio signal. What's left is only the music, with not a trace of distortion.

While Super Feedforward circuitry puts Sansui's AU-D 11 and AU-D 9 amplifiers in a class by themselves, all our amplifiers are renowned for their musicality, versatility, and respect for human engineering. Add a matching TU tuner to any of Sansui's AU amplifiers and you'll appreciate the difference 35 years of Sansui dedication to sound purity can produce.

For the name of the nearest audio specialist who carries the AU-D 11 and AU-D 9 or other fine components in Sansui's extensive line of high fidelity products, write: Sansui Electronics Corp., 1250 Valley Brook Avenue, Lyndhurst, NJ 07071.



SANSUI ELECTRONICS CORPORATION Lyndhurst, New Jersey 07071, Gardena, CA 90248 Sansui Electric Co., Ltd., Tokyo, Japan CIPCLE NO. 27 ON READER SERVICE CARD

Sansui

test reports

A digital deck such as the SV-P100 operates on very different principles. Instead of trying to record the audio waveform as analogous magnetic fields, the SV-P100 deliberately *samples* the audio level some 44,056 times each second and records each sample as a fourteen-"bit" digital binary number. This technique provides an available dynamic range of 84.3 dB. No less important, distortion is kept under 0.01 per cent.

In theory, the high-frequency response of a digital recorder is equal to half its sampling rate, though the necessary input and output filters reduce this somewhat. On the other hand, because the digital signals are "clocked"—synchronized with an extremely accurate quartz-crystal reference oscillator—mechanically generated wow-andflutter (and attendant FM-modulation noise) are essentially eliminated.

The front panel of the SV-P100 is designed to convey a sense of familiarity to the regular cassette user. Pressing the OPEN/ CLOSE button swings open a wide-window door into whose rear slides the VHS cassette is inserted. The door is closed automatically. While there is a light within the cassette well, it is not sufficient to illuminate either the cassette's label or tape.

The familiar logic-activated solenoid pushbuttons for RECORD. FAST FORWARD, PLAY, STOP. REWIND, and PAUSE are provided, together with a SEARCH button that is used to locate (digitally) preselected spots on the tape for subsequent playing. There are actually three memory systems built into the SV-P100. The LOCATE buttons operate similarly to the memory-rewind/play functions of a regular cassette deck. One of the two auxiliary tape tracks, which do not in any way interfere with the audio, is used for "search" signals that may be activated at any point but are automatically inserted when a recording begins. These allow one to go forward or backward in the high-speed modes to find a desired selection. A "jump" command may be placed on the other auxiliary track, instructing the deck to skip un-



Insofar as flat lines can be called "curves," these are drawn to the normal vertical scale.

wanted selections. Both the jump and search signals may be erased by a CLEAR button during playback.

The record-level indicator of the SV-P100 consists of two thirty-two-element displays calibrated from -40 to +5 dB. It may be switched to show either the audio level or the pre-emphasized signal going to the tape. A third switch activates the indicator when in play mode to examine the frequency and severity of tape dropouts.

The microphone inputs cannot be mixed with the line inputs, but the user may select a direct digital input if he has a second EIAJ-standard deck and wishes to make a maximum-fidelity copy. In addition to the left- and right-channel recording-level controls there is a master fader (it operates on both channels simultaneously in either record or play mode) to facilitate easy fadein/out operation. Provisions for both external timer and remote control are included.

The rear panel of the SV-P100 contains the customary line-input/output phono jacks plus the pair designed for digital dubbing. Access to a tracking control to use with tapes recorded on another machine is also provided, as are switches for alternate a.c. line voltages and a warmup delay.

• Laboratory Measurements. Because of its digital configuration, the Technics SV-



. Could you ask His Majesty if he's heard about the latest rage they call 'quad'? We've a few units in our warehouse that I can have brought right over.....

P100 precluded many of the tests I normally make on a tape deck. There are no calibrated playback frequency-response tapes available, for example, and trying to measure wow and flutter was an exercise in futility—all I could detect on a record-playback basis was the residual readings of my meter (0.008 per cent weighted rms, 0.01 per cent DIN peak-weighted). And with digital recording there are no brand-to-brand differences in tape-bias requirements that would affect treble response.

The third-harmonic distortion from a standard 315-Hz tone at an indicated 0-dB level measured only 0.008 per cent-again, about the residual of my wave analyzer. At a +2-dB input, however, distortion was up to 4.8 per cent, and by +4 dB it rose to more than 16 per cent. What this indicates is that digital recording is extraordinarily good within its defined limits, but there is little margin for error. Fortunately, the signal-to-noise ratios available enable you to record well under 0 dB without encountering objectionable hiss (or its digital equivalent, "quantization noise"). The peak-reading display of the SV-P100 was fully adequate to the task of monitoring levels as critically as required.

I used the output at 0 dB as my reference point for measuring signal-to-noise ratios. Unweighted, the S/N of the SV-P100 registered a spectacular 80.3 dB, improving to 82.2 dB and 84.5 dB with CCIR/ARM and IEC A-weighting, respectively. This, by the way, is without the use of a noise-reduction system, which would be superfluous.

A signal level of 150 mV was required to produce a 0-dB indication on the SV-P100's indicators, and the maximum output voltage with that input was a little over 2 volts. Using the microphone inputs, a 3.5 mV signal was required for 0 dB at full gain, and input overload did not occur until 210 mV was applied.

• Comment. To evaluate—and appreciate—a digital recorder such as the SV-P100 there is only one really satisfactory "test signal": the live performance of music. It is pointless to ask whether a deck can make satisfactory dubs of FM and discs when the deck is far better than any source could possibly be. Technics was kind enough to lend me some of their digital master tapes made on the SV-P100 and some recorded on a previous prototype; impressive as they were, the only way I could be satisfied was to "roll my own" in a recording session. (Continued on page 46) Lorar⁵⁷ is the cassette of the "uture... but it's here right now. The original and only heat resistant cassette shell and tape that withstands the oven temperatures of a gar dashboard in the sun. Testing proves that even TDK or Maxell cannot take this kind of punishment.

With Loran, you'll capture a full range of sound as you'ye never heard it before. Tape that delivers magnificent reproduction of highs and lows, along with an exceptionally low background noise-fevel. Super sensitive with an extremely high maximum recording level capability. That means you can record Loran at high input levels for greater clarity. As a matter of fact, we recommend it.

Because of our cassette shell, Loran

tape can stand up to being accidentally left near a source of excessive heat in your home or in your car. It is indeed the finest quality tape available today.

Loran also has exclusive features not available on any other cassette. Safety Tabs™ (patent pending) prevent; accidental erasures. Bug unlike other cassettes, you can restore its erase and record capabilities simply by turning the Tab screw a ½ turn. Our Hub Lock (patent pending) secures the tape to the hub in such a way that the harder it is pulled the tighter it's held.

With all these features, it's no wonder Loran was selected as "one of the most innovative consumer electronics products..." by the Consumer Electronics Show Design and Engineering Exhibition. Every Loran tape comes with a full lifetime warranty. Listen to Loran. The new generation of cassettes is here right now,



WHEN ALL OTHERS FAIL...LORAN CASSETTES ARE SAFE AND SOUND SENSATIONAL.



Come to where the flavor is.



Marlboro Red or Longhorn 100'syou get a lot to like.

16 mg ''tar,'' 1.1 mg nicotine av. per cigarette, FTC Report Mar.'81 Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dancerous to Your Health.

test reports

Shure lent me a pair of their excellent SM-81 condenser microphones (and a stand), and Technics supplied one of their professional Ramsa WR-130 mixers so I could feed the SV-P100 (electrically) with a signal worthy of it. Flutist Sydney Goldsmith and classical guitarist Lisa Hurlong, both professional musicians, kindly consented to be my "test signals." Subject to commercial vagaries, you'll one day be able to hear the results for yourselves on LP or tape; for now I can only report that it was

the cleanest sound I have ever recorded, and I've recorded a lot. To me, that says enough about the SV-P100's capabilities.

-Craig Stark

Circle 141 on reader service card



B&W DM10 Speaker System

- B&W DM10 Speaker System
- Rated Frequency Response: 75 to 20,000 Hz ±3 dB
- Size: 19 x 10 x 9¹/₄ inches
- Weight: 14¹/₂ pounds
- Price: \$169

THE B&W DM10 is the newest and lowest-price addition to the product line of the well-known British speaker manufacturer. Most B&W speakers are priced in the upper-middle to higher brackets, and the DM10 now brings their essential qualities to a much broader market. A two-way bookshelf system with a walnut-veneer cabinet, the speaker is especially well suited to shelf mounting, either vertically or horizontally. Optional pedestals are available from B&W for free-standing operation.

The woofer of the DM10 is an 8-inch unit designed specifically for this system and employing B&W's proprietary impregnated-fiber cone structure. Unlike other B&W speakers, the DM10 uses a vented enclosure. The company's advanced computer techniques, which have been largely responsible for the outstanding performance of their more expensive speakers, were used to develop the woofer, enclosure, and crossover network of the DM10. Its tweeter is the same 1-inch dome type used in a number of other B&W speakers. The crossover, unlike those of most comparably priced speakers, is a third-order Butterworth filter that gives an 18-dB-per-octave attenuation outside the operating range of the drivers.

The rated frequency response of the B&W DM10 is 75 to 20,000 Hz ± 3 dB measured at a 2-meter distance (anechoic measurement). It is nominally an 8-ohm system whose impedance is said to remain above 6.4 ohms in the audio band. The rated sensitivity of the speaker is 87 dB sound-pressure level (SPL) measured at 1 meter when driven by 1 watt. The DM10 is suitable for use with amplifiers rated between 10 and 75 watts per channel, and it can generate a maximum SPL of 106 dB at 1 meter at 1,000 Hz.

• Laboratory Measurements. Splicing the smoothed room-response curve to the closemiked woofer curve resulted in a very flat and smooth composite frequency response over the larger part of the audio range. The output between 150 and 600 Hz seemed to depend more on speaker placement than is usually the case, although that may have been merely a reflection of the unusually smooth response at higher frequencies. Depending on whether we installed the speaker against a wall or on stands a few feet from a wall, we observed variations of as much as ± 5 dB in that frequency range. These are really very minor modifications of a speaker's response, and we mention them only because drawing an average between those extremes resulted in a composite frequency response within ± 2.5 dB from 45 to 13,000 Hz, or ±3.5 dB from 45 to 20,000 Hz. There was a high-frequency peak of about +6 dB at 16,000 Hz. In the bass, the response maximum was at 90 Hz, and it fell off to -4 dB at 30 Hz.

Quasi-anechoic measurements with our INDAC FFT analysis system confirmed the general shape of the speaker's live-room response curve, although it differed in detail from the room measurements (not being affected by the room boundaries). At a 1-meter distance the response was within ± 1 dB from 200 to 5,000 Hz, dipping to a minimum at 6,000 Hz and rising to ± 6 dB at about 16,000 Hz.

The bass distortion of the DM10 at a 1watt input was under 2 per cent down to (Continued on page 48)

If all you want is everything...

1. The only cassette deck with *all* Dolby Noise Reduction functions: Dolby B, Dolby C, Dolby FM, *and* Dolby HX. **2.** The only receiver with built-in *dbx-II*; to decode disc/tape, or encode for recording. **3.** The only cassette deck with a 400-15,000Hz sweep tone oscillator *and* a fixed frequency oscillator; with continuously variable record calibration and bias across the entire frequency spectrum, visually displayed. This permits adjustment to lab test-bench standards for any tape formulation. **4.** The only cassette deck with a 4-kilobyte microprocessor controlling a full range of Compucounter, functions: **5.** Tape length is automatically determined and remaining time is digitally displayed. **6.** Compucounter programming for auto-search, autoplay, auto-rewind, and auto-repeat. **7.** Receiver amplifier power output: 90 watts per channel rms into 8 ohms. 100 watts per channel rms into 4 ohms; harmonic distortion: .02% 20-20,000 Hz. **8.** A receiver with built-in synergistic timer display capable of controlling the entire system: At

a preprogrammed time it turns itself on and finds a preprogrammed time it turns itself on and finds a preprogrammed to make sequences, human-engineered to make

9. Microchips interface the ca studio console pan for bass, midran path indicator fo the receiver is moving-coil ph switching to tota fier against DC 16. 3 head/dua transport. 17. 25-21,000Hz. 1 digital/tuning 23. Quartz sy with auto-sto receiver ampl LED record in jacks. 30. Dy equalization switch. 37. oxide, chron 45. Sendu control car

tion. Or it turns on the hrough programming moving-coil head-amp ctions. 10. Recording d level adjustments controls. 11. Multiany function and accommodate lent relay input rotect the ampling power output trolled cassette ency response: 75dB (Dolby C.). mory preselect Tuner scanning 00p. 25. Total 27. 24-segment ain input output 32. Loudness 6. Meter range filter. 41. Ferric e slack take-up omplete remote pe copy switch.

Need we say more? The VRX 9500 receiver. The VCX 800 cassette deck. \$1000 each, U.S. suggested list.



©1981 by Vector Research. Inc., 20600 Nordhoff Street, Chatsworth, CA 91311

Available at these selected dealers across North America. US: Audio Warehouse, Custom HI-Fi Discount Centers, The Federated Group, Great American Stereo Warehouse, Hi-Fi Buys, Lindsey Ward, Schaak Electronics, Southern Hi-Fi, Tech Hi-Fi, Wall to Wall Sound, World Radlo. CANADA: ABC Color and Sound, American Hi-Fi, Big Bird Sound, Custom Stereo Systems, Great Metropolitan Sound, Harold's Stereo, Independent Buyers, J&A Stereo Sound, Schneider Hi-Fi Center, Super Clef, Treble Clef. Check for the dealer nearest you, or call Vector Research collect at 213-998-1555.

fest reports

about 75 Hz, rising to about 6 per cent at 40 Hz (measurements were made at the port for frequencies under 80 Hz, which was the effective acoustic crossover point between the port and cone radiation). A power-input increase to 10 watts resulted in higher but still acceptable distortion readings of 1.5 to 5 per cent down to 70 Hz, but they rose very rapidly at lower frequencies. The speaker impedance was a minimum of 5 ohms between 7,000 and 10,000 Hz, but elsewhere it never went below 7 ohms. Its sensitivity was exactly as rated, with a measured SPL of 87 dB at 1 meter when we drove it with 2.83 volts of midrange band-limited pink noise.

• Comment. We compared the B&W DM10 extensively with our reference speakers and with comparably priced bookshelf systems. We also listened to them in both wall and pedestal mounting locations. What we heard was generally consistent with what we had measured. The high-frequency peak, since it affects only frequencies well above the musical range, did not color the sound detectably. The lower-midrange variations, which we had found to be sensitive to both position and room, tended to impart a slightly warm or full character to the sound. This was clearly audible when we compared the DM10 to other speakers, but it was not at all obvious when heard alone. The bass was surprisingly strong and clean, despite the low-frequency power limitations evident in our distortion measurements. One would hardly expect to use a speaker of the size and cost of the DM10 for heavy-duty, high-level reproduction of deep bass frequencies, so we do not see this as any real limitation on its overall performance. At any listening level that most people would reasonably use at home, it was completely clean.

In a highly competitive price bracket such as this (\$150-\$200), the differences between speakers are not large. They are nonetheless real, and each buyer must make a decision based on personal preference if he has one. To us, the sound of the DM10 was easily the peer of that we heard from any speaker anywhere near its price, and it did remarkably well in comparison to some costing many times as much. The small size and weight of this speaker, which make it practical for installations that could not accommodate a larger "bookshelf" speaker, could conceivably combine with its sonic properties to make it the preferred choice in many cases. Its distribution is somewhat limited compared with that of some betterknown brands, but we would strongly recommend making the effort to hear the B&W DM10 before buying any speaker in its price range. It is unquestionably one of the better speaker-system values in today's market -Julian D. Hirsch

Circle 142 on reader service card

Empire ICS/400 Phono Cartridge



Empire ICS/400 Phono Cartridge Tracking Force: 0.75 to 2 grams Price: \$110

THE Empire ICS/400 is an integrated stereo cartridge designed to plug directly into the end of a tone arm having a universal four-pin bayonet mount. It is a physically redesigned version of the standard Empire 400TC cartridge, to which it is electrically identical. However, an appreciable mass reduction has been achieved by using a slim molded carbon-fiber shell and eliminating the mounting hardware. The ICS (Integrated Cartridge Series) version has a total mass of only 9.7 grams, compared to the 5.3 grams of the standard unmounted 400TC cartridge.

The ICS version is available in the other cartridges of Empire's Dynamic Interface Series, whose wide range of stylus characteristics make them usable in almost any type of record player. All of them use a three-magnet construction and have easily replaceable stylus assemblies with integral, hinged stylus guards. In the ICS format, the cartridge overhang can be adjusted over an 8-millimeter range and locked with a set screw.

The Empire ICS/400 is designed to track at forces between 0.75 and 2 grams, with the recommended force being 1.25 grams. The rated output at a 3.54-cm/sec reference groove velocity is 3.8 millivolts, and the recommended load is 47,000 ohms in parallel with 150 to 400 picofarads. The stylus is a 0.2 x 0.7-mil diamond on a tapered aluminum cantilever. Like the other Empire cartridges, the 400TC carries exceptionally complete performance specifications, covering distortion, channel separation, and tracking ability, among other factors. The frequency-response specification is 20 to 20,000 Hz ± 2 dB.

The low mass of the ICS/400 may make it impossible to balance a massive tone arm because of the large counterweight usually furnished with such an arm. For such a case, a small brass weight, designed to be mounted on the bayonet plug, is furnished with the cartridge.

• Laboratory Measurements. We tested the Empire ICS/400 in the S-shaped tone arm of an integrated record player. The arm's effective mass without a cartridge was about 20 grams, and, as expected, it could not be balanced without adding the extra weight to the cartridge. Initially, the frequency response of the cartridge was measured with several values of load capacitance across the standard 47,000-ohm load resistance. Capacitance values as low as 60 picofarads (pF) gave a rising high-end output; this was flattened out nicely by using 300 pF. A 430-pF load gave the flattest response up to 10,000 Hz, but it rolled off above that frequency. We used 300 pF during our subsequent testing and operation of the cartridge.

The frequency response with the CBS STR 100 test record was flat within $\pm 1 dB$ from 40 to 20,000 Hz. The channel levels, which averaged 4.3 millivolts, were matched within 0.5 dB. Channel separation was better than 20 dB up to 5,000 Hz, falling smoothly to 12 to 15 dB at 20,000 Hz. The 1,000-Hz square wave on the CBS STR 112 record was reproduced with a single cycle of ringing. The vertical stylus angle was 24 degrees. The frequency response and crosstalk characteristics of both channels were very closely matched.

Tracking distortion was measured with the Shure TTR-102 and TTR-103 test records. The intermodulation distortion (400 and 4,000 Hz) with the TTR-102 record was about 1 per cent (probably the record residual) up to a 17-cm/sec velocity, increasing rapidly to 8 per cent at 20 cm/sec and higher levels. With the maximum rated force of 2 grams, the distortion was unaffected up to 17 cm/sec but increased only gradually at higher levels to 4 per cent at 27 cm/sec. Unless otherwise stated, we used the 1.5-gram force throughout our tests of the cartridge. The 10.8-kHz tone-burst distortion with the TTR-103 record increased (Continued on page 50)



The Blaupunkt CR-2010. Richer, purer sound than you ever thought possible in a moving vehicle.

Autosound is only as good as the equipment it passes through. Which means that, in the case of the Blaupunkt CR-2010, the sound is exceptional.

The CR-2010 coddles and shapes highs and lows into a sound as fullbodied, as richly-textured, as anything you'll hear from a home stereo.

4 Channel Amplifier

Blaupunkt increased the conventional two channels to four, each with a maximum output of 7.5 watts. Even when hooked up to a front



The essential controls are fully illuminated. end, two-speaker system, the CR-2010's crisp reproduction will surprise you. Add two rear speakers and the home stereo effect is complete—sound that surges to new heights of clarity and richness while holding its delicate balance through the magic of a built-in front-to-rear fader.

Holds Signal Longer

Drive away from the signal source of your favorite stereo station and

what happens? Reception breaks up into a barrage of crackles and hisses. Not with the CR-2010. Thanks to the "Soft MPX" feature your Blaupunkt automatically shifts reception from stereo to mono *before* the hissing sets in.

Higher Volume without Distortion

The CR-2010 has a pre-amp output jack that lets you bypass the built-in amp and plug directly into a high power amplifier. Yet the boost in volume doesn't come at the expense of distorted sound. And at lower volume the clarity is actually enhanced.

Of course, you get Dolby Noise Reduction-but for FM reception as well as tape. A Sendust Alloy tape head reproduces a fuller range of recorded frequencies.

Hear the Full Blaupunkt Line The CR-2010 retails for only \$396.00** and is the latest in a full line of Blaupunkt AM/FM stereo cassette radios priced from \$290.00**

CR-2010 Features

- 4 channel (4 x 7.5W)
- Autoreverse Cassette
 Sendust Alloy Tape Head
 - Soft MPX
 Night Illur
 - Night Illuminated
 Controls

Soft Mute

Auto Hi-Cut Filter Controls
 Dolby Noise Reduction Circuit

*Dolby is a registered trademark of Dolby Laboratories.

Blaupunkts can be installed in virtually any car, import or domestic. For more information, write: Robert Bosch Sales Corporation 2800 South 25th Avenue Broadview, IL 60153 Robert Bosch Canada, Ltd. Ontario, Canada

**Suggested U.S. retail prices. The Blue Dot and Blaupunkt are registered trademarks of Blaupunkt Werke GmbH.







In the graph at left, the upper curve represents the frequency response of the cartridge. The distance (measured in decibels) between it and the lower curve represents the separation between the two channels (anything above 15 dB is adequate). The inset oscilloscope photo shows the cartridge's response to a recorded 1,000-Hz square wave, which indicates resonances and overall frequency response (see text). At right is the cartridge's response to the intermodulation-distortion (IM) and 10.8-kHz tone-burst test bands of the TTR-102 and TTR-103 test records. These high veloc-

ities provide a severe test of a phono cartridge's performance. The intermodulation-distortion (IM) readings for any given cartridge can vary widely, depending on the particular IM test record used. The actual distortion figure measured is not as important as the maximum recorded-signal groove velocity that the phono cartridge is able to track before a sudden and radical increase in distortion takes place. There are very few commercial phonograph discs that embody musical audio signals whose average recorded groove velocities are much higher than about 15 centimeters per second.

from 0.7 per cent at 15 cm/sec to 1.4 per cent at 30 cm/sec.

In other tracking tests the cartridge was able to play the very high-level 32-Hz tones on one of our test records at 1.2 grams and the 30-cm/sec 1,000-Hz tone on another record at 1.5 grams. The 60-micrometer level of the German HiFi Institute record was played without distortion at 1.5 grams and the 80-micrometer level at 2 grams.

• Comment. The Empire ICS/400 is a very flat-responding cartridge with a good

output level and sufficient tracking ability to cope with almost any recorded material likely to be used. For extreme cases, an increase of force to 2 grams gives the cartridge a tracking ability close to that of the most refined cartridges we have tested.

In subjective listening tests with the Shure "Audio Obstacle Course" records the ICS/400 was able to play all sections of the ERA III and ERA IV records up to level 4 without audible distortion. There was some evidence of mistracking at the maximum level (5) of the bass drum on ERA III and



... So this will be your first stereo system, sir?"

of the flute and harp sections of ERA IV as well.

The low-frequency arm/cartridge resonance in the rather massive tone arm we used was at about 8 Hz (as indicated by the Shure ERA IV record). This represents a "worst-case" situation, since the arm alone was fairly massive and the cartridge had to be operated with its auxiliary weight to achieve balance. A less massive arm, or one with a lighter counterweight, might not have required the extra cartridge weight and probably would have resonated at a more desirable frequency (around 10 Hz). The finger lift, integral with the cartridge, was at the height of the center of the arm tube with very little clearance between the user's finger and the record surface. Raising the lift about 1/4 inch would help.

It is ironic that low-mass integrated cartridges such as the Empire ICS series will usually be used with rather massive Sshaped or J-shaped tone arms that were designed for much more massive cartridges. Although the combination of a massive arm and a low-mass cartridge would seem to work out well, it doesn't always because of arm-counterweight limitations. Adding extra weight to achieve balance unfortunately removes much of the advantage of the lowmass cartridge assembly. Still, the ease of installation of an integrated cartridge is undeniable and eliminates one of the most onerous of all the chores involved in setting up a hi-fi system.

As for the sound of the cartridge, it was as neutral as the measurements would indicate. There are cartridges, including others in the Empire line, that can track higher levels and operate at lower forces, but they are more expensive and delicate and in many cases would be difficult to distinguish from this one by their sound alone.

-Julian D. Hirsch

Circle 143 on reader service card

(Continued on page 52)

"The truth is, I would speak for the quality of Smirnoff anytime.

> Its value speaks for itself."

> > F. LEE BAILEY, trial lawyer.

"Everyone admitted to the bar at my house, always gets Smirnoff. And no one ever raises an objection.

"Some might argue that Smirnoff[®]vodka costs more. I'll concede that. But consider this...for just a little more than you pay for ordinary vodkas, you can have the great quality of Smirnoff.

"Faced with evidence like this you can reach just one conclusion. Smirnoff is simply the best value in vodka. I rest my case."



There's vodka, and then there's Smirnoff.

SMIRNOFF & VODKA 80 & 100 PROOF DISTILLED FROM GRAIN STE PIERRE SMIRNOFF FLS (DIVISION OF HEUBLEIN, INC.) HARTFORD, CT -- "MADE IN U.S.A"



- Micro Seiki MB-38 Turntable
- Size: 18 x 13 x 5½ inches Weight: 15¾ pounds Price: \$469.99
- .

HE MB-38 is the first fully automatic, belt-driven turntable from Micro Sei-The full-size, cast nonferrous platter, ki which weighs 2 pounds including its rubber mat, is driven by a light rubber belt around an inner drive rim that is smaller in diameter than the platter itself. The motor speed is electronically controlled for 331/3- and 45rpm operation. Stroboscope markings are cast into the outside of the rim for both speeds and for power-line frequencies of 50 and 60 Hz, and they are illuminated from

prism arrangement. A separate motor controls the tone arm (for cueing, arm lift and descent, automatic indexing to the beginning of a record, and automatic shutdown after play). According to Micro Seiki, the MB-38 also features what they call an "exclusive oil bath bearing system," presumably for the platter bearing. The tone arm is a low-mass straight tube whose offset cartridge mount can be removed by loosening a thumbscrew. A plastic jig aids in setting the cartridge position for minimum tracking error. The threaded counterweight carries the usual tracking-force scale, and an antiskating dial, arm-lift lever, and locking arm rest are on the arm base.

below the motorboard by a neon lamp-and-

The MB-38 is furnished on a rosewoodfinish wooden base with a hinged clear-plastic cover. The entire unit is supported on four softly sprung feet. The principal operating controls (everything except the armlift lever) are on the front of the base, where

they are accessible with the cover lowered. The power switch is at the left, near a small SPEED knob that gives a vernier speed adjustment. Four slender, flat pushbutton switches along the front top edge of the base set the arm indexing diameter for either 12or 7-inch records, select the operating speed, engage the AUTO REPEAT function, and initiate the START or REJECT cycles.

Normally the START/REJECT button is the only operating control. A light touch on it starts the record turning, moves the arm over the lead-in groove, and lowers it gently to the playing surface. After play, the arm rises and returns to its rest, and the motor shuts off, Full manual control of the arm is also possible. Red LEDs on the control buttons show their status at all times.

• Laboratory Measurements. We operated and tested the Micro Seiki MB-38 with an AKG P25MD cartridge installed in its arm. Using the supplied mounting jig for the cartridge installation, we measured a maximum tracking error of 0.25 degree per inch for radii between 21/2 and 6 inches. The actual vertical force was within 0.05 gram of the indicated value between 0.5 and 2.5 grams after an unaided visual balance of the arm. When we reset the counterweight for exact reading at 1 gram it was equally exact at other force settings.

The effective arm mass (less cartridge) was a low 11 grams, and the combination resonated in the near-ideal range of 10 to 12 Hz. Apparently there was little damping in (Continued on page 54)



Please excuse this interruption in our broadcast of Janáček's Sinfonietta, but I just wanted to tell you that this part they're going to play now is the part I like."

Two new ways to play it...

New Kool Lights There's only one low 'tar' with a sensation this refreshing. Kool Lights. The taste doesn't miss a beat





New Kool Ultra One ultra has taste that outplays them all. New Kool Ultra. Even at 2 mg., you get the refreshing sensation of Kool.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Ultra Kings, 2 mg. "tar", 0 .3 mg. nicotine; Lights Kings, 9 mg. "tar", 0 .8 mg. nicotine av. per cigarette by FTC method.



WHAT TYPE ARE YOU?

Power has its price. Unfortunately, with many receivers, you usually end up paying for a lot of power you may not necessarily need in order to get the computerized features you want.

At Kenwood, we don't think that's playing fair. Which is why every one of our new Hi-Speed[™] receivers offers a host of very intelligent engineering advances.

Like Direct Coupled, Hi-Speed amplifier circuitry for absolutely brilliant musical clarity, down to OHz.

And microprocessor controlled Quartz PLL Synthesizer tuning to give you perfect, drift-free FM reception.

We've even included the convenience of our computerized AutoScan tuning. And instant, automatic computer-memory tuning of 6 AM and 6 of your favorite FM stations.

But best of all, we didn't restrict all this intelligence to just our new KR-850 Hi-Speed receiver.

You can also find it on our new KR-830. And our new KR-820.

And even our new Slimline KR-90.

Examine all the possibilities at your Kenwood dealer. With all the choices we offer, you'll find the computerized receiver that's exactly your type.

At your type of price.



Micro Seiki MB-38 Turntable

(Continued from page 52)

either the arm or the cartridge, since the amplitude of the arm movement at resonance (with the Shure ERA IV record) was very large. The capacitance of the tone-arm and signal-cable wiring was 143 picofarads from each channel to ground and 8 picofarads between channels. The arm cueing was good (free of drift) if the lift lever was handled carefully and if the antiskating dial was not set higher than the vertical tracking force. The arm tended to bounce and shift its lateral position when raised rapidly with the cueing lever. The calibration of the antiskating system was good, giving approximately correct skating compensation when the dial was set to match the applied tracking force.

The automatic operating cycles of the MB-38 were relatively rapid, with 6.5 seconds elapsing between START and the beginning of play and 6 seconds from the end of play to the shutdown of the player. The vernier speed control had a range of +4, -6per cent and required a slight readjustment when switching from one speed to the other. The turntable rumble was -34 dB unweighted and -55 dB with ARLL weighting. The rumble was mostly in the range of 5 to 25 Hz, with smaller peaks at 40, 60, and 70 Hz. The flutter was ± 0.1 per cent weighted peak (DIN) and 0.08 per cent weighted rms (JIS), with most of the flutter being at rates under 10 Hz; there were smaller components at 15 to 20 Hz.

The acoustic isolation of the base appeared to be quite good. However, recent changes in our test equipment prevent us from making a close quantitative comparison between the base transmission of the MB-38 and turntables tested previously. We did note that its major acoustic/mechanical sensitivity was between 20 and 30 Hz, with narrow lower-level responses at 80, 300, and 1,200 Hz.

• Comment. Although the Micro Seiki MB-38 is a very good record player with no significant faults, for its level of performance it is also rather expensive. One of its best features is the low-mass tone arm, whose geometry seems to have been optimized for minimum lateral-tracking-error distortion and whose other calibrated parameters of vertical tracking force and antiskating compensation are also as nearly ideal as our measurments can determine.

The operation of the MB-38 is simple and foolproof, although we would have preferred to be able to turn on the turntable (say, by lifting the arm, as on many other units) and cue the arm manually from the start instead of having to go through the automatic cycle. We usually avoid subjective styling judgments, but we must admit that this is a handsome piece of equipment. It presents a more "furniture-like" appearance than most of the more clinically styled record players from other manufacturers. —Julian D. Hirsch

Circle 144 on reader service card

MAXELL IS PLEASED TO PRESENT AN EVEN HIGHER PERFORMANCE TAPE.



If you're familiar with Maxell UD-XL tapes you probably find it hard to believe that any tape could give you higher performance.

But hearing is believing. And while we can't play our newest tape for you right here on this page, we can replay the comments of Audio Video Magazine.

"Those who thought it was impossible to improve on Maxell's UD-XL II were mistaken. The 1981 tape of the year award goes to Maxell XL II-S."

How does high bias XL II-S and our normal bias equivalent XL I-S give you such high performance? By engineering smaller and more uniformly shaped epitaxial oxide particles we were able to pack more into a given area of tape. Resulting in a higher maximum output level, improved signal-to-noise ratio and better frequency response.

To keep the particles from rubbing off on your recording heads Maxell XL-S also has

an improved binder system. And to eliminate tape deformation, XL-S comes with our unique Quin-Lok Clamp/Hub Assembly to hold the leader firmly in place.

Of course, Maxell XL II-S and XL I-S carry a little higher price tag than lesser cassettes.

We think you'll find it a small price to pay for higher performance.



THE BEOCORD 9000. MOST TECHNICALLY ADVANCED

THE PROMISE FULFILLED.

Ever since their invention in the mid 60's, cassette decks have held out the promise of quality sound reproduction, combined with true convenience.

Convenience has been achieved, to one degree or another.

But no cassette deck has ever succeeded in accurately delivering the wide dynamic range associated with the live performance.

Until now.

BANG & OLUFSEN HX PROFESSIONAL*: THE FIRST SIGNIFICANT IMPROVEMENT IN CASSETTE PERFORMANCE SINCE THE INVENTION OF DOLBY. (DOLBY LABS AGREES.)

In 1978, Bang & Olufsen began exploring technologies which could complement noise reduction systems by offering significant headroom expansion. The result of these explorations is Bang & Olufsen HX Professional (not to be confused with Dolby HX**), pioneered by Bang & Olufsen of Denmark and perfected in collaboration with Dolby Laboratories.

Utilizing an automatically regulated variable bias oscillator to compensate for the bias effects of high frequency signals, Bang & Olufsen HX Professional offers the discriminating audiophile a cassette deck that, for the first time, truly achieves disc-quality sound reproduction.

Overall dynamic range is increased by up to 10 dB. Definition of bass frequencies is audibly superior. Frequency response with any type of tape is ± 1.5 dB from 20 to 20,000 Hz, with a S/N ratio of up to 80 dB. The ability of any kind of tape to record and play back higher levels of mid-range and high frequency signals is increased significantly.

Bang & Olufsen HX Professional operates independently on each channel, allowing optimum compensation for the particular signal content of each channel. And since Bang & Olufsen HX Professional is not an encoding system, tapes recorded on it will sound better, even when played on other cassette decks.

OPTIMUM CALIBRATION, FOR EVERY INDIVIDUAL TAPE. IN JUST 9 SECONDS.

The second major advance that is unique in the Beocord 9000 is a computerized tape calibration system that performs all tape calibration functions, completely automatically, in just 9 seconds.

You simply insert a cassette, and push the Tape Calibration button. The Beocord 9000 proceeds to record a test tone on the

*HX Professional is exclusively available on the Beocord 9000 and Beocord 8002 cassette recorders. **TM Dolby Labs, Inc.



BEYOND A DOUBT THE CASSETTE DECK IN THE WORLD.

cassette, and sets the appropriate bias, sensitivity, and equalization. It also actually reads the tape itself to determine what type it is and indicates the tape type via LED.

In the calibration process, the Beocord 9000 also measures distortion and sets its recording levels and meters according to the characteristics of the particular tape you are using. This exclusive Peak Program Meter function assures you of recordings free of audible distortion, with any tape you use. The specifications on types of cassettes you use frequently can be placed in memory and recalled instantly. making future calibration unnecessary.

IN EVERY OTHER RESPECT, MERELY STATE-OF-THE-ART.

There is not space here, to go into further detail on the many other capabilities of the Beocord 9000.

It of course includes Dolby B and C, and all of the functions, such as LED real-time tape counter with real-time tape remaining, random access programming, automatic return, and programmable timer, that you would expect in a state-ofthe-art deck.

You will only find them unexpectedly simple to use.

WRITE FOR THE WORDS. AND THE MUSIC.

As much as we've said here, there is a great deal more to be said for the Beocord 9000. And we've said it

in a white paper which we will gladly send you, at no cost whatsoever. It will allow you to absorb, at your leisure, the remarkable capabilities of this unique machine.

We have also prepared a cassette of music recorded on the Beocord 9000. Played on any cassette deck of reasonable quality, it will allow you to immediately appreciate the accuracy of music recorded with Bang & Olufsen HX Professional. If you send us \$3.00 to cover handling costs, we will

send you the cassette. and the white paper. Please allow 4 to 6 weeks for delivery. Offer expires June 30. 1982. Please address requests to Dept. SR.

Bang & Olufsen of America 515 Busse Road Elk Grove Village, IL 60007

THE BEOCORD 9000

TECHNICAL VER FROM

Bang&Olufsen of Denmark CIRCLE NO. 4 ON READER SERVIC

TOP BRAND STEREO COMPONENTS AT THE SAME PRICE MANY DEALERS PAY! 120,000 Customers Coast-to-Coast CALL TODAY 9 A.M. to 9 P.M. POR FULL COLOR BROCHURES OF PLACE YOUR OR BROCHURES OF SAME-DAY DELIVERY COD OR CHARGE CARD ASK ABOUT OUR "NO LEMON" GUARANTEE

NOW YOU CAN OWN ALL

INGS

CALL 1-800-638-8806 OR 1-301-488-9600

OR SEND FOR BROCHURE WITH LINES AND PRICES AND TIPS ON BUYING BY MAIL TO...



INTERNATIONAL HI-FI DISTRIBUTORS, Inc. MORAVIA CENTER INDUSTRIAL.PARK BALTIMORE. MARYLAND 21206

CIRCLE NO. 15 ON READER SERVICE CARD







SAD SONGS

HERE is not much point in writing a formal review of an assortment of bad records by eminent sopranos, but the almost simultaneous appearance of several of them is striking enough that one ought to say something about them. It is no secret any more that the (theoretical) aesthetic purpose of the phonograph record-the preservation of outstanding performances of great music-has long since been superseded by something far more ephemeral. Nonetheless, one still has to wonder about the release of recordings that can bring little credit to anyone associated with them and that are bound to disappoint anyone unlucky enough to have purchased them. Such records are not confined to sopranos, of course; the number of bad records of every type is increasing. But, for reasons largely of coincidence, I have heard a number of recordings by sopranos recently, and they, therefore, are the ones who are about to get it in the neck.

If one divided the population of lieder singers into those who sing the words and those who sing the notes, Kiri Te Kanawa would certainly be among the latter. It is not just that her diction is poor on her new record of German, French, and English songs (CBS 36667)-there are consonants, but it is often difficult to determine which particular ones she has in mind-but that no word seems to have any special significance, emphasis, or inflection. She has a lovely voice, it's true, and her operatic accomplishments are well known; but here, in addition to sounds that are disembodied and innocent of meaning, there are moments of inaccurate intonation, others of strain, and an occasional swoop. Te Kanawa's lovely face looks out at us impassively from the album cover, which also says that texts are enclosed; they weren't in my copy.

Régine Crespin is another ordinarily admirable soprano with some exquisite records to her credit, and her singing of Ravel's *Histoires Naturelles* on side one of CBS 36666 must also go on the plus side of the balance. The voice is not as beautiful as it once was, but it is still beautiful enough, and musical intelligence illuminates the interpretation, aided not a little by Philippe Entremont's pianism. But the other side of mains a somewhat enigmatic figure in music, but not all of his music is necessarily enigmatic. He worked for a time as a café pianist and he wrote café songs-not enigmatic café songs, just café songs. He also wrote "serious" art songs that are every bit as odd and quirky as the oddest of his piano works. Crespin has chosen to sing both here. and someone has decided to alternate them, giving us the aural equivalent of a series of martinis and malted milks. In addition, while Crespin makes a reasonable stab at the art songs (they really demand a more "impassive" voice, the vocal equivalent of deadpan), she goes at the little fin-de-siècle waltzes and novelty songs like an aging Brünnhilde. CBS furnishes all the texts in French only (what do you mean, you don't read French?).

the record is something else. Erik Satie re-

RMGARD SEEFRIED was a lovely singer in her all too brief American career (I do not know whether she is still performing in Europe), and, God knows, she gave us some of the finest Mozart, Schubert, Strauss, and Wolf ever recorded. Her career had phases: she sang differently, with almost a different voice, at different times. Which makes her newly released two-record set (Pearl SHE 556/7) something of a mystery, for it gives no clue as to when these songs of Mozart. Schubert, Schumann, and Wolf were recorded. All I can say is that I had never heard these performances before. I hadn't missed much. This is not ugly singing (it is ugly recording, or at least third-rate recording); in places it is even quite beautiful, but it has hardly a trace of the totally natural quality for which Seefried was justly famous. Here tempos are really pushed, ritards seem mechanically inserted, the whole sounds calculated (and not always well calculated) and unfeeling. Vocally she has a few awkward moments, but what is most disappointing is just how unconvincing she sounds in songs I had considered absolutely her métier. The two accompanists are of so little aid that I can barely bring myself to believe that they are Erik Werba and Walter Klien as the jacket says. A saddening experience. Pass me that old Elisabeth Schumann record and let me forget.

THE ONLY THING MORE **REVOLUTIONARY THAN AKAI'S NEW** GX-77 IS THE TAPE IT PLAYS.



The new GX-77 is the world's first open-reel machine with a special setting

TAPE NORMAL

for the new ultrahigh-density "EE tapes.

For the uninitiated, "EE simply stands for extra efficiency. And the innovators at both Maxwell and TDK are committed to it.

For some very sound reasons Numbers don't lie.

And what the numbers are saying is this. You don't have to sacrifice performance for economy. Not with a GX-77 and "EE" tape. Because at an efficient 3% ips, you'll still get the same frequency response, S/N ratio and dynamic range of conventional tape played at 7½ ips.

But see for yourself below. The specs are spectacular at any speed.

There's sound engineering, too.

The GX-77 also features quick-reverse playback/record, 3 motors, 4 AKAI GX heads and

an optional custobver that's the ultimate cover-up. Plus a unique, motorized tape-loading mechanism that guarantees virtually perfect tapeto-head alignment. All at the touch

of a button.

And all for a relatively modest \$775 suggested retail price.

Or, if you prefer the benefits of "EE" tape on a grander scale (including 101/2" reels), consider the new AKAI GX-747.

Better yet, audition both at your AKAI dealer's soon. Or write: AKAI, P.O. Box 6010, Compton CA 90224.

We'd hate to start the revolution without you.

AKAI GX-77 with:	Dynamic Range	Frequency Response	S/N Ratio
EE Tape (3¾ ips)	70 00	25-25000 Hz	में बेच
Conventional Tape (7½ ips)	30.46	25-25000 Hz	母曲
EE Tape (7½ ips)	76 (19	25-33000 Hz	10 60



TAPE FUTURES

Ralph Hodges takes a look at some evolutionary and revolutionary advances in tape technology



F they ever stop to think about it at all, tape buffs probably do not sufficiently appreciate the fact that the rapid progress in tape-machine performance over the past couple of decades has been matched, innovation for innovation, by advances in tape manufacturing and formulation. New developments in audio tape have particularly benefited of late from useful discoveries made in the fields of video and computer tape, with the result that we are once again looking at a "new generation" of high-performance audio tapes that will begin to reach the market within the next few months.

The first of this new wave of tapes to appear will lay emphasis on recording objectives that have not previously been paramount in tape designs. The second wave should bring some new magnetic materials, some older ones in new forms, and the advent of multi-application tapes. At least one manufacturer plans to introduce a cassette that will handle analog and digital (PCM) audio with equal aplomb. Another expects to produce a tape that will accommodate analog, digital-and video to boot! The common sense of this is quite plain when you realize that all video tapes will likely have two tracks of audio, and sooner or later these will be very highquality tracks indeed.

Wrenching secrets from tape manufacturers is only a little less difficult than, say, discovering the full nuclear potential of the Soviet Union. The industry is notoriously competitive, and if some advance information should accidentally happen to leak out the door on Friday, it could mean mass executions by Monday. Still, by reading between the lines of press releases and paying as much attention to what manufacturers won't talk about as to what they will, it's possible to get some idea of what the future holds.

A tape can be divided into three parts: backing (or base), binder, and magnetic material. (There is also an optional fourth part, a back-coating, that some manufacturers favor, some don't, and some change their minds about from time to time.) All three parts are critical, and all three are candidates for improvement.

Backings

The backing, a clear base film of tensilized polyester, would probably be the least problematic of the three if so many manufacturers didn't have to get it from outside suppliers. Surface irregularities in the backing material cause coating-thickness variations in the finished tape, and such thickness variations are a principal mechanism in the production of modulation noise, no matter how well controlled the total thickness of the backing-plus-coating may be. One manufacturer reports that he was unable to convince his supplier of this problem until he embarked on the production of a very tricky video formulation and the final tape didn't work. Clearly, backings will have to advance to a higher standard of uniformity for the proposed new tapes, but it's unlikely that you will hear much about the heroic efforts that will be required to accomplish this.

On the other hand, there are excellent reasons why a backing should not be perfectly smooth and uniform. A texturized backing gives the capstan and pinch-roller a better grip on the tape and combats what is generally referred to as "slippage." According to one company's view, a good backing is not so smooth as to be slippery and not so rough as to prevent a good recording. Back-coatings, which are sometimes applied to the nonmagnetic side of the tape in the final production stages, can provide texturizing without interfering with the properties of the backing itself, and at the same time they create a scratch-resistant surface to prevent polyester debris from fouling the recording system.

Binders

Binders are simply glues, mixed with solvents and other additives. Ideally they should start out by holding the magnetic particles in a perfectly dispersed suspension during the coating process and end up by bonding the particles to the backing in a very permanent way. On the way from liquid to semi-solid to fully cured solid, a binder system should be fluid enough to permit free rotation of the magnetic particles as they are oriented in the intended recording direction, then malleable enough to respond well to the calendering and polishing processes, then soft enough to permit slitting of the tape into its final widths without crumbling at the edges, and, finally, hard enough to resist scratching and flaking when the tape is used. Binder systems are constantly being tested and changed. Some manufacturers stick faithfully to binder systems whose changes of state are timed to the production cycle. Others are willing to interrupt the production process in midstream to let the tape sit and "cure" its way into the next desired state.

Quizzing a tape manufacturer on what's new in binder systems is something like asking a medieval alchemist to describe his technique for transmuting lead into gold: the best you can expect is to receive no misinformation. Chemical analysis of the final tape doesn't help very much because so much of the binder brew goes up in volatile fumes during tape production (it will also go up in flames if the maker is not exceedingly careful). Still, together with the crystal-formation techniques for making the magnetic particles, the chemistry and technology of binder systems have been keys to the fine tapes of today and will be the starting point for the superior tapes of tomorrow.

Magnetic Materials

The crystalline forms that magnetic tape particles assume are not found in nature but are synthesized through the control of temperature, pressure, pH values, catalysts, and the timing of the crystal-growth cycle. From the first, the goals for magnetic particles in recording tape have been the same: a "clean," needle-like shape free of pits

"The second wave should bring some new magnetic materials, some older ones in new forms, and multi-application tapes."

or branches ("dendrites"), appropriate size, and uniformity from particle to particle. In recent years, particle size has been getting smaller and smaller, and the premium tapes appearing now are typically endowed with "needles" one-quarter the size of their predecessors. Coercivity, which affects high-frequency performance at slow recording speeds, is enhanced by small particle size, but the general feeling in the industry is that with metal tape we have achieved as much coercivity as we need. The new emphasis is on what smallness, uniformity, and cleanliness can do to improve the packing density of magnetic material in the tape coating, which will lead to increased remanence and better performance at the longer wavelengths (lower frequencies).

The chemical composition of the various tape particles we'll be offered should lead to some interesting competitive skirmishes. Maxell and TDK want to pursue, respectively, their Epitaxial and Super Avilyn materials, both of which are ferric oxides sufficiently refined (by cobalt-adsorption processes) to accomplish "almost anything," in the words of a TDK spokesman. Fuji seems bent on pursuing the technology of pure metal. BASF remains committed to chromium dioxide for its premium products and believes that it has superior characteristics for digital (PCM) recording as well as video. And Sony recently introduced an IEC Type II ("high bias") cassette employing a very small iron-oxide particle with a coating scheme said to afford exceptional remanence and squareness ratio. The company is carefully keeping up its involvement with many other materials, however, even to the point of using them in dual-coated products such as ferrichrome. Most major manufacturers promise flexibility and further research in new materials, and mixtures of materials seem a likely possibility in the near future. As for vapor-deposited puremetal coatings (pioneered in Matsushita's Angrom microcassette), there are some doubts as to the technique's capabilities for longer-wavelength recording as well as some hopes for its potentially superior remanence, especially if appropriate metallic alloys are used.

Cassettes of the Future

A not-unexpected finding that the metal-tape market is somewhat limited by high product cost has persuaded a number of manufacturers to move in the direction of improving more conventional tape coatings; TDK, for example, now feels it can, for all practical purposes, match the performance of metal using variants of Super Avilyn. In its available forms, metal has shown greatest strength in the area of coercivity, and TDK has countered with SA-X, a dual-layer cassette tape that has a thin, high-coercivity layer on top and a thicker, high-remanence layer belowboth composed of Super Avilyn material. In the future, the company will be working closely with hardware manufacturers to produce a cassette that is adaptable to PCM recording (digital tapes are expected to be more critical in terms of tape guidance than in magnetic properties). Dupont is working on a two-layer chrome tape.

Maxell has introduced its XL-S line of cassettes to represent refinements in particle-growth and coating techniques. Their processes for both are said to be unique and highly effective in improving packing density and tape-to-head contact. The most interesting development at Maxell, however, is a new type of tape with particles oriented along the tape path but with some pitched into and out of the tape at about a 45-degree angle as well as some parallel to the surface. This enables the tape to take advantage of the fact that flux lines from the recording heads pass through

TAPE FUTURES...

the tape surface in an arc; since more particles will be aligned with the flux, the tape will be capable of greater energy storage. (The particles are reported to be very short, by the way—about 0.1 micrometer.)

In general, the industry is moving toward what it terms a "balanced" cassette tape, adequate in high-frequency performance to match the capabilities of current cassette recorders and augmented at lower frequencies to deal with the noise and dynamic-range limitations of previous machines. Most manufacturers plan to increase the performance of their cassette tapes so that this year's medium-quality tapes will be just about equal to last year's premium tapes, and the premium tapes will be one step better than before. These improvements will be achieved through developments that are described as incremental rather than revolutionary. More and more, the key ingredients of non-premium cassettes come from outside suppliers who have pulled their standards up to acceptable levels.

The Future of Open Reel

It is the intention of four companies—Maxell and TDK on the tape end, Akai and Teac on the hardware end—to establish a new standard for consumer open-reel recording. BASF is also expected to cooperate in this venture. According to joint statements by these companies, the new EE ("Extra Efficiency") standard is destined to "take over" the home open-reel tape market.

The impetus behind the EE innovation is a desire to apply technology gained in cassette development to the open-reel format. The motivation comes from market studies, one of which found that production of openreel tape decks in Japan exceeds 200,000 a year and is holding steady. This is a market large enough to be attractive, yet small enough to be manipulated. The EE innovation is expected to encourage market growth to some degree, but, more important, it might compel open-reel devotees to abandon their current equipment for new and improved models.

New open-reel models are needed to handle the EE tapes, which resemble the high-coercivity, high-remanence cassette formulations more closely than anything that has been seen in openreel heretofore. They require higher bias and, concurrently, some changes in equalization if they are to perform at their best. That best should yield improvements comparable to what cassettes have demonstrated in recent years: lower noise, higher output levels and sensitivities at all frequencies, and greater consistency of performance. Again, these gains are evolutionary.



THIS MONTH'S COVER

HE frontiers of any technology, whether they relate to the exploration of outer space or to the development of the ultimate in audiophile inner space, are intriguing to study even if you never get to experience them. The Nakamichi 1000ZXL "Limited Edition" cassette deck on the left is the ultimate in analog cassette recording. It has automatic azimuth, bias, level, and equalization controls. it has outstanding performance, and it is extensively gold-plated, including all its internal connections, heat sinks, and more. It costs \$6,000, but a standard version is available for only \$3,800 (see test report in the May 1981 issue of STEREO REVIEW). The Technics SV-P100 digital audio cassette recorder on the right represents a new frontier in digital recording, for this is the first integrated digital recorder intended for home use. See the test report on this unique \$3,000 device on page 40.

The benefit most emphasized by the four companies is the potential improvement at lower tape speeds, one that promises the equivalent of the performance offered now by the next speed up. The first EE-optimized decks are now arriving in the U.S., so we'll soon know exactly how good it is.

Other Developments

Dual-layer products are going to continue to be available in the tape repertoire, even though one manufacturer preceded his comments on them with a few unprintable adjectives. The real problem, as he has experienced it, has to do with the transition point between the coating layers. Making the two lavers similar in magnetic properties smooths the transition, but it throws away the advantages of going to two layers in the first place. Making the layers dissimilar (the outer layer strongly favoring highs, the inner one favoring lows) exploits the technology to its fullest but it runs risks in the midrange that can upset noise-reduction tracking and inter-machine compatibility even if the average listener does not notice obvious impairment of frequency response.

Vapor-deposition metal tape, although attractive as an idea, is not universally attractive in practice. Some companies are pursuing it avidly; others are going to wait and see. The majority view is that vapor deposition is going to be of great benefit for the very short wavelengths employed in data processing and video, even though the resultant coating appears, at the moment, to be too fragile.

The word from Japan is that microcassettes are going to sweep the market for automotive and portable uses. Certainly they will have an impact, reinforced by new recording techniques and new noise-reduction systems such as B&O's HX Professional. And the next generation of microcassettes (as well as the players they will be employed in) promises to be superb.

ALL of which leaves me in something of a quandary about the final justification for multi-application tape formats. They will provide convenience to the consumer (any tape on hand can do the job he needs done) and a certain amount of the same to the manufacturer (any tape he produces can be sold for any application), but will they be the best possible for each individual application? Analog audio, requiring excellent performance at both short and long wavelengths, calls for some fairly sophisticated tape design. Whether it will still show up at its best in multi-application tapes remains a question. Perhaps the answer lies in a house joke popular at 3M: one day packing density will have become so great that the tape will be able to record and play without having to move at all! That will surely spell the end of magnetic recording as we know it, inspiring tape manufacturers to move on to the next thing.

BARGAIN TAPES Tape expert Craig Stark puts them to the test

and finds they are gratifying performersif they come from a name-brand manufacturer

DON'T know anyone who doesn't like a bargain, and that probably explains why tape manufacturers make second- and even third-line cassettes designed to sell for significantly less than their premium-price formulations. Are these less expensive cassettes really "almost as good," as salespeople readily assure prospective buyers, or are they fit only for such undemanding applications as speech recording and the like?

To shed a little light on this question I tested a number of samples of modestly priced cassettes using the very same procedures I would use for top-of-theline products. The tests are standard, and no attempt was made to examine a large number of samples of any one cassette or even to cover more than a reasonable number of the available products. I used a single very high-quality tape deck (the Nakamichi LX-5, to be reported on in the April issue) whose head characteristics and bias/equalization adjustments would probably bring out the best performance of which a given cassette is capable.

In addition to the less expensive lines of reputable tape manufacturers, there are two other kinds of tape "bargains." The first is off-brand products, which are sometimes available at discount stores for less than a dollar each. Years ago, when open-reel was the dominant format, we called such wares "white box" tape. The "Nippon" and "Tempest" tapes whose responses are reported in the graphs and the accompanying table are examples of this sort of thing in the cassette genre, and the performance speaks for itself.

The second kind of bargain tape is more sinister: out-and-out counterfeits of reputable products from such manufacturers as Maxell, Sony, and TDK. TDK was kind enough to supply unopened samples of some lookalike counterfeits of their products that would certainly pass for genuine visually. In performance, however, they were among the worst I have ever measured. How can a buyer tell they're counterfeit without testing? In this case by looking for the words "TDK FULL LIFE TIME WARRANTY" visible through the cellophane wrapper on the back of the genuine article.

Happily, there are some genuine bargains to be had if your recording job



doesn't require the very highest level of performance. Most brand-to-brand performance variations among premium formulations have narrowed in recent years, and frequently what manufacturers once sold as top-of-the-line products now continue as their second or third line. Conversely, formulations that were originally intended to be "economy" tapes have frequently been upgraded. For the purposes of this limited survey I picked a group of C-90 ferric-oxide cassettes, all of which have list prices under \$5 and most of which actually sell for much less.

How the Tapes Were Tested

The Nakamichi LX-5 recorder used for these tests was checked for playback response (31.5 Hz to 18 kHz) with a new IEC-standard BASF calibrated test tape, and its output was adjusted to produce a 0-dB (0.775-volt) level when playing back a Teac MTT-150A Dolby-level (200 nanowebers/meter) test tape. Record bias and equalization were optimized for Nakamichi EX-II tape, which is similar in its requirements to the premium-price TDK and Maxell formulations. Each cassette was then fed with a fixed-level 315-Hz test tone that produced a 0-dB record-playback output with the Nakamichi EX-II tape; variations in the other cassettes' sensitivity are noted in the accompanying table. Variations in sensitivity of more than ± 2 dB are important principally because they may affect frequency response when a noise-reduction system is used.

The input level of the 315-Hz signal was then raised or lowered, as appropriate, to produce a 0-dB output (Dolby-level) from each cassette, and frequency-response measurements were made across the entire 20- to 20,000-Hz audio spectrum both at the 0-dB level (where there is invariably some high-frequency loss with cassettes) and at the -20-dB level (where frequency response should ideally be flat). These curves (from 1,000 Hz up) are shown in the graphs with (where possible) a company's higher-price product displayed with its lower-cost formulations.

No less important than frequency response is the signal-to-noise ratio of a tape. This was measured by increasing the 315-Hz input level until the thirdharmonic distortion in the output reached 3 per cent (the "signal"), short-circuiting the output of the audio generator while continuing to record, and then measuring the recorded "noise" through a standard IEC Aweighting filter (which closely approximates the sensitivity of the ear to tape hiss). This was done without using a noise-reduction system.

While almost every tape has some safety margin ("+" reading in the table) between a Dolby-level output at 315 Hz and the onset of severe distortion (the 3 per cent point), no cassettes can handle this level at the highest audio frequencies. The final test, therefore, was of the maximum output level each cassette could produce (with this machine and its factory-adjusted bias/ equalization setting) at 10 kHz. While all the numbers in this column of the table are negative, the closer the figure is to 0 dB the better.

What do the numbers in the table and the traces in the graphs really show? Besides sounding a clear warning to avoid unbranded (and counterfeit) products, they demonstrate that most companies' second-line tapes compare extremely well with their premium product, usually suffering only a slight loss in signal-to-noise ratio and in high-





frequency overload capability. Further, the results tend to illustrate how hard won are the advances in tape technology. In fact, the state of the art is now so far advanced that improvements of more than a decibel or so are accounted "revolutionary" even if their audible effect is minimal at best. In tapes at the very bottom of a company's line, however, the compromises are necessarily greater, sufficiently so in my estimation to suggest that music recorded on them will usually be audibly affected.

N the end, of course, "you pays your money and you takes your choice." I find that the sensible solution is to use the premium formulations for very critical music recordings for your home system and the second- and third-line tapes for everything else. If you wonder whether a less-than-premium tape will achieve the level of performance you want on your particular machine, the best advice I can give you is to try it and see. In any case, this brief study demonstrates that there's nothing wrong with an economy product if it comes from a name-brand manufacturer. But stay away from the unknowns; there's good reason for their anonymity.



Brand and Type	31 5-Hz sensitivity	3 per cent third- harmonic distortion	A-weighted S/N	10-kHz saturation
BASF Professional I	0.0	+4.7	56.8	-4.7
BASF Performance	-0.2	+4.6	56.7	-5.3
Fuji FX-I	-0.6	+ 4.0	58.3	-5.8
Fuji FL	-1.2	+ 1.6	53.6	-9.2
Maxell XLI-S	+0.5	+5.7	57.5	-2.1
Maxell UD XL-I	+0.3	+5.1	56.8	-4.5
Maxell UD	-0.6	+3.5	55.1	-4.3
Maxell LN	-2.6	-0.2	52.6	-7.2
Memorex MRX I	-0.3	+ 4.4	57.3	-5.0
Realistic Supertape Gold	-0.5	+4.1	57.0	-8.0
Sony SHF	+0.35	+5.0	57.0	-4.3
Sony HFX	-0.6	+3.8	55.9	-5.8
TDK AD	-0.8	+ 3.3	58.2	-3.7
TDK D	-1.0	+ 3.4	56.1	-5.0
3M Master I	+0.6	+6.0	57.7	-3.9
3M Dynarange	-0.25	+4.6	56.8	-4.8
3M Highlander	-1.0	+1.6	56.1	-10.4
"Nippon" (C-60)	-4.8	- 4.7	49.0	- 10.3
"Tempest"	-5.0	- 5.0	47.8	-26.0
Counterfeit TDK AD	-0.7	+2.5	56.1	- 27.0

10K

20K

SK



The recent appellate court reversal of an earlier decision in the Betamax Case demonstrates that the question of equity in home taping, whether video or audio, is far from settled

By Gary Stock



F you're looking for a profitable business with affluent customers and a shot at national recognition, you might consider becoming a copyright lawyer specializing in the electronic media. While the technology of recording and replaying entertainment and news has advanced rapidly over the past thirty years, the laws that dictate its proper use have lagged well behind. As a result, most precedent-setting copyright-law decisions come only after extended court cases with multiple appeals; precedents become law only after much money and publicity have brought the issues to the attention of legislators.

What has come to be known as the "Betamax Case" is a good example. A lawsuit was filed in 1976 by Universal Studios and Walt Disney against Sony Corporation (manufacturer of Betamax videocassette recorders), some of Sony's distributors and retailers, and a Betamax owner, one William Griffiths. The Betamax Case concerns itself with the most troubling questions of the home video revolution. Who controls the rights to a work of entertainment once it is broadcast? How does a developer of entertainment programs make a steady living from his or her work? And to what extent should private corporations using public property-the airwaves-to disseminate their wares be allowed to influence what citizens do with broadcasts in their own homes?

The Video Boom

No one firm did more to initiate the home video era than Sony. The company prides itself on being one of Japan's most prolific electronic innovators in everything from portable office equipment to the Walkman cassette player. Despite its relatively modest size, Sony has traditionally (and successfully) competed in new electronics markets with such immense corporate behemoths as Matsushita and Hitachi. Between 1965 and 1975, Sony and a handful of other firms experimented with offerings of unwieldy, expensive, and difficult-to-use open-reel home video equipment that appealed primarily to video artists and local television stations. Then, in early 1975, Sony took the lessons of that decade and beat its competitors to the punch with one of the video revolution's most seminal products: an affordable, easy-to-use home videocassette recorder called the Betamax. And the video era was born.

Although it was not intentional, Betamax represented a challenge to the traditional entertainment distribution systems of the big television and movie organizations. The movie studios had survived the breakup of the studio-theater monopolies in the Thirties and the growth of network television in the Fifties. But control of their product-the entertainment programs themselveshad always been in their hands. Betamax took that control from the entertainment industry and placed it in the hands of the American consumer. The video-recorder owner could rearrange television schedules at will, tape and replay programs hundreds of times over, trade or loan portions of a "video library" to friends, and purchase all sorts of alternative entertainment outright. Indirectly, the Betamax also opened the door to a boom in the sale of "bootleg" or illicit copies of feature films and television programs because it provided for the first time a large outlet for them.

The Studios React

The reaction to this situation by the entertainment industry-as represented by two of its best-known members, Universal and Disney-was not surprising. In 1976 they sued Sony and its co-defendants on the basis of copyright infringement, noting that Sony had marketed and advertised Betamax recorders specifically for recording television programs. The real but largely unstated issue was money, specifically whether the entertainment industry was entitled to a slice of the video breadloaf because its wares were the ones being taped.

Three years brought a decision: in 1979, district court Judge Warren J. Ferguson handed down a lengthy and precisely worded decision that seemed to dismiss Universal's and Disney's claims conclusively. Ferguson based his decision on three concepts. First, that the exemption Congress had extended in 1971 to exclude home audio taping from the copyright provisions was applicable to home video taping as well. Second, that making videotapes at home fell into a copyright-law doctrine called Fair Use, which permits copying of many copyrighted materials if their commercial value is not reduced by the copying. (Ferguson noted here that the television networks were already paying a fair price for the rights to broadcast Universal and Disney materials.) Third, that a company like Sony could not be held responsible for the actions taken by purchasers of its products, especially as there were alternative, legitimate, non-copyright-infringing uses for the machines. As expected, Disney and Universal appealed, but most members of the video industry thought the whole question was closed for good by Ferguson's ruling.

A Reversal

All that was changed by an appellate-court reversal of Ferguson's ruling rendered by a three-judge panel in October of last year. The reversal sent shock waves racing through the homevideo industry. The higher court rejected all three of Ferguson's theses, noting that Congress had not specifically exempted home video taping when it amended the copyright laws and that it was not the court's job to fill in where Congressional intent was not clear. The panel also said that the Fair Use doctrine did not apply because home taping was harming the commercial value of broadcast works. Also rejected was the notion that Sony was not accountable for the actions of its machines' users, because the Betamax had been "advertised, sold and promoted" primarily for the purpose of recording television programs, thus rendering Sony liable for what the appellate court termed "contributory infringement." The higher court remanded the case to Ferguson, instructing him to "fashion relief" for the plaintiffs (Universal and Disney), but noting that where "great public injury would result from an injunction, a court could award damages or a continuing royalty."

Shortly after the announcement of the reversal, Universal filed a blanket suit for damages against every VCR manufacturer doing business in the U.S.—but, interestingly, not against any individual users. The current ruling is applicable only in Guam, Hawaii, and the eight other Western states that comprise the Ninth Circuit and technically refers only to recordings of copyrighted material made off the air—not cable or subscription TV.

Repercussions

This leaves three plausible courses for the future of home video recording. The most likely, in the view of Congress



watchers, would be for the Congress simply to pass an amendment to the copyright act specifically excluding home video taping from the copyright laws. At least two bills, one in the Senate and one in the House, have been introduced to accomplish this, and action on them is expected this spring.

A second possibility is Sony's expected appeal to the Supreme Court. In all likelihood the case would take months to prepare and present. The result might be a narrow decision that would leave many issues unresolved, but that is of course in the nature of judicial decisions.

The Supreme Court could also conceivably follow the appellate court's recommendation and institute a royalty tax on either VCRs or blank tapes (see accompanying box), formulating its own guidelines for such a royalty arrangement. This third, royalty-based approach is the most disturbing of the three possibilities to the video industry and video enthusiasts.

At this writing, the Senate Judiciary Committee is holding hearings on the subject, with both senators and witnesses making some telling remarks. Senator Dennis DeConcini (D-Arizona), sponsor of the Senate bill that would exempt home video taping from copyright law, presented his view of the situation early on, saying "the networks charge advertisers for the privilege of giving their products exposure concurrent with the airing of the entertainment item, and the circle closes when the American consumer purchases merchandise to which has already been added the cost of advertising. Thus, in a roundabout way, the American consumer has already paid the copyright fee to the copyright holder." Sid Sheinberg, president of Universal's parent company MCA, predictably disagreed: "Even if a system of measuring timeshift viewing were to become feasible, a study of videocassette owners indicates that 84 per cent skip commercials.

What advertiser or broadcaster is likely to pay for time-shift viewership when it is either unmeasurable or such viewership is without commercials?" So with barely a nod to the questions of artistic freedom or public rights, the hearings have gotten down immediately to the nitty-gritty: money.

IN the meantime, business goes on in the video industry, with some minor changes. Many video dealers report increased sales of recorders by buyers concerned about impending price hikes. Sony officials, apparently confident of a favorable ultimate resolution, are pressing forward with their "most aggressive" Betamax advertising campaign yet while vowing to defend the rights of the American consumer. And the nation's four million or so video-recorder owners-judging by increasing blank-tape sales-are apparently continuing their home taping activities without any clear assurance that what they are doing is not piracy. Just one more uncertainty among many in our technologically advanced world.

THE idea of a royalty on videocassette recorders or blank videotape, intended to compensate the entertainment industry for the money claimed to be lost when consumers tape programs at home, is not a new one. According to information supplied by the Motion Picture Export Association of America, at least three nations have levies of some type on video recording. The catch is that none of those regulations is apparently accomplishing what they are supposed to.

West Germany has the oldest law. Since 1977 a provision of the revised German copyright law has directed a levy of up to 5 per cent on the wholesaler's purchase price of video recorders sold in the country. In practice, of course, this 5 per cent figure is sequentially expanded by the wholesaler's and retailer's profit margins to something between 7 and 10 per cent of the final price to the consumer-a substantial amount by any standard. The money is supposed to be disbursed to all of the separate parties having copyright claims on a given work-including actors, directors, and cinematographers. (In the U.S., the studio usually holds the copyright and those who work on a film make their money through a simple contractual arrangement with the studio.) But only a tiny fraction of the money collected has ever been paid out-it went to film-score composers-because a tangle of lawsuits and questions raised by both the equipment manufacturers and the

A TAX ON TAPE?

entertainment industry has kept the cash essentially in escrow.

The law in Austria is even more unwieldy. It prescribes an unspecified tax on blank videocassettes (our information



suggests 10 per cent of the retail price), which is to be handed over to a collective management society similar in purpose to our ASCAP or BMI. In theory, this approach seems fairer than a hardwarebased tax, in that it taxes those who are actually assembling software libraries rather than video buffs engaged in simple time-shifting or playback of commercial prerecorded tapes. The Austrian government, however, has never issued the necessary implementing regulation, and the law—despite being technically on the books—is not currently in force.

Norway has also recently passed a law covering home video taping and compensation for copyright owners, but we have not been able to obtain detailed information on how it is supposed to work or whether it is in effect currently.

KELATED audio-taping compensation proposals have not fared well either. Judicial panels in Great Britain have repeatedly rejected taxes on blank tape, most recently last fall. And a blank-tape tax bill submitted to the California legislature last year died in committee despite having strong support from the record industry.

Nonetheless, perhaps a bit of a refresher in just how the Law of the Land stands right now with reference to audio taping might be in order:

IF YOU

a. record yourself, friends, parties, or famous personalities (in person)

b. copy phonograph tecords either directly or off the air

- c. tape programs off the air
- d. tape live performances

DO NOT sell or distribute your recordings *unless* you obtain permission to do so from the following, wherever applicable:

l. the persons involved

2. the person, company, or agency to which the performer(s) may be under an exclusive service contract

3. the copyright owner of the subject matter of the performance, if it is a work protected by copyright

4. the program's broadcaster and its producer

5. the manufacturer of the record.



"If it had a Jensen, it would be a classic."

People who know sound know what it takes to make classic car stereo. Electronics like a Jensen[®] RE518 electronically tuned buttons on the RE518 control refinements like equalization for normal or metal and chrome tape playback. And conveniences

stereo/cassette receiver. The RE518 features a Quartz

Digital Synthesizer that electronically locks into a selected radio frequency.

Tuning is extremely accurate because there is no mechanical drift from temperature variations or vibrations.

Feather touch push



such as electronic pre-set tuning, seek, scan, and digital readouts. The RE518 has a universal sized chassis that fits most American and European

cars, as well as many other imports. So even if you don't own a 1934 Buick Club Sedan, with a Jensen RE518 you can have a classic.



When it's the sound that moves you.

CIRCLE NO. 18 ON READER SERVICE CARD

STEREO REVIEW'S SELECTION OF RECORDINGS OF SPECIAL MERIT BEST OF THE MONTH

Purcell Anthems: an Ancient Art for Modern Ears

WHEN the monarchy was restored in England with Charles I in 1660, English cathedrals reopened their doors triumphantly. Musically this meant that the anthem, which combined the grandeur of the French motet with the earlier English Renaissance tradition, had an opportunity to flourish with a new vitality. In the hands of such composers as Pelham Humphrey, John Blow, and especially the young Henry Purcell, this old English form soon became one of the most opulent musical genres of Restoration England. A new three-disc Deutsche Grammophon Archiv album furnishes eloquent proof of the resplendent, awe-inspiring power of this music while celebrating Purcell's immortal contribution to its development and substantiating his genius, originality, and mastery.

The anthems fall into two basic types: the full anthem for chorus and organ continuo, and the verse anthem for soloists and chorus. The most splendid form is the "symphony" anthem, a verse anthem with orchestral accompaniment featuring an instrumental introduction and interludes.

Purcell's style ranges from intricately wrought contrapuntal techniques to massive, almost Handelian homophonic statements. The solo writing ranges from expressive declamation to suave melodies and makes use of finely balanced duets and trios as well as lavishly conceived solos. Especially striking is Purcell's harmonic language, with its bold dissonances and startling cross relations. All is controlled by the Scripture-derived poetry, each word receiving its exact musical analog in terms of rhythm, figuration, and harmony. In a sense, the English anthem is an expansion of the madrigal, with its perfect marriage of text and music.

One doesn't have to hear much of the Choir of Christ Church Cathedral to

> PURCELL: Choral Works. Evening Service in G Minor; Canticles in B-flat Major from the Morning and Evening Service; Te Deum and Jubilate in D Major. Anthems: O God, Thou has cast us out; O Lord, God of Hosts; Remember not, Lord, our offences; Lord, how long wilt Thou be angry; O God Thou art my God; Man that is born of a woman; Thou knowest, Lord, the secrets of our hearts; My heart is inditing; O sing unto the Lord; My beloved spake; They that go down to the sea in ships; Praise the Lord, O Jerusalem; Jehova, quam multi sunt hostes mei. Choir of Christ Church Cathedral, Oxford; the English Concert. Trevor Pinnock director; Simon Preston cond. ARCHIV 2723 076 three discs \$32.94.

sense that one is in the presence of a centuries-old tradition. As in Cardinal Wolsey's time, the chorus consists of twelve men and sixteen boys. The sonorities, reinforced by the cathedral ambiance, are crystal clear. The individual sections are perfectly balanced so that while the counterpoint is heard with clarity, the overall blend is there too to lend power to the homophonic writing. Further, the blending of the voices with the strings and trumpets of the English Concert is ravishing. Especially telling is the sublime combination of Baroque violins and boy sopranos. It is an effect impossible to attain using either female voices, modern strings, or both.

Simon Preston's reading of these works is characterized by a judicious choice of tempos and an abiding concern with pacing. Many of the anthems consist of short contrasting sections that can easily fall apart and become boring unless a sense of musical continuity is carefully sustained. Under Preston's guidance, the sections flow smoothly and logically into each other, creating in the end a compelling sound mosaic of large and impressive design. It is a rare conductor who can achieve such a long line and still not lose the detail of the component parts; Simon Preston's mastery of this music lends the works great breadth and dignity without any suggestion of pomposity. The album is a monumental homage to Henry Purcell and English church music. But it is far from an antiquarian exercise, a self-conscious revival of past glories, for this is a remarkable living musical tradition with unexpected delights for modern ears. It is not only exquisitely performed but brilliantly recorded as well. Recording engineer

". . . homage to one of the most opulent musical genres of Restoration England."


Simon Preston directing the Choir of Christ Church Cathedral, Oxford (Photo by Clive Barda, courtesy of Deutsche Grammophon)





Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

uant good taste and ultra low tar.

Karl August Naegler has caught the English cathedral sound beautifully; there is just enough of the resonance and reverberation created by the lofty stone spaces to lend liveliness to the sound but not so much that any of the important musical detail is blurred.

-Stoddard Lincoln

Anja Silja and Christoph von Dohnányi Present Schoenberg's *Erwartung* as Real Music

LONDON has given us a superb performance of one of the landmark works of twentieth-century music: *Erwartung (Expectation)*, written by Arnold Schoenberg in 1909 in the white heat of inspiration to a text by Marie Pappenheim. The story of a woman who either does or does not discover the body of her lover is treated in the most intensely atonal, athematic, expressionist manner possible. It is no piece of hot-house avant-gardism, but a full thirty-minute musicodramatic case history, one of the most intensely expressive works of art of any period.

Anja Silja, whose singing seems only to improve as the years go by, has mastered the enormous musical and vocal difficulties of Erwartung, plunging beneath a mere surface reading to reach a deeper level of interpretation. She is not just getting all the notes but going beyond them-like in real music! The result is that the work no longer seems to be the overlong cry of anguish we used to hear but something richer, more complex, more dramatic, more insightful. The presence of the Vienna Philharmonic adds something too. Now that the Viennese have finally accepted Schoenberg as one of their ownwhich, of course, he was all alongthey bring to his music old-fashioned qualities of tone and expression that are quite relevant to it. The talents of conductor Christoph von Dohnányi are equally the right means to the right end.

Erwartung, for all its fearsome and daunting aspects, is a familiar work compared with the Orchestral Songs, Op. 8. This is strange, for the songs are squarely in the tradition of Wagner, Strauss, Mahler, and the like. There are three sonnets of Petrarch, two texts from the *Knaben Wunderhorn*, and a poem by one Heinrich Hart, all richly set in the best transcendental late-Romantic manner. *Too* rich, *too* transcendental, one might say. But all of Schoenberg's works are that way. If you like *Gurrelieder*, you'll love these songs, but buy the record for its revelatory performance of *Erwartung* in excellent digital sound. —*Eric Salzman*

SCHOENBERG. Erwartung; Six Orchestral Songs, Op. 8. Anja Silja (soprano); Vienna Philharmonic Orchestra, Christoph von Dohnányi cond. LONDON O LDR 71015 \$12.98.

The Brahms Piano Trios In Remarkably Intense Interpretations by Les Musiciens

A PARISIAN piano trio recording for Harmonia Mundi France calls itself Les Musiciens, and this can be confusing, because that is simply the French equivalent of what the Italian chamber orchestra I Musici has been calling *itself* for all these years, and also because the innocent collector may assume "Les Musiciens" to be simply the record company's heading to introduce the participants in this or that particular recording. Indeed, in reviewing this threesome's recording of the Schubert trios last June we simply listed the individual names: Jean-Claude Pennetier (piano), Régis Pasquier (violin), and Roland Pidoux (cello).

Well, so much for sorting out the nomenclature: by any name(s), individual or collective, this is a superb ensemble, and its new set of the three piano trios of Brahms is the sort of thing that will encourage listeners to remember it both ways. Every regularly constituted trio gets around to recording these works, and generally sooner rather than later, for they constitute a prominent chunk of the cornerstone of this repertoire as well as a choice segment of Brahms' chamber-music production, spanning virtually the entirety of his creative life. Les Musiciens seize upon the dark, dramatic quality abundant in this music as the foundation of their approach, and they manage to invest it with remarkable intensity within a rather expansive frame. If these two notions seem mutually contradictory, an actual hearing will show how mutually supportive they can in fact be. As in the Schubert set, the playing here is extremely suave, subtle, mature in outlook, and exquisitely balanced. The broad pacing, I think, works so well because it is more or less determined by the intensity of the interpretations-an intensity that is not felt or expressed in terms of frenetic irruptions (hardly appropriate to these nobly brooding works), but richly impassioned all the same.

While the tempos in all three works are generally unhurried, the final movement of the Op. 8 trio is just that much more alert than in most other performances of such expansive cast, and it brings the drama of the whole work to a convincing resolution. Opus

Soprano Silja and conductor Von Dohnányi: the right means



European Surfaces For Your Platters.

Here's how we do it: We buy large quantities of the best recordings there are directly from Europe. We handle our own import-business. We eliminate the percent-hungry middle-person and sell directly to you by mail. That's why our imported and famous label recordings

The Best Violinconcerti, Of Bach Vivaldi Havdn Gio vanni Battista Viotil, Mozart, Beethoven, Paganini, Wie-niawski, Bruch, Brahms, Dvořák, Salnt-Saens, Tchaikovsky, Sibelius, Schumann, Kovsky, Sibelius, Schumann, R. Strauss, Alban Berg, Bar-tók. Orchestras/conductors: English Chamber Orch./Bar-enboim, London Symph/Pre-vin, Berlin Phil./Karajan, Philharm, London/Do-New mate this set! The title might sound like a cracker jack packet, but closer inspection tells you: this is the best of the best with the best, made in Germany by EMI/Electrola (1C197 54050/

The World of Symphony Probably the largest single collection of records that has ever been offered in the U.S.A. An exclusive 91 rec-ord set in 5 collector boxes. The complete symphonies of Beethoven, Mozart, Bruckner, Brahms, Tchalkovsky, Sibe-lius, Mahler, Dvořák, Bar-tholdy, Schumann, Schubert. And the best of Haydn. Con-ductors: Abbade. Jochum ductors: Abbado, Jochum Bohm, Kubelik, Karajan, Orlo. Bohm, Rubelik, Karajan, Orig. Deutsche Gram. (stamped, dated poly-lined sleeves). Made in Germany. Through-out Stereo. A heavy (31 lbs) bargain. 91 LPs not 3900, only \$379 It#29308

Franz Schubert: Die schoene Muellerin: Winterreise; Schwa-nengesang. And 33 selected songs (words by Goethe, Hei songs (words by Goethe, Hei ne, Schiller, Uhland, Shake speare etc.). Dietrich Fisher-Dieskau, Barlton, Gerald Moore, plano. DGG 2720105. Md.I.Germ. Compl. texts in Ger. • • • • • 6LP not \$60 only \$35.99 It#29608

•.•.

1

Mozart: Complete Violin Con-certi. Bath Festival Orch., Y. Menuhin cond. & plays. EMP Electrola (1C15352341/44). Made in Germany. Text Ger. ★ ★ ★ 4 LPs not \$35, only. \$19.99 tt#29347

Vivaldi, 82 ConcertI. The most complete anthology, perl. by I Musici, Grand Prix du Dis-que; Edison Award; Deutscher Schallplattenpreis, 12 hrs. of Baroo, mus. Philips (6747029)



Wagner: The Ring. Complete Edition: Rheingold. Walkuere. Sieofried, Goetterdaemme rung. Herbert von Karajan con ducts the Berl. Phil. & Opera. Gundula Janowitz. Christa Ludwig, Dietrich Fischer Dieskau, Karl Bidderbusch, etc.

Dimitri Shostakovich: Sym

phonies 1-15. Complete. Mos-cow Philharm., Kondraschin. cond.; State Symph. USSR, Swetlanov. cond.; etc. With texts by Rilke, Apollinaire. Jewtuschenko. Recorded in the USSR, PRESSED IN GER. Gorgeous notes, photos & texts. Ariola 87623 XK. Text Gorgeous notes, protos a texts. Ariola 87623 XK. Text Ger. ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ 13LP not \$130 only \$69.99 lt#29571

.

Mozart: Complete Plano Concertos. Daniel Barenboim & the English Chamber Orch. Cited as being a masterwork by a still young interpreter. EMI/Electrola (1C19752249/ 60): Made in Germany. Text Eng./Ger. + + + + + + + + + + 12 LPs not \$107 only \$49.99 It#29231 Text

Bela Bartok: The Six String Quartets. "His greatest a-chievement lies in his 6 string quartets." Perf. by the Juilliard String Quartet. CBS GERM. 77330. Md.i.Germany. Text Engl./Fr./Ger. + + 3LP Engl./Fr./Ger. + + 3LP not \$30 only \$16.99 It#29463

Maurice Ravel: Orchestral Works, First complete record ing. Rapsodle Espagnol. Bo-tero. Scheherazade, La Valse etc. Pierre Boulez cond. the NY Philharm, and the Cleve-land Orches, GERMAN CBS MASTERWORKS 79404, Text

Engl./Fr./Ger. + + + 4LP not \$40 only \$25.99 It#29563 Virtuoso Guitar Duets. Ida

Presti & A. Lagoya play Bach. Scarlatti, Debussy, Granados etc. Philips 6768657. Made in Holland. • 2 LP. Only Holland. + + 2 LP. \$9.99 It#29599 Only

Rakhmaninov: The Sympho-nies. "The last of the color-ful Russian masters of the 19th century." Edo de Waari cond. the Rotterdam Symph. Orchestra. Philips 6768148. MdL:Holland Txt: Eng/Fr/Ger. • • • • 4LP not 540 only • 5260 L#20560 \$26.99 11#29560

Bach: Complete Organ Works. Lionel Rogg. Considered by Grammophone Mag. to be the ultimate collection. EMI/Elec-Unimate collection. Emilielec-trola (1C19714101/20). Made in Germany. Text Ger. + + + + + + + 20 LPs not \$179 only \$79.99 It#29300

· · · · ·

Brahms: Complete Sympho-Brahms: Complete Sympho-nies, Acad. Festival & Tragic Overtures Op. 80 + 81. Phil. Orch. London, Klemperer. EMI/Electrola (1C19750034/ 7). Made in Germany. Text German. • • • • 4 LPs not \$35, only \$16.99 II/#29131

Arthur Rubinstein plays Cho pin. Ballades 1-4, Mazurkas 1-51, Nocturnes 1-19, Polo-nalses 1-7, Scherzo 1-4, Impromptus 1.4, Sonatas 2.3. Walizes 1-14 etc. etc. Clas-sic recordings from 1957-66 GERMAN RCA RED SEAL RL42234 Md.I.Germany. Text Ger. + + + + + + + + + + + 12 LP not \$120 only \$65.99 lt#29561

100 Years of Berlin Philhar-100 Years of Berlin Pnimar-monics. In 1882 Berlin Mu-siclans rebelled, wrote a democratic constitution, elected their own conductor a named themselves "Ber-liner Philharmonisches Or-chester." For their 100th birthday, Deutsche Grammophone complied their chronological documentation ological documentation. From the first recordings w/ Arthur Niklsch to the most recent ones w/Karajan & Rostropovich. 15 LPs (5 orig. Mono, 10 STEREO) with the Mono, to StENEO) with the B.P. pick of the century: Beethoven, Bruckner, Schu-mann, Wagner, Schubert, Strauss. A Pantheon of con-ductors: Nikisch, Kleiber, Walter, Knappertsbusch, Pfitzner, Strauss, Furtwäng-er, Jochum, Ericeaw, Bohm Phitzner, Strauss, Furtwang-ler, Jochum, Fricsay, Bohm, Maazel, Kubelik, Abbado, Karajan, Karajan, Karajan, For you collectors: This is the first edition of this set & the first edition of this set & the first pressing (Made in Germany Fall '81). Secure this unique set now. It might soon become a rarity. DG 2892 059. Text Ger. **** ********* 15 LP, not \$150 only \$79.99 It#29601



Edition La Chanson Here's Import: A 12 album docu-mentation of the French Chanson. 1 LP each of Chanson. 1 LP each of George Brassens, Jacques Brel, Barbara, Yves Mon-tand, Borls Vian, Edith Prat, Sacha Distel, Mouloudji, Maurice Chevalier, Patachou, 30163

The Jazz History I & II. Arm strorig at Carnegie Hall, M. Jackson, Miller, Ellington, Ba-sle, Goodman, Fitzgerald, Scott Jopiln, Bechet, Jelly Roll Morton, Dorsey, Waller, Crosby etc. Usually 1 album per person/orchestra. Jazz Line 33-101/110 33-117/126. In 2 boxes. Made in Germany.

Jelly Roll Morton and Red Hot Penners & Trios, 1926 - 1939 The Saga of Mister Jelly Lord Master by master in chron, order. Joker C70/7. Md. in Italy. \$24.99 It#32113



Keith Jarrett: Sun Bear Con certs, Piano Solo, Recorded in Japan. Pressed in Ger many. The famous collec-tion: Jarrett's Music, com-bined with Japanese Design & German precision. Beautiful thick paper Jackets, box & collector's book (many photos, text Engl.) Made in Germany by ECM (1100). * \$64.99 It#23217



Djangology. The most complete collection of the most most famous Jazz gultarist: Djan-go Reinhardt, James Jones: "He's a God." Contains 20 Reinhardt LPs, including the Reinhardt LPS, including the rare '49 Rome recordings. 265 cuts from 1928 to 1950. Lots of first time releases, unearthed in the archives of Pathé/EMI. If you are a Reinhardt collector, this box of 20 LPs will leave no mu 20 LPs will leave no mum-mies buried. Reinhardt with the Quintet of the Hot Club de France, with Stephane Grappelli, with Joseph Rein-nardt, Coleman Hawkins, Jean Vaissade, Dicky Wells & Orchestra, Andre Ekyan, Eddy South, Michel Warlop, Benny Carter & Orch., Larry Adler, Christian Wagner etc.

Complete documenta-tion. Made in Germany by EMI (1C198-16001/20) ***

Furtwängter conducts Brahms. A collection of Im-portant historical Mono re-cordings. Sym. No. 1, Vienna Philharm. rec. 11/47; No. 2, Berlin Philh. rec. live 5/52; Ne. 3, Berlin Philh. rec. live 12/49; No. 4, Vienna Philh. rec. live 10/48. Hung. Dances №. 1, 3, 10; Conc. for Vn. & Orch., Op. 77, Menuhin, rec. Orch., Op. 77, Menuhin, rec. 10/49, Conc. for Pno. 8 Orch. Op. 83, rec. 11/42. Conc. for Vn., Op. 102, Vienna Philh. rec. Ilve 1/52. EMI 1C149-53420/26M. Made in Germ. Text Engl./Germ. +**** * 7 LP not \$70 only \$33.99 It#29627

often cost even less than their domestic counternarts. All are STEREO

unless indicated otherwise. And as many of these sets are available

for the first time in the U.S.A., "not" prices are for comparison only,

based on the suggested list price for comparable items.

Telemann: The 300th Birth-day Edition. On March 14. Georg Philipp Telemann ce-lebrated his 300th birthday. And look at the party which Telefunken is giving him. His Orchestra Works (Darmstadt Overtures, Overtures and Con certos from the Banquet Mu sic): his Chamber Music (10 Trio Sonatas, 6 Trio Sonatas, Trios. Quartets, Soll and Con-clusions from the Banquet Music: and Telemann's Vocal Music (Pimpione. The Day of Judgement, on the original Instruments). Performed by Concerto Amsterdam under Frans Brueggen and by Con-centus Musicus under Nic-olas Harnoncourt. Excellent Telefunken/Das Alte Werk (6.35554 · 6.35556). Made in Ger. 3 booklets (Eng./Ger.).
 15 LPs in 3 volume boxes in 1

 15 LPs in 3 volume boxes in 1

 slip-case.

 * * * * * * * * * * *

 * * * * * * * * * * *

 * * * * * * * * * * *

 * * * * * * * * * * *

 * * * * * * * * * * *
 Tchalkovsky: The 6 Symphonies & Manfred Symphony. Lorin Maazel conductor Vi-enna Philharmonic Deutscher Schallplattenpreis. Tetelunken -Decca 6.35342. Md.i.Germ. Txt Ger. * * * * * * 6LPs not \$60 only \$34 99 It#29617

Pablo Casals: In Memoriam Historic mono recording, Iresh pressing, Casals (Violincello) and Rudolph Serkin (Piano) play Beethoven's Complete Works for Violincello & Pi ano, Sonatas #1 Ihru 5 and more, CBS GERMANY 77364. Made In Germany, Text Ger. * * 3 LP not \$30 only \$19,99 It#29452

Joseph Haydn: The 12 Lon-Joseph Haydh: The 12 Lon-don Symphonies, E. Jochum cond, the London Philhar-monic Orchestra. Deutsche Grammophone 2720 091. Madein Ger, Text Ger, *** *** 6LP not \$60 only \$34.99 Itt/29630

Dinu Lipatti. (The James Dean of Classical Music. | Selected Vorks from Bach, Brahms, Chopin, Enescu, Grieg, Liszt, Mozart, Ravel, Schubert, Schu-mann & Scarlatti, Important hist, Mono rec EMI/Electrola (IC19753780/86), Made in Ger Text Germ. • • • • • • • 7 LPs only \$29.99 It#29554 Telemann: Banquet Music. Complete recording. G. Leonhardt, Concerto Amster-dam. F. Brueggen, Grand Prix du Disque, First rate Telelunken (6.35298). Made in Ger Text Ger/Eng/Fr Sumptuous box. + + + + + 6 LPs not \$60 only \$34.99 It#29295

Call Toll Free: (800) 446-7964 Virginians, pls. call (804) 293-5197. We are here from 9-5 EST. Ask for Bambi, or leave a message. Speedy-Gonzalez service: By good old U.P.S. O.k., here we go:

Terri

Quant.	Of item #.	s each.

Quantities are limited. Add \$3 for postage & handling. VA residents add 4% sales tax. 10 day money back guarantee for unplayed records.

FOREIGN ORDERS: Visa/MC, Intl. money order or cashier's check in U.S. funds only. Add 10% for p&h, \$7.50 minimum

I have enclosed check/money order for (allow 3 weeks for pers. checks). Send it C.O.D. I will pay addl. postage. \$ and here's \$10 as a deposit.

Charge It to my MC Visa

Card# Siq. Exp. Name (print) Address City State Zip Telephone (just in case) SR3 Please send me your catalogue

Blue Angel, Inc. 1738 Allied St. Charlottesville, VA 22901



away stars like Buddy Holly. Bill Haley, Eddie Cochran, Johnny Preston, Gene Vin-cent, etc.); "Doo-Wops." featuring harmonists like "The Silhouettes" or "The Platters"; albumslike "Rhythm Platters' abbums like "Rhythm and Blues Party," "Teenate funker/Decca (6.30118) Made Queens," "The Girl Groups" in Germany * * * * * * * and "Rocklin" Movies." This collection has everything only \$74.99 It#24213 you've been hunting for (sort of) for the last couple of vers. Philips/Mercury 6685 139, pressed in Germany. • 15 LP, not \$150, only \$89.99 1t#30164

Jimi Hendrix: Rare and mysterious recordings. 10 LPs with un-Hendrix-like titles like "Hang On Sloopy," "Day Tripper," "Woolly Bully," ve Mercy." "Simon Says." "Mave Mercy, "Simon Says, "Go Go Shoes," etc. On like-wise obscure labels like "ASTAN" and "MUSIDISC." Achtung: Some pitiful guy at the record company listed Itsy Bitsy Teenie Weenie" on the box. This title is not on record #4. So please don't look for the bikini, but for another, even more mysterious title. Music Distrib-utor 50082. Made in Ger., ance. ********* IO LP, not \$99, only \$39.99



good old Decca times. Stones aludins as released in Eng 1. Around & ar Stones 2. Out land.orig.covers.PIs.Please of our heads. Aftermath. Got Me. With Hard Day's Night like if you want. Satanic Maj. For Sale. Help. Rubber Soul. esty. Beggar's Bang. Let in Revolver. Sg1 Pepper. White Bleed, Yayas Out. Metamor. Album (2 LP).Yellow Sub. Abof our heads Attermath. Got Me. With Haru Day's Nigui. Ille if you want. Satanic Maj. For Sate. Help. Rubber Soul. esty. Beggar's Banq. Let in Revolver. Sgt. Pepper. White Bleed, Ya-yas Out. Metamor. Album (2 LP). Yellow Sub Ab-phosis Biw. The Buttons. 2 bey road. Let II Be. Rarities historical Mono. LPs. Tele. EMI. Made in Germany or funken/Decca (6.30118). Made. Holland. Gold-embossed.box. werv limited strick! 23392

2





very limited stock! + + + ********** 14 LPs not 1111 only \$99.99 lt#



Extra heavy Cream Collec-tion. The ORIGINAL Cream recordings in a beautiful col-lector's box; Fresh Cream. Live Cream I. Live Cream II Wheels of Fire (2 recs.), Discovers! Pls Please by Deutsche Grammophon \$49.88 only \$39.99 It#24214 OH, MY SOOOOOUUL

•



The John Mayall Collection

John Mayall is famous for going through musicians like others go through un-Since the set of the s

Everyone Needs a Little Comfort.



The unique sound of Dixieland jazz and the unique taste of Southern Comfort. They're both originally from New Orleans, and they're both just right for those special times when good friends get together. Add a perfect note to your next evening out with:

Comfort & Coffee Add 1-ounce of Southern Comfort to a cup of hot coffee (regular or chicory). Stir and enjoy.



80-100 Proof Liqueur. For a free Southern Comfort recipe book, write Southern Comfort Corporation, St. Louis, MO 63132 @ 1981



JEAN-CLAUDE PENNETIER

87 is paced almost identically with the San Francisco Trio's persuasive statement of that work (Sound Storage SSR 2010), but it shows a sharper profile as well as a deeper level of intensity. The one point in this set that may disappoint some listeners comes at the beginning of the last and most ingratiating of the three works, the C Minor: the hearteasing quality of the principal theme makes itself more apparent in the grainy, crackling-hearthfire texture projected by the Suk Trio in its recent remake of the Brahms trios (Supraphon set 1 11 2251/2) than in the highgloss smoothness of the French players. The Czechs, while generally brisker throughout the cycle (they are fiercely effective in the andante of Op. 87, quite different from the way Les Musiciens do it), curiously allow the finale of Op.

Singer Murphy: prepossessing



Mark Murphy's "Bop for Kerouac" May Be the Vocal Jazz Album of the Year

RÉGIS PASQUIER

8 to drag and come dangerously close

to losing momentum. Otherwise, the

Supraphon set too is one of the front runners, not only less costly than the

Harmonia Mundi but with a substan-

tial bonus in the form of the Horn Trio,

with Zdeněk Tylšar sitting in. Overall,

though, I feel there is no integral set of

the Brahms trios that is quite as persua-

sively performed or as richly recorded

as the new one from France (actually

pressed in Germany); the ever-deepen-

ing pleasure it affords will justify the

investment many times over. Excellent notes, too, with musical examples.

BRAHMS: Piano Trios: No. 1, in B Major, Op. 8; No. 2, in C Major, Op. 87; No. 3, in

C Minor, Op. 101. Les Musiciens. HARMO-

NIA MUNDI FRANCE HM 1063/64 two discs

\$23.96 (from Brilly Imports, 155 North

San Vicente, Beverly Hills, Calif. 90211).

-Richard Freed

SINGER Mark Murphy keeps a relatively low profile. That is to say, his is not a familiar face on the talk-show circuit, nor is he someone you will find perennially guesting about on the tube's various music shows. Too bad, because Murphy has a great deal to say musically, and given the chance he could of-



ROLAND PIDOUX

fer us a refreshing alternative to the dreary fare that seems to please tonedeaf television producers and talent coordinators.

Murphy was seven when he took his first piano lesson, his first musical job was with a band led by an older brother, and he played in Greenwich Village during the late Fifties. After an appearance at the 1962 Newport Jazz Festival, he joined the growing group of jazz performers who sought the greater rewards offered in Europe.

Fortunately, Murphy's talent has been recognized by record companies, and in recent years, since his return from a decade spent living in England, his very special artistry has been made more generally available in several albums on the Muse label. The latest of these is "Bop for Kerouac," a tribute to the late Beat poet that may well be his most rewarding effort to date. He turns fifty this month, and he has never sounded better. I have not always cared for the music Murphy sings, but I have never been deaf to his talent, and I am overwhelmed by the way it all seems to work its way to the surface here. He gets splendid assistance from a group led by Richie Cole, and it helps that he has chosen a fine collection of songs to interpret in his own special, prepossessing way. He has even woven some of Kerouac's words into two of the tunes, Parker's Mood and Ballad of the Sad Young Men, and the blend is perfect.

If you buy but one vocal jazz album this year you could hardly do better than "Bop for Kerouac," a delightfilled outing by a member of that vanishing breed of jazz vocalists who are also singers. —Chris Albertson

MARK MURPHY: Bop for Kerouac. Mark Murphy (vocals); instrumental accompani-



BEST OF THE MONTH: RECENT SELECTIONS YOU MAY HAVE MISSED

POPULAR

Lindsey Buckingham: Law and Order. ASYLUM 5E-561. "... a contemporary version of Walt Whitman's barbaric yawp." (February)

Chico Freeman: The Outside Within, IN-DIA NAVIGATION IN 1042. "... the most important horn player since John Coltrane." (January)

■ King Crimson: Discipline. WARNER BROS. BSK 3629. "A seminal band back better than ever." (February)

Amanda McBroom: West of Oz. SHEF-FIELD LAB 15. "Popular singing with intelligence and humor." (January)

□ Pieces of a Dream. ELEKTRA 6E-350. "A teenage trio serves up gentle jazz and polished funk." (February)

□ Tom Verlaine: Dreamtime. WARNER BROS. BSK 3539. "May be last year's best rock album." (January)

CLASSICAL

□ Francisco Araiza: Opera Recital. EURO-DISC SQ 26 163 KR. "A distinguished solo debut." (February)

□ J. S. Bach: The Notebook of Anna Magdalena Bach. NONESUCH DB-79020. "An album to be treasured." (February)

Placido Domingo: Gala Opera Concert. DEUTSCHE GRAMMOPHÓN 2532 009. Domingo! CBS M 37207. Placido Domingo/ John Denver: Perhaps Love. CBS M 37243. "Impressive voice and musicality." (January)

Shlomo Mintz: Kreisler Recital. DEUT-SCHE GRAMMOPHON 2531 305. "Charm and affection: a treasure." (January)

 Ravel: Daphnis et Chloé. LONDON LDR 71028. ". . . the finest recording yet of this music." (January)

□ Tippett: Symphony No. 4; Suite for the Birthday of Prince Charles. LONDON LDR 71046. "Rich and complex in kaleidoscopic color and dramatic transformation." (February)



NEIL "DUNG a pop idiot savant?

ment. Goodbye Porkpie Hat; Be-Bop Lives (Boplicity); Parker's Mood; Ballad of the Sad Young Men; You've Proven Your Point; The Bad and the Beautiful; Down St. Thomas Way. MUSE MR 5253 \$8.98.

Neil Young and Crazy Horse: Making the World Safe For Loud Noises

NEIL YOUNG's ambiguously titled new album "Reactor" is as willful, eccentric, and confusing as any he's made since he abandoned overdubbing on "Harvest." It may be the funniest as well—if he's joking, that is—for it furthers his post-"Rust Never Sleeps" campaign to prove to the world that middle-aged Canadian hippies can make more obnoxious noises than Johnny Rotten ever dreamed of. Take *T*-*Bone*, for example, nine minutes of grinding, feedback-laden, industrialstrength guitar squawk over which Neil intones a lyric which runs, in its entirety, "Ain't got no t-bone ... got mashed potatoes."

Now what is any self-respecting rock critic to make of that? What is he saying? Should we take it as a topical aside? The album's title conjures up visions either of a nuclear holocaust or a President whose world view harks back to old Andy Hardy movies, so perhaps we should. Ah, yes ... t-bone ... mashed potatoes. A pregnant comment on the depressed state of the economy,



GEORGE JONES: in a class by himself

no doubt. Or is it a tip of the hat to T-Bone Walker and an old Dee Dee Sharp record? Who knows? Who cares? Well, I do-sort of. After all, Neil is probably the greatest Bozo rock has ever produced, a sort of pop idiot savant who just may have all the answers if we can ever get around to asking him the right questions. And he's a survivor, just about the only Woodstock-era musician to make it into the Eighties with life, record sales, and credibility intact. He's been as much the chameleon as David Bowie, yet he's always maintained a sense of humor about the world and himself; unlike his more laid-back California pals, he's never been complacent, cute, or lazy.

Nonetheless, this new album sounds like he's basically goofing around (there are no wondrous masterstrokes such as *Cortez the Killer* here, for instance). But as a textbook on how to

make music out of the sounds of a scrap vard, it will do very nicely. Southern Pacific is the best train song anybody has written in quite a while, Opera Star is a screamingly funny meditation on the rock-and-roll life (the ho-ho-ho chorus is vintage Bozo, and irresistible), and the rest is all eminently worth your attention, especially the punk/funk/ metal rave-up of Rapid Transit, on which Neil steals Roger Daltrey's My Generation stutter and does not die of shame. In short, highly recommended to all those fun lovers who thought Lou Reed's "Metal Machine Music" was -Steve Simels too straightforward.

NEIL YOUNG AND CRAZY HORSE: Reactor. Neil Young and Crazy Horse (vocals and instrumentals). Opera Star; Surfer Joe and Moe the Sleaze; T-Bone; Get Back on It; Southern Pacific; Motor City; Rapid Transit; Shots. REPRISE HS 2304 \$8.98, © M5 2304 \$8.98. George Jones: Honkytonk Singing That Will Just Flat Astonish You

SEE where some damfool organization has named Moe Bandy honkytonk singer of the year. Well, Moe's a good old boy and I wish him all the best, but anyone who would tell vou that any honkytonk singer is in a class with George Jones would suck eggs. As he has before, Jones reminds us in "Same Ole Me," his latest for Epic, that the main thing about the honkytonk is what a sad place it is. And does it without being at all maudlin, even when he brings in daughter Georgette to sing the refrain in Daddy Come Home, a Bobby Braddock weeper that would be right at home in that saloon in Central City, Colorado, where the Chamber of Commerce still celebrates the penning of the immortal Face on the Barroom Floor.

Still, it's a far cry from the best album Jones could make. So far they all have been, for niggling little reasons not too different from the reasons in this case: a few of the songs don't quite make it, and producer Billy Sherrill tends to pour on too much sweetener. But singing is what we were talking about, and there is some of that here that will just flat astonish you. Jones is capable of making one syllable express a whole (broken) heart full of emotions, and he receives just enough backing here from such notables as the Jordanaires and the Oak Ridge Boys to give you a fixation on vocals for days after you hear it. Give him a song that's just average-Someday My Day Will Come, Still Doin' Time, or the title song-and Jones will turn it into something special. Give him a disaster, such as Together Alone, and he will make it respectable. Through it all, he keeps the back of your mind from forgetting the basic premise of the honkytonk: it is the place you go to when something's wrong. Whatever that might be, when Jones sings it sure ain't the music.

-Noel Coppage

GEORGE JONES: Same Ole Me. George Jones (vocals, guitar); instrumental accompaniment. Still Doin' Time; Couldn't Love Have Picked a Better Place to Die; I Won't Need You Anymore; Together Alone; Daddy Come Home; You Can't Get the Hell Out of Texas; Good Ones and Bad Ones; Girl, You Sure Know How to Say Goodbye; Someday My Day Will Come; Same Ole Me. EPIC FE 37106, © FET 37106, ® FEA 37106, no list price.

Classical Music Briefs





Master teacher Gérard Souzay with student Hei-Kyung Hong

FRENCH baritone **Gérard Souzay**, now in his sixties, is still singing, but like most mature artists he spends increasing amounts of time teaching. Recently at the Juilliard School of Music in New York he gave a couple of master classes to pass on to younger singers some of the things he has learned in a distinguished career in opera houses, concert halls, and recording studios.

Working with a group of impressively gifted students, he seemed especially concerned with the proper use of dynamics

FOR a long time American book publishers insisted that people who listen to music will not read about it. In the last few years many of them have discovered to their pleasure (and profit) that this is not true, and last year's best-seller lists included books about opera stars Luciano 'Pavarotti and Maria Callas.

Not destined for the bestseller lists, but welcome nonetheless, is Robert Donington's **The Rise of Opera** (Scribner's). A scholarly discussion of to provide contrast, build excitement, and give shape to a song. "Each nuance must be motivated," Souzay said. "If you don't feel something, don't sing it."

His approach was summed up in his remarks to a young soprano: "You must perform the song as though this is your last chance to sing it. You must somehow be better than yourself, or it will not be enough. You must not only sing the song, you must *live* it. And if *you* don't enjoy it, your public certainly will not." — *W.L.*

the invention of opera at the

end of the sixteenth century

and its development in the sev-

enteenth, the book has the stiff

(\$24.95) is Martin L. Sokol's

The New York City Opera

(Macmillan). It is a history of the

company, and more than half of

its 562 pages are given over to

annals that list the designer and

director for each new produc-

tion and the cast and conductor

for every performance from

1944 through 1981.

priced

list price of \$45.

More modestly

York City Opera occasionally dressed up its roster of young American singers with a name of the magnitude of Maggie Teyte, Gérard Souzay, or Dusolina Giannini. In time, resident singers like Frances Bible, Beverly Sills, Norman Treigle, and Samuel Ramey became the company's stars. It is interesting to go through the annals and come across the names of artists who sang with the New York City Opera before they became international celebrities, among them Carol Neblett, José Carreras, Placido Domingo, and Sherrill Milnes. Fascinating reading. -WI

In its early years the New

EFFORTS to expand the concert repertoire sometimes pay off—and sometimes they don't. Promoters of Gustav Mahler, for example, have persuaded the American audience to make room for him in their hearts and on their symphony programs, and Béla Bartók has just had a good year. But back in the Sixties not even so popular a conductor as Leonard

Pianist Ronald Smith



Bernstein was able to make the American public take to the Danish composer Carl Nielsen, and despite the support of strong partisans, Anton Bruckner has still not been invited to come in out of the cold.

A while back the pianist Raymond Lewenthal did his best for the French composer Charles-Henri Alkan (1813-1888) and recorded some of his compositions for RCA, but those recordings have been deleted. Alkan was represented in Schwann only on a couple of albums by pianist Michael Ponti (Candide 31045 and Turnabout 34740) and one by the Mirecourt Trio (Genesis 1058/9) until Arabesque released "The Alkan Project" (8127-3) on February 1. This set contains Alkan's Etudes, Opus 39, a work that includes the Symphony for Piano Solo and the Concerto for Piano, played by British pianist Ronald Smith. If the public responds to the records and to the Alkan works Smith is including in his New York concerts in February and March, Arabesque is prepared to release more Alkan played by Smith.

Russian composer Sergel Taneyev (1856-1915) is being pushed by Pro Arte Records. which has just doubled his listings in the catalog by bringing out three new discs of his work: the Suite de Concert for Violin and Orchestra, the Trio in D Major for Violin, Cello, and Piano, and the Piano Quartet in E Major. Taneyev, a friend and pupil of Tchaikovsky and the teacher of Scriabin, is one of the most respected figures in Russian music, but he is little known in the West. His Symphony No. 4, performed by the London Symphony Orchestra

conducted by Yuri Ahronovitch, was recorded by Pro Arte in Europe and released in this country by Arabesque in 1980.

If Alkan and Taneyev seem unlikely candidates for the Classical Top 40 in the United States, you should remember that few people here knew the music of Erik Satie until pianist Aldo Ciccolini made his bestselling Satie series for Angel Records back in the Sixties and Seventies. These days you can even hear his *Gymnopédies* used as backgrounds for radio and TV commercials.

SHOULD classical music be banned for its own good? Maybe. A recent issue of Chicago magazine (it has the impressive circulation figure of 212,500) contained an article on X-rated movies, "Visions of Vice" by William Brashler. which compared pornography to classical music. After pointing out that access to the current alut of smut has reduced the demand for hard-core books and movies. Brashler said, "It may well be that pornography, if left to itself, might assume the status of classical music: that is, a specialized field with a small but devoted and, from everything we've learned, harmless following. The general public, as usual, will take a casual, no-damage attitude toward it, unless, of course, pornography were banned . . . In that case it would become, like any [other] contraband, an underground sensation."

The jest becomes even creamier when you realize that *Chicago* contains the monthly program guide for fine-arts radio station WFMT. The magazine is published by the same corporation that operates WFMT, which, even without making music a contraband, underground sensation, has managed to become the most prosperous classical-music station in the United States.

NONDUCTORS tend to lead long C lives and have long careers, perhaps because of the upper-torso exercise they get while practicing their profession, perhaps because of the mental concentration it requires. One of the most durable, the British conductor Sir Adrian Boult, has finally retired at the age of ninety-two. Advanced age and decades of standing at his work have strained his back so that he now requires two sticks just to be able to walk.

Still waving their sticks vigorously at orchestras are the much younger Neville Marriner, André Previn, and John Williams, each of whom has just re-upped for another hitch in his present musical post—



Marriner with the Minnesota Orchestra, Previn with the Pittsburgh Symphony, and Williams with the Boston Pops. it was rumored that the Pittsburgh Symphony had to increase Previn's fee to \$1 million to get him to renew. The orchestra denied that rumor but declined to release the actual figure.

Coincidentally, all three of these conductors have new albums on Philips. Marriner's is a new recording of Bach's Brandenburg Concertos with members of the Academy of St. Mar-

tin-in-the-Fields and such stellar soloists as Henryk Szeryng (violin), Jean-Pierre Rampal (flute), and Heinz Holliger (oboe). Previn's is a digital recording of the Tchaikovsky Fourth with the Pittsburgh Symphony. Williams' first four alburns with the Boston Pops-'Pops in Space," "Pops on the March," "Pops on Broadway," and "We Wish You a Merry Christmas"-all sold so well that hopes are high for his new album of overtures scheduled for March release.

Discand Tape Reviews

By RICHARD FREED • DAVID HALL • GEORGE JELLINEK • PAUL KRESH STODDARD LINCOLN • ERIC SALZMAN

© = stereo cassette ® = eight-track stereo cartridge digital-master recording
 direct-to-disc

□ = quadraphonic disc ❷ = monophonic recording

The first listing is the one reviewed; other formats, if available, follow.

J. S. BACH: Harpsichord Concertos: No. 3, in D Major (BWV 1054); No. 6, in F Major (BWV 1057); No. 7, in G Minor (BWV 1058). Raymond Leppard (harpsichord); Richard Taylor, Adrian Brett (recorders, in BWV 1057); English Chamber Orchestra, Raymond Leppard cond. PHILIPS 9500 962 \$10.98, © 7300 962 \$10.98.

Performance: Dashing Recording: Excellent

Lacking a virtuoso violinist for his Collegium Musicum in Leipzig, Bach transcribed his violin concertos for the harpsichord. Thus came into being the three concertos presented in this album, two taken from solo violin concertos and a third from the Fourth Brandenburg Concerto. As chamber music, the transcriptions work very well in intimate surroundings; played in a concert hall with a string orchestra, however, the solo part is lost. This problem was solved in the present recording by judiciously adjusting the natural balance.

Raymond Leppard favors lively tempos and dashes off the harpsichord part with brilliance. The English Chamber Orchestra furnishes brisk, neatly played accompaniments, and the overall result has vigor and sparkle. This is Bach that comes off in modern terms. *S.L.*



BEETHOVEN: Violin Concerto in D Major, Op. 61. Itzhak Perlman (violin); Philharmonia Orchestra, Carlo Maria Giulini cond. ANGEL O DS-37471 \$10.98, © 4ZS-37471 \$10.98.

Performance: Classic poise Recording: Excellent

From the early Thirties, when the Kreisler/ Blech and Szigeti/Walter disc versions were considered classic, the Beethoven Violin Concerto has never lacked for distinguished recorded performances. This new one by Itzhak Perlman and Carlo Maria Giulini, done up in splendidly transparent and full-bodied sound from a digital master, is among the best of those from the younger generation of superstar violinists. Indeed, it stands in somewhat the same relation to (Continued on page 84)

Where a man belongs.

8 mg. "tal" 0.8 mg. mcotine av. per cigarette by FTC method.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

Camel Lights. Low tar. Camel taste.

Smg tar. C A MEL LIGHTS

> LOW TAR CAMEL TASTE

JEROME LOWENTHAL

ALFRED BRENDEL

CYPRIEN KATSARIS

The Many Faces of Franz Liszt

FRANZ LISZT's late piano works are turned inward. They are so intense in feeling and (for their time) avant-garde in technique that many of them remained unpublished, unplayed, and virtually unknown until recent years. A number of writers and performers have taken up the cause of this music lately, but few have done so as persuasively on records as Cyprien Katsaris and Alfred Brendel.

On a fascinating recent Telefunken disc, Katsaris introduces the tortured, bedeviled soul of the old man with a pious thought. The first piece he plays is the Bénédiction de Dieu dans la Solitude, the third of the Harmonies Poétiques et Religieuses that Liszt wrote before the midpoint of the nineteenth century, and quite beautifully earnest it is too. But elements of unease, uncertainty, and doubt seemed to grow, not diminish, in Liszt's personality with the passing of the years. In the popular Mephisto Waltz No. 1, which derives from music written in 1860 to illustrate Lenau's Faust, the demonic element is explicit though it is mainly illustrative and theatrical. But in the last years of his life Liszt wrote no less than three more Mephisto Waltzes (the last unfinished), each further gone in oddity than the preceding, plus a weird little Bagatelle Without Tonality (originally intended as yet another Mephisto Waltz) and a sardonic Mephisto Polka.

How the demons must have beseiged Liszt for him to have thus to exorcise them again and again! The popular first Mephisto Waltz has overshadowed the later, quirkier ones, which are not illustrations for a literary scene but excursions into nether regions of the soul. They do not represent breast-beating anguish but a kind of musical madness, as if behind the middle-class respectability and gaiety one might find all kinds of unspeakable things.

On first hearing, I found this music and

Katsaris' playing of it so remarkable that I was ready to praise both to the skies. After repeated hearings, I began to detect certain notes of strain in both the music and the playing. But the pianism exhibited here is remarkable nonetheless, and it is effective in just the way the music is-brilliant and scary, perfectly explicit and yet somehow managing (as it should) to leave something unsaid. The trick to great Liszt playingonce you've got all the notes down-is to imply that there's more than meets the ear. Katsaris is very successful at this, just as Liszt himself must have been.

Not all of late Liszt is demonic, though even the popular Valses Oubliées have a diabolical air. The first three pieces on Alfred Brendel's recent Philips disc are Nos. 2, 4, and 5 from the third volume of the Années de Pèlerinage. The earlier Années are full of romantic Wanderlust, but now the old man sits alone in his apartment at the Villa d'Este near Rome and contemplates the cypresses or the fountains or his own mortality or something else equally morose. Of the other pieces Brendel plays, Unstern is an evil star, bad luck; Schlaflos is the tossing and turning of an insomniac: Mosonvis Grabgeleit is funeral music-a strange, stark funeral marchfor a Hungarian patriot. Beautiful music, but hard going, and it actually makes the seductive diablerie of the Csárdás Macabre a relief

What can be done with these pieces, Brendel does. He leads us by the hand across stony wastes, through sleepless nights, past funereal cypresses, under unlucky stars. Eventually, as a kind of reward, we reach the local watering place, where we can order a glass of beer or wine, dance a bit, sin a little.

With the excellent and showy playing of Jerome Lowenthal on an RCA disc of the operatic paraphrases we are back on safer ground. These are by no means all of the 'great" Liszt paraphrases, as the album bills them-the most obvious omission is the very definitely great Don Juan Fantasy-but they are certainly some of the best, played to the hilt and very well recorded. But put one of these pieces next to one of the later Mephisto Waltzes and then that one against an early poetic or late morose work, and you'll find it hard to imagine them all being written by the same man. Liszt was certainly the founder of modern musical schizophrenia, and that is not the least of his continuing fascination for listen--Eric Salzman ers and players alike.

LISZT: Bénédiction de Dieu dans la Solitude; Mephisto Waltz No. I ("Der Tanz in der Dorfschenke"); Mephisto Waltzes Nos. 2, 3, and 4; Bagatelle Without Tonality; Mephisto Polka. Cyprien Katsaris (piano). TELEFUNKEN 6.42829 AW \$10.98, © 4,42829 CX \$10.98.

LISZT: Années de Pélerinage, Troisième Année, Nos. 2, 4, and 5: Aux Cyprès de la Villa d'Este I; Les Jeux d'Eau à la Villa d'Este; Sunt Lacrymae Rerum. Schlummerlied (Berceuse); Valse Oubliée No. 1; Unstern, Sinistre-Disastro; Schlaflos-Frage und Antwort; Mosonyis Grabgeleit; Csárdás Macabre. Alfred Brendel (piano). PHILIPS 9500 775 \$10.98, © 7300 863 \$10.98.

LISZT: Opera Paraphrases: Quartet from Verdi's "Rigoletto"; Sacred Dance and Final Duet from Verdi's "Alda"; Miserere from Verdi's "II Trovatore": Spinning Chorus from Wagner's "The Flying Dutchman": Reminiscences of Verdi's "Simon Boccanegra"; Prelude to Act III and Wedding March from Wagner's "Lohengrin." Jerome Lowenthal (piano). RCA ARL1-3993 \$9.98, © ARK1-3993 \$9.98.



Barda / Phonogram

A New British label, dell'Arte Records, has released an album of Bach arrangements and transcriptions that Leopold Stokowski recorded with the Philadelphia Orchestra for RCA in 1927-1930. If you're a Baroque purist, you'll hate these old recordings, but if you can appreciate the best in a certain kind of old-time music making, you'll love them.

I only wish the album hadn't begun with the Second Brandenburg Concerto, a performance that has its weaknesses, but with the glorious transcription of the Toccata and Fugue in D Minor—known to every music of his contemporaries so relentlessly that scholars are still arguing over who did what and to whom.

The Stokowski transcriptions offered here are as valid as good modern productions of Shakespeare. What shall I say? That they bring out all the polyphony beautifully? Of course they do. But the real point is that this Bach—Bach/Stokowski, one should say—has magic. And it's not all hoky-Stoky magic either; some of it is quite subdued, internalized, self-effacing. All of it is intense and quite spiritual in a perfectly earthy and sometimes even melodramatic



Leopold Stokowski ...and the reinvention of Bach

lover of that immortal film masterpiece, Fantasia, as the Toccata and Fugue. I confess to having seen the movie a dozen times, and it was probably the single experience most responsible for my becoming a musician. Who, having seen Fantasia, can hear the inimitable, apocalyptic tones of Stoky's great arrangement played by his great and inimitable Philadelphians without conjuring up the rolling, heaving landscape of the Disney interpretation—the first triumph of American abstract art!

So much ink has been spilled and so much spleen vented over the issue of the Stokowski transcriptions that it is worthwhile to recall a few facts: Stokowski was a great interpreter of Bach and a real pioneer in introducing this music not only to orchestra programs but also to records. In effect, he helped bring a whole generation to Bach, and his arrangements, performances, and recordings were rapturously received even (or especially) by the cognoscenti in a day when Mozart was still considered a cute little fellow in a funny wig. And let us not forget that transcription was considered (as it still should be) a fine branch of the musical art. Schoenberg transcribed Bach, and so did Webern and Stravinsky. So, for that matter, did Bach-who also transcribed the way. This is Bach not yet cut open with the musicological scalpel, but rather a living vision of another age as presented through the good ears and hands of a remarkable and individualistic twentieth-century man and musician who never learned to exchange his soul for a high-power, scientifically acceptable R-&-D approach.

The glorious original mono recordings have been reasonably well transferred. You can really hear the intensity of the sound and the interpretation, and, that Brandenburg always excepted, the playing and the famous sonority of the Stokowski/Philadelphia collaboration are truly overwhelming. --Eric Salzman

J. S. BACH/STOKOWSKI: Brandenburg Concerto No. 2, in F Major. Chorale Preludes: Wir Glauben All' an einem Gott; Aus der Tiefe Ruf Ich; Ich Ruf zu Dir, Herr Jesu Christ. The Well-Tempered Clavier, Book I: Prelude in B Minor; Prelude in Eflat Minor. Toccata and Fugue in D Minor; Passacaglia and Fugue in C Minor. Philadelphia Orchestra, Leopold Stokowski cond. DELL'ARTE & DA 9001 \$10 (from dell'Arte Records, Ltd., P.O. Box 26, Hampton, Middlesex, England TW12 2NL).

Pinchas Zukerman's Deutsche Grammophon recording with Daniel Barenboim conducting as Szigeti's did to Kreisler's. Whereas Zukerman's fiddling is suffused with a romantic glow, Perlman, perhaps taking his cue from Giulini, builds up a reading of the utmost classical poise and strength, which is a bit unexpected from this normally ebullient practitioner of violinistic wizardry. The deliberate opening movement here accumulates intensity, and the slow movement is a transcendent essay in purity of tone and phrase, but in the finale Perlman finally cuts loose with a blaze of virtuoso fireworks-nothing coy heretopping it off with a dazzling rendition of the Kreisler cadenza (Kreisler's is also used in the opening movement).

The sonics are highly satisfactory; the soloist is spotlighted, but not obtrusively so, and the orchestral contribution has a nicely spacious surround. The Szigeti recording still holds a place of honor in my collection, as does Zukerman's, but I'm very glad to add Perlman and Giulini's. D.H.

BIZET: L'Arlésienne, Suites Nos. 1 and 2; Jeux d'Enfants. Toronto Symphony, Andrew Davis cond. CBS • 1M 36713, © HMT 36713, no list price.

Performance: Impeccable Recording: Excellent

Despite the immense amount of attention they have received in the recording studio, these ingratiating concert works by Georges Bizet wear better than most. The first of the suites, drawn from the incidental music Bizet wrote for Alphonse Daudet's play *L'Arlésienne*, he put together himself. After his death, Ernest Guiraud (he wrote the recitatives for *Carmen*) assembled the second suite, padding it out with music from Bizet's 1867 opera *La Jolie Fille de Perth* (which itself gave rise to still another suite). Guiraud did his work so well that the two suites make a lovely pair.

The program on this album is most aptly filled out with the suite from Jeux d'Enfants, a set of twelve piano pieces composed in 1871. The five movements of the orchestral suite are delightful miniatures depicting wooden horses, swings, soap bubbles, a lullaby for a doll, and a spinning top. Andrew Davis brings out the best in the Toronto Symphony in impeccable performances that never exaggerate for effect but manage to convey the full flavor and charm of these delightful scores. P.K.

BRAHMS: Piano Trios Nos. 1-3 (see Best of the Month, page 74)

BRUCH: Violin Concerto No. 1, in G Minor, Op. 26 (see MENDELSSOHN)

CHOPIN: Piano Concerto No. 1, in E Minor, Op. 11. Emanuel Ax (piano); Philadelphia Orchestra, Eugene Ormandy cond. RCA O ATC1-4097 \$15.98, © ATK1-4097 \$15.98.

Performance: Elegant planism Recording: Orchestra lacks focus

The immensely gifted Emanuel Ax now has recordings of both Chopin piano concertos to his credit, and in No. 1—actually the later and more elaborate of the two—he displays flawless technique in the exacting and numerous episodes of passagework and a fine command of subtle dynamic nuance. Most gratifying to my ears is his classic poise throughout the slow movement. I can't say that digital mastering adds anything special to the recording as such unless it be the absence of intrusive background noise. Indeed, the fault of this particular production lies in the rather ill-focused recording of the orchestra; Chopin's already somewhat opaque scoring is hardly enhanced by the blowsy-sounding opening orchestral ritornello. Eugene Ormandy contributes his usual considerate and well-considered accompaniment. D.H.

RECORDING OF SPECIAL MERIT

GRIEG: Violin Sonata No. 1, in F Major, Op. 8; Violin Sonata No. 2, in G Major, Op. 13. Philipp Naegele (violin); Günter Krieger (piano). MUSICAL HERITAGE SOCIETY MHS 4403 \$7.75 (plus \$1.60 shipping and handling charge from the Musical Heritage Society, 14 Park Road, Tinton Falls, N.J. 07724).

Performance: Spontaneous Recording: Warm

It seems to be only on records that we get much of an opportunity to hear the first two of Grieg's three violin sonatas, and of course they make a very sensible coupling. Philipp Naegele and Günter Krieger sound very happy with this music, as if they had been really committed to it for a long time and had not just picked it up to add a couple of novelties to the catalog. They make no attempt to muffle the exuberance and impetuosity that are these early sonatas' dominant characteristics; there is an uncommon-and thoroughly irresistible-degree of give-and-take in their playing, a fluent spontaneity quite in keeping with the music's own character, as well as abundant beauty of tone from both instruments. Jascha Heifetz set a perhaps matchless standard in the fervently communicative performance of the G Major Sonata he recorded with Brooks Smith in 1955 (now in RCA CRM6-2264), but in its own right the new version is hardly less compelling, and in Op. 8 Naegele and Krieger are themselves quite matchless. Both sides are recorded warmly and in virtually ideal balance, and the pressing itself is a heartening example of what our domestic plants can do. Highly RF recommended.

RECORDING OF SPECIAL MERIT

HASSE: Concerto in G Major for Mandolin and Orchestra. HUMMEL: Concerto in G Major for Mandolin and Orchestra. HOFF-MAN: Concerto in D Major for Mandolin and Orchestra. Takashi Ochi (mandolin); Paul Kuentz Chamber Orchestra, Paul Kuentz cond. PHILIPS 6527 098 \$10.98, © 7311 098 \$10.98.

Performance: Elegant Recording: Excellent

The three concertos for mandolin and orchestra so beautifully played on this recording were all written by expert craftsmen who had in common an elegance of taste, grace, subtlety, and the late-Classical musical language. The instrument they wrote (Continued on page 87)

You'll Never Buy Our Metal For Looks Alone.





While our one-of-a-kind, die-cast metal frame is amazing, it's our MA-R tape's sound that will really impress you. TDK MA-R created a new state-of-the-art in cassettes. It's metal tape with a higher energy and a wider dynamic range.

But the MA-R's looks are important to the tape's sound, too. The metal frame and Reference Standard Mechanism eliminate warpage, reduce wow and flutter, and withstand environmental changes.

The same outstanding metal tape also comes in a more economical cassette: TDK's MA, in a Laboratory Standard Mechanism.

Look for TDK MA-R and MA, the metal tapes that stand alone.





on Angel





5-37794

S-37884

RAFAEL KUBELIK: allowing Mozart to reveal his own secrets

Mozart: Three More Views

NEVILLE MARRINER and the late Karl Böhm more or less share the distinction of having recorded more Mozart symphonies than any other conductor, with duplications of some individual titles along the way (in Böhm's case even a quintuplication or two). In a new batch of releases from Philips and Deutsche Grammophon, Marriner and the Academy of St. Martin-inthe-Fields add a few titles they had not covered before, and Böhm, in what may be his valedictory Mozart offering, gives us his final thoughts on two well-loved symphonies and adds to his vast discography a work that in the circumstances must seem especially poignant, the Masonic Funeral Music.

Böhm's realization of the Funeral Music with the Vienna Philharmonic can only be called awesome: he really dug in and brought out a virtually unsuspected degree of power without sacrificing any of the essential dignity. Unfortunately, some of this funereal mood seems to have spilled over into the marvelous Symphony No. 29, whose first movement here assumes almost the character of a slow movement. Böhm was perhaps as leisurely in his earlier recording of No. 29 with the Berlin Philharmonic, but that performance was nonetheless informed with momentum and spirit; this one, for all the gorgeous playing, merely plods. The actual slow movement is quite noble, and the finale, if less fiery than it might be, is saved by its elegance, but the minuet too is somnolent. The Haffner Symphony is altogether more successful, even though it seems more portentous than festive and Mozart's wish that the finale be played "as fast as possible" seems to have been ignored. The sound is rich and well defined, but only one side of this disc can be recommended.

None of Marriner's two new Philips discs a remake of the Symphony No. 32 (actually a concise Italian overture) is packaged with two full-scale Salzburg symphonies—the seldom-heard No. 30 and the more familiar No. 33—and the brief adagio introduction Mozart wrote for a Symphony in G Major by Michael Haydn that used to be listed as his own No. 37 (K. 444). Everything about these stylish performances seems just right: they are alert and crisp, yet as lilting as anyone could wish in the appropriate sections. This is the sort of thing Marriner does best, and the disc is very much a winner.

Heretofore I've found Marriner a good deal less persuasive in Mozart's later Viennese symphonies, but his new performance of the Prague, coupled with the buoyant No. 34 (the last of the Salzburg symphonies), strikes me as being far more successful than his Linz, etc. It is a suitably grandscale reading, with full repeats in the opening movement and excellent pacing throughout. Only in the slow movement do I sense a certain lack of depth, a sort of reluctance to allow the music to be more than pretty. Some listeners may find this approach preferable to some of the romantic indulgences of the past, but this is really a fairly romantic movement, with more than a little pathos and sublimated passion beneath its exquisite exterior. I have no complaints about No. 34, which receives a handsome, vital, extremely sympathetic performance. Marriner includes the Minuet, K. 409, that some other conductors (Böhm among them) have inserted into this work by way of restoring its "lost" movement, but he wisely appends it at the end of the side instead of interrupting the sublime scene-change Mozart decreed. Judged by Philips' own high standards, the sound on both these discs is just a little tubby, but in general it is more than agreeable.

VHILE we expect Mozart symphonies from Marriner and Böhm, we have not had any from Rafael Kubelik since he taped his own pairing of Nos. 34 and 38 for Mercury with the Chicago Symphony Orchestra in 1953. (He also recorded Nos. 35, 36, 38, and 41 with the Vienna Philharmonic for Decca a few years later, but those were never issued here.) Now, with the Bavarian Radio Symphony Orchestra, as whose conductor he stepped down in 1979 after eighteen productive years, he has made a digital recording of the last two symphonies-the big G Minor and the Jupiter-for CBS, and the performances are different from most of those we have been hearing from other interpreters. Kubelik makes few gestures toward our current notions of eighteenth-century style, nor does he attempt an overlay of drama. His approach is evenhanded and somewhat understated, characterized by patrician grace and a marked sobriety that is at the same time not without expansiveness or warmth of heart. He seems to be unhurriedly and undemonstratively allowing Mozart to reveal his own secrets, concentrating for his part on balance and clarity (the fugal sections of the Jupiter's finale are exceptionally clear here). The orchestra is at the very top of its form, the various solo passages are phrased comfortably and eloquently, and momentum is maintained with heartbeat naturalness. These may not seem the most striking performances of these familiar works at first hearing, but there is a radiance about them that may ensure uncommon durability. That radiant effect as well as the remarkable clarity are effectively enhanced by the beautifully "open" -Richard Freed sound.

MOZART: Symphony No. 29, in A Major (K. 201); Symphony No. 35, in D Major (K. 385, "Haffner"); Masonic Funeral Music (K. 477). Vienna Philharmonic Orchestra, Karl Böhm cond. DEUTSCHE GRAMMOPHON 2531 335 \$10.98, © 3301 335 \$10.98.

MOZART: Symphony No. 30, in D Major (K. 202); Symphony No. 32, in G Major (K. 318); Symphony No. 33, in B-flat Major (K. 319); Adagio Maestoso in G Major (K. 444/ 425a). Academy of St. Martin-in-the-Fields, Neville Marriner cond. PHILIPS 9500 790 \$10.98, © 7300 867 \$10.98.

MOZART: Symphony No. 34, in C Major (K. 338); Minuet in C Major (K. 409); Symphony No. 38, in D Major (K. 504, "Prague"). Academy of St. Martin-in-the-Fields, Neville Marriner cond. PHILIPS 9500 791 \$10.98, © 7300 868 \$10.98.

MOZART: Symphony No. 40, in G Minor (K. 550); Symphony No. 41, in C Major (K. 551, "Jupiter"). Bavarian Radio Symphony Orchestra, Rafael Kubelik cond. CBS O IM 36703, © IHT 36703, no list price.



for, much like a lute though with its own characteristics and somewhat less versatile, was intriguing enough to Beethoven for him to own one and to have composed five solos for mandolin with piano accompaniment. It's also the very instrument on which Mozart's Don Giovanni plays his little canzonetta to tempt the lady in the second act of the opera. Johann Nepomuk Hummel (1778-1837) knew Beethoven, and the development of the various themes in his G Major concerto is the most advanced on this disc. Yet it is not too great a departure from the modest dimensions of the work in the same key by Johann Adolf Hasse (1699-1783), who was born in Hamburg and died in Venice after composing sixty operas in Dresden, or the one in D Major by Giovanni Hoffman, about whom little is known except that he flourished around 1800. In a sense, all three concertos are really serenades. Their airy charm makes for consistently gratifying listening, especially as lightly and lissomely interpreted here by mandolinist Takashi Ochi with delicate chamber-orchestra accompaniment under the deft baton of Paul Kuentz. P.K.

RECORDING OF SPECIAL MERIT

HAYDN: Arias. Vada adagio, Signorina; Infelice sventurata; Son pietosa, son bonina; D'una sposa meschinella; Sono Alcina e sono ancora; Chi vive amante; Solo e pensoso. Cantata, Miseri noi, misera patria. Edith Mathis (soprano); Chamber Orchestra of Lausanne, Armin Jordan cond. PHIL-IPS 9500 929 \$10.98, © 7300 929 \$10.98.

Performance: Lovely Recording: Splendid

In 1775, when Prince Nicholas founded an Italian opera company at Esterháza, Haydn became deeply involved in opera. Not only did he compose for the new theater, he also conducted and arranged operas of other composers. In typical eighteenth-century fashion, if he did not like certain arias by his contemporaries he thought nothing of scrapping them and writing new ones. Edith Mathis devotes most of this album to such "substitute" arias, showing us an unfamiliar but delightful side of Haydn.

Most of the arias, oddly, depict young ladies who have been wronged in love and are eager to reveal their despondency and ill feeling toward men in general. Mathis' portraval of these jilted women strikes the perfect balance between lamentation and outrage. Though tastefully avoiding slapstick and bathos, she brings out Haydn's wit and warmth. She is in excellent voice, her phrasing is supple, and her word coloration subtle. The coloratura always falls into the musical line rather than being sung for brilliance. In short, her singing here is the very essence of Classical expression, and it is well and suitably accompanied. S.L.

HAYDN: Sinfonia Concertante in B-flat Major for Oboe, Bassoon, Violin, Cello, and Orchestra; Concerto in F Major for Violin, Harpsichord, and Orchestra. Violin Concertos: No. 1, in C Major; No. 3, in A Major ("Melk"); No. 4, in G Major. Salvatore Accardo (violin); Bruno Canino (harpsichord); Neil Black (oboe); Graham Sheen (bassoon); Heinrich Schiff (cello); English Chamber Orchestra, Salvatore Accardo cond. PHILIPS 6769 059 two discs \$21.96, © 7654 059 \$21.96.

Performance: Splendid Recording: Robust

Haydn is known to have composed four concertos for violin and string orchestra, the second of which is lost. Only the first of the three surviving concertos is likely to be familiar to many listeners, and all three (the last of which, I understand, may still lack authentication) have been notoriously underrepresented on records. It is heartening to have so fine a musician as Salvatore Accardo turn his attention to them, and he serves them extremely well in what appears to be his first recording in the dual role of soloist and conductor. If the elegance of Philips' earlier recording of the C Major with Arthur Grumiaux (Raymond Leppard conducting) is not fully matched here, it is not missed by much; the performances of all five works in this set are stylish and enlivening in the best sense, and the sound is marred only by a slight tendency toward bass-heaviness on the second disc, which contains the three solo concertos. That is a generously filled record, with each side running about thirty-four minutes, but the layout-another of those "sandwiches" that Philips, perhaps more than any other major company, seems to love to dish up-is a distressing example of how more becomes less, and it is what impels me to withhold the

"Polk offers an uncommon amount of superior sound at a moderate price." Stereo Review



"Polks are vastly superior to the competition." Musician Magazine

Lab and listening tests prove Polks measure and sound better. Experts agree Polk speakers will give you the highest quality sound and the most listening pleasure for your money. They will deliver amazingly life-like, boxless, three dimensional sound with breathtaking clarity and detail in your listening room from your hifi system.

"Polk speakers are vastly superior to the competition...a remarkably well integrated and coherent sound that adapts itself ideally to all kinds of music...the kind of open, uncolored, perfectly imaged sound we thought began at twice the price... **Sound quite magnificent** with a good mid-powered popular brand receiver...They make the popular speakers in their price range seem dim, colored, boxy and just plain insufficient. Our advice is not to buy speakers until you've heard the Polks." Musician Magazine

Better sound in your home Polk Audio loudspeakers will give you more listening pleasure and greater long term satisfaction from your music, your records and your hifi system. They offer you the best sound for your money and are affordably priced from less than \$125 each to less than \$500 each.

Simply use the free reader service card to receive detailed information, copies of the expert's rave reviews and the location nearest you for auditioning the **Incredible Affordable Polks.** Polk Audio, Inc. 1915 Annapolis Rd., Baltimore, Md. 21230.



"Special Merit" tag from an otherwise exceptional recording. R.F.

HOFFMAN: *Mandolin Concerto in D Major* (see HASSE)

HUMMEL: Mandolin Concerto in G Major (see HASSE)

MASSENET: Werther. José Carreras (tenor), Werther; Frederica von Stade (mezzosoprano), Charlotte; Thomas Allen (baritone), Albert; Isobel Buchanan (soprano), Sophie; Robert Lloyd (bass), the Bailiff; Paul Crook (tenor), Schmidt; Malcolm King (bass), Johann; others. Orchestra and Children's Chorus of the Royal Opera House, Covent Garden, Sir Colin Davis cond. PHILIPS 6769 051 three discs \$29.94, © 7654 051 \$29.94.

Performance: Good Recording: Excellent

For reasons that may be worth exploring elsewhere, *Werther* seems to have overtaken *Manon* (a distinctly superior work) as Massenet's most popular opera. There are now four stereo *Werthers* in the catalog, and, what is quite gratifying, three of them are commendable.

The new Philips set, a by-product of a recent Covent Garden production, benefits from a proved ensemble spirit and from the strong hand of its conductor. With all those outstanding Berlioz interpretations to his credit, Sir Colin Davis needs no introduction as a masterly orchestral colorist who can handle Massenet's subtly sensuous orchestral idiom with a sure and sensitive command. He also maintains enough firmness and propulsion to counteract the lachrymose tendencies in the music. Overall, his approach is closer to Michel Plasson's (Angel S-3894) than to Georges Prêtre's (Angel S-3736), which is more briskly paced.

José Carreras starts rather unpromisingly with Werther's opening "Ô Nature, pleine de grace," in which the requisite ardor is effortfully expressed. He improves in the later scenes, and the dark timbre of his attractive voice helps in creating a manly figure out of Goethe's at times annoyingly selfpitying hero. There is much here that this sensitive artist does very well indeed; it is unfortunate that so much of his singing above the staff lacks grace. Frederica von Stade, on the other hand, solves all her vocal problems beautifully. She is an absolute pleasure to listen to, though a bit cool and distant for my taste-too much the proper, dutiful wife to make her agonizing dilemma fully believable. In the not-too-grateful role of the husband, Thomas Allen not only excels but also manages to sound young enough to realize the poet's intention.

Isobel Buchanan is a charming Sophie who does not overdo her girlishness, and the smaller roles are well handled. The orchestra plays with passion and refinement, and, though I've heard more attractive tones in children's voices, the present group does no serious damage. This is a good Werther, but my preference remains Angel S-3736 with its perfect pairing of Nicolai Gedda and Victoria de los Angeles. G.J.

RECORDING OF SPECIAL MERIT

MENDELSSOHN: Piano Concerto No. 1, in G Minor, Op. 25; Piano Concerto No. 2, in D Minor, Op. 40. Kristin Merscher (piano); Salzburg Mozarteum Orchestra, Leo-



pold Hager cond. EURODISC SQ 200152-366 \$9.98.

Performance: Lively Recording: Good

Kristin Merscher was seventeen when she made these recordings. Felix Mendelssohn was not much older when he wrote the first of these concertos. Where Mendelssohn wrote Molto allegro con fuoco or Presto scherzando or Molto allegro e vivace, Merscher has taken him at his word. These are, to say the least, lively performances.

This record is a memorial to French pianist Monique de la Bruchollerie, who died in 1972. A scholarship from the proceeds of one of her recordings was awarded to Kristin Merscher, and this record was issued in conjunction with the prize. The award was (pardon the pun) felicitous. This is youthful, high-spirited music making of the happiest sort—technically perfect and full of dash, fire, and brio. The sunny, eternal youth of Felix Mendelssohn shines through benevolently. E.S.

MENDELSSOHN: Violin Concerto in E Minor, Op. 64. BRUCH: Violin Concerto No. 1, in G Minor, Op. 26. Leonid Kogan (violin); Berlin Radio Symphony Orchestra, Lorin Maazel cond. EURODISC
88 466 MK \$9.98.

Performance: Russian Recording: Good

Perhaps it's just that I've heard too many Nathan Milstein records, but I thought that the performance parameters of the Mendelssohn and Bruch concertos were clearly set and generally known. I was wrong. Back in 1974 Leonid Kogan made his first (and, to my knowledge, only) recording of the Mendelssohn, released in the United States now for the first time, and what he gives us is a Russian concerto-big, throbbing, emotionally drenching, full of sobs, sighs, passion, and great heroic gestures. Even the very opening comes at us like a Russian gypsy adagio. The Bruch is even stranger, sounding in ways like a sort of Russian Mahler. It is startling to hear such interpretations from a world-class musician in 1974. Were it 1949 it would be more comprehensible, for this is the kind of music making that develops in a land cut off from cosmopolitan influence, approaching the score as if it had just been discovered and turning inward to its own musical traditions as the sole interpretive tools. Strange.

Still, Kogan is a colossal violinist and musician (I cannot believe that Maazel is responsible for anything more here than carrying out Kogan's wishes), and this is violin playing on nearly the highest level. Furthermore, Kogan has such force of character that while these performances cannot possibly convince anyone who knows the scores, they command interest and attention, and almost awe. We don't hear enough of Kogan by a long shot in this country and on records, and this disc tells us what we have been missing. A disturbing record, in more than one way. —James Goodfriend

PURCELL: Choral Works (see Best of the Month, page 70)

RAVEL: *Histoires Naturelles* (see Going on Record, page 58)

RODRIGO: Concierto de Aranjuez; Fantasía para un Gentilhombre. Carlos Bonell (guitar); Montreal Symphony Orchestra, Charles Dutoit cond. LONDON O LDR-71027 \$12.98.

Performance: Handsome Recording: Excellent

RECORDING OF SPECIAL MERIT

RODRIGO: Fantasía para un Gentilhombre; Concierto Andaluz. Alfonso Moreno (guitar, in Fantasía); Alfonso Moreno, Minerva Garibay, Cecilia López, Jesús Ruiz (guitars, in Concierto); Orquesta Sinfónica del Estado de México, Enrique Bátiz cond. VARÉSE SARABANDE O VCDM 1000.150 \$15.

Performance: Outstanding Recording: Outstanding

In the two works on the new London disc, Joaquín Rodrigo created the two most popular guitar concertos of all time, and the Concierto de Aranjuez by now must be ranked one of the most successful concertos for any instrument. It is represented by more than a dozen current recordings, about half of which are paired with the Fantasía para un Gentilhombre. Not one of them is less than pleasing, and if I have remained loyal to the old Yepes/Argenta version (London STS 15199 in this coupling, or CS 6046 in a different one) I cannot pretend I'd be much less happy with, say, Angel Romero and André Previn, again in the same coupling (Angel S-37440). The advantage Carlos Bonell enjoys, in addition to sensitive accompaniments under the Charles Dutoit, is the limpid digital recording and a somewhat more judicious balance than his various predecessors, nearly all of whom were brought unnaturally forward in relation to the orchestra. Two very handsome performances, excellently recorded.

The Varèse Sarabande disc, of course, would be a companion to an existing recording of the Concierto de Aranjuez rather than a replacement, and it makes a much stronger impression than the London. Handsome as the Bonell/Dutoit Fantasia may be, the opening phrase of the Moreno/ Bátiz performance is sheer magic, so idiomatically ingratiating that any resistance one may have simply melts, and the promise thus implied is more than fulfilled as the work unfolds. What is more remarkable is the similar effectiveness of the Concierto Andaluz, the four-guitar concerto which heretofore seemed at best only one-fourth as fetching as either of Rodrigo's solo guitar concertos. It is an appealing piece, after all, with its own share of inventiveness and poetry-or so one is persuaded in this brilliantly evocative performance. I would not attempt to evaluate the young Mexican orchestra from performances of this relatively undemanding material, but Bátiz, who has been recording for this label with both English and Mexican orchestras, is apparently a conductor of real sensitivity as well as technical assurance, and the unfamiliar guitarists are all one could ask in the way of dexterity and conviction. The recording itself is outstandingly realistic, with still more natural balance than London's. In short, a honey of a record. R.F.

(Continued on page 91)

Before now, all ultra lightweight headphones rolled off at 150-200 Hz.

Not so the Mura RED SET VII.

In addition to using samarium cobalt magnets, RED SET VII incorporates unique magnetic uprisers to increase the already high



magnetic flux density in the voice coil gap. The result is superb low frequency response, with 33 Hz response, only 3 dB down from the 1,000 Hz reference point. Overall frequency response is 20-20,000 Hz (30-20.000 Hz at the 6 dB point down from the 1 KHz reference level). Sensitivity is 98 dB at 1 milliwatt.

A 4 ft. cord with a 3.5mm stereo plug and an included 8' extension cord with a 1/4" stereo plug makes RED SET VII ideal for both portable and home hi fi listening.

Mura RED SET VII... the one lightweight that gives you all the bass the music has to offer.

MURA® You'll be hearing from us.**



RED SET and Mura are registered trademarks of Mura Corp ©1982 Mura Corporation, Westhury, N.Y., 11590 CIRCLE NO. 22 ON READER SERVICE CARD

Ortofon LM cartridges have changed the audio world.

Super low mass eliminates resonance distortion and unwanted signals from warped records, while our exclusive, patented VMS generating system lets you hear your records with unprecedented clarity.

What in the world are you doing with a cartridge other than an Ortcfon LM?



HE unconventional 1976 Bayreuth staging of Wagner's Ring cycle by producer Patrice Chéreau and conductor Pierre Boulez was generally greeted with cries of outrage or, at the very least, mutters of apprehension. It seems, though, that over the years the production has gained many partisans. Philips has now released the music of this Ring in four volumes totaling sixteen discs. The performances carry an unmistakable theatrical conviction that is further enhanced by stage noises (they are hardly ever obtrusive to the point of distraction), but there is no applause or any other suggestion that the taping took place before an audience. Technically, the production is firstrate. The first three operas of the Ring were digitally recorded; Götterdämmerung, for some reason, was not, but the difference is imperceptible. The entire set benefits from the characteristic Bayreuth perspective, which gives the singers prominence but supports them with a clear and sonorous orchestral foundation.

The unorthodox elements of Chéreau's staging are revealed in the lavishly illustrated book, *Boulez in Bayreuth*, that comes with the set. (It also contains an essay of Wagnerian verbosity by the conductor.) This review, however, must deal only with what meets the ear. Musically, the results are at best uneven: Boulez's estimable leadership is severely hampered by generally undistinguished, and in one instance disastrous, singing.

As might be expected from one with his precise, analytical kind of mind, Boulez strives for clarity and stays clear of interpretive excesses. The orchestra sounds surprisingly lean for Wagner; the dynamics are subtly graded and avoid shattering climaxes. Certain scenes are captured with amazing vividness: the piling-up of the Nibelung treasure in Das Rheingold, the great rhythmic vitality of Siegfried's Forging Scene, the gathering of the vassals in Götterdämmerung, to single out a few. There is no lack of power and momentum in Boulez's way with the music, but the eloquence, the poetry, and the passion in Wagner's writing are not sufficiently stressed. The "Todesverkündigung" and Wotan's Farewell in Die Walküre and the final Immolation Scene do not move the listener as they should.

Nonetheless, the conducting is the strongest element in this production. The real problem is the dearth of Wagnerian voices —a severe international malady. I can say without exaggeration that in this entire gigantic undertaking there is only one case in which role and interpreter are ideally matched—the Finnish basso Matti Salminen as Fasolt. Fortunately, after Fasolt is duly dispatched at the end of Das Rheingold by his brother giant Fafner, Salminen re-emerges in Die Walküre as an equally impressive, darkly malevolent Hunding.

The rest of the cast represents compromises of various kinds. I must rate Donald McIntyre's Wotan an honorable achievement; he shows vocal limitations and signs of exhaustion toward the end of *Siegfried*, but there are also many compelling moments that reveal the best possible artistic intentions. Tonally, too, he remains remarkably steady under pressure through some of the most exhausting episodes. I cannot say as much about either tenor hero. As Siegmund, Peter Hofmann's basically attractive voice is not too well produced and frequently sags under pitch. As Siegfried, Manfred Jung sings boldly and with considerable en-



Wotan's Farewell, by K. Dielitz Philips' New "Ring" NM

durance and even poignancy (especially in the monologue "Neides Zoll zahlt Nothung"), but he cannot overcome the handicap of a strident, unattractive voice that is incapable of sustaining long phrases.

These are mere imperfections, but the Brünnhilde of Gwyneth Jones is sheer disaster. She is a handsome woman and may be an ideal Brünnhilde from the visual standpoint, but the uncontrollable waver in her voice takes all the beauty out of her music and makes her singing only intermittently listenable. The effect is particularly deadly in *Siegfried*, where all goes reasonably well until side eight; when Brünnhilde is awakened from her slumber, the music takes a severe beating.

There are some positive contributions in minor roles. Das Rheingold benefits from the uncommonly lyrical Froh of Siegfried Jerusalem, and Ortrun Wenkel makes a firm-toned and dignified Erda. The three Rheinmaidens (Norma Sharp, Ilse Gramatzki, and Marga Schiml) are good, and Heinz Zednik, a weak Loge in Rheingold, turns into a skillful Mime in Siegfried, making maximum expressive use of a very slender voice. In contrast, the rich-toned Gwendolyn Killebrew lacks the expressive quality to make her Waltraute memorable. Hermann Becht's Alberich is mainly toneless declamation, dryly voiced and lacking in legato. Fritz Hübner is suitably evilsounding as both Fafner and Hagen, but vocally undistinguished. Jeannine Altmeyer is adequate as Sieglinde and Gutrune; Franz Mazura finds the tessitura of Gunther uncomfortably high, but he demonstrates that he is an artist of stature.

HERE is no denying the involvement and conviction conveyed by this well-rehearsed group of singing actors. Just the same, I cannot regard this set as competitive with the previous recorded *Ring* cycles under Solti (London) and Karajan (Deutsche Grammophon), both of which, to be sure, have limitations of their own. To record the *Ring* is a phenomenal undertaking. Like Siegfried's task, it should be attempted only by those who know no fear. But they should also have the voices for it.

—George Jellinek

WAGNER: Der Ring des Nibelungen. Das Rheingold. Donald McIntyre (bass-baritone), Wotan; Martin Egel (baritone), Donner; Siegfried Jerusalem (tenor), Froh; Heinz Zednik (tenor), Loge; Matti Salminen (bass), Fasolt; Fritz Hübner (bass), Fafner: Hermann Becht (baritone), Alberich; Helmut Pampuch (tenor), Mime; Hanna Schwarz (mezzo-soprano), Fricka; Carmen Reppel (soprano), Freia; Ortrun Wenkel (contralto), Erda; others. Bayreuth Festival Orchestra, Pierre Boulez cond. Die Walküre. Peter Hofmann (tenor), Siegmund; Matti Salminen (bass), Hunding; Donald McIntyre (bass-baritone), Wotan; Jeannine Altmeyer (soprano), Sieglinde; Gwyneth Jones (soprano), Brünnhilde; Hanna Schwarz (mezzo-soprano), Fricka; others. Bayreuth Festival Orchestra, Pierre Boulez cond. Siegfried. Manfred Jung (tenor), Siegfried; Heinz Zednik (tenor), Mime; Donald McIntyre (bass-baritone), Wanderer; Hermann Becht (baritone), Alberich; Fritz Hübner (bass), Fafner; Ortrun Wenkel (contralto), Erda; Gwyneth Jones (soprano), Brünnhilde; Norma Sharp (soprano), Forest Bird. Bayreuth Festival Orchestra, Pierre Boulez cond. Die Götterdämmerung. Manfred Jung (tenor), Siegfried; Franz Mazura (bass-baritone), Gunther; Fritz Hübner (bass), Hagen; Hermann Becht (baritone), Alberich; Gwyneth Jones (soprano), Brünnhilde; Jeannine Altmeyer (soprano), Gutrune; Gwendolyn Killebrew (mezzo-soprano), Waltraute; others. Bayreuth Festival Orchestra, Pierre Boulez cond. PHILIPS O 6769 074 sixteen discs \$150.

SATIE: *Mélodies* (see Going on Record, page 58)

SCHOENBERG: Erwartung; Six Orchestral Songs, Op. 8 (see Best of the Month, page 74)

RECORDING	OF	SPECIAL	MERIT

SCHUBERT: Quartet No. 14, in D Minor (D. 810, "Death and the Maiden"). Juilliard Quartet. CBS M 37201, © MT 37201, no list price.

Performance: Prime Juilliard Recording: Very good

The Juilliard Quartet's recent remake of Schubert's last and greatest string quartet, the G Major, Op. 161/D. 887 (CBS M 35827), was a striking improvement over an already excellent earlier recording; now the remake of the most beloved of the late quartets serves to reinforce the happy impression of a distinguished chamber-music ensemble at the very peak of its powers. There is nothing strikingly different in this reading: it is very much the D Minor Quartet as most of us have known and loved it all our lives, but the familiar view is projected in an idealized form in terms of precision, intensity, balance of pathos and passion, and cohesiveness. The Juilliard's version is somewhat less taut and austere than the distinguished versions by the Melos Quartet of Stuttgart (Deutsche Grammophon 2530 533) and the Prague String Quartet (Supraphon 1111 1997), but it is unquestionably on the same exalted plane and, in CBS' incandescent sonic frame, an equally reasonable candidate for top honors among current recordings of the work. RF

RECORDING OF SPECIAL MERIT

SCHUMANN: Kreisleriana, Op. 16; Kinderszenen, Op. 15. Alfred Brendel (piano). PHILIPS 9500 964 \$10.98, © 7300 964 \$10.98.

Performance: Probing Recording: Nice

SCHUMANN: Fantasy in C Major, Op. 17; Humoreske, Op. 20. Richard Goode (piano). NONESUCH O D-79014 \$11.98, © D1-79014 \$11.98.

Performance: Ruminative Recording: Very good

Alfred Brendel's first record of Schumann's solo piano music since his now deleted Vanguard disc of the Fantasia and the Symphonic Etudes is not only more convincing than those performances were but is one of the finest things he has given us in some time. These are probing interpretations by a pianist who has unquestionably found his way deep inside the music and knows how best to illuminate his findings. The fantastic element in the Kreisleriana comes off especially well because of Brendel's firm grip on the work's dimensions and his resistance to any temptation to underscore the bizarrerie. There is an abundance of Schumannesque warmth of heart and a fine regard for color tempered by a certain sobriety that does not suppress these factors but simply keeps them from calling undue attention to themselves. In the Kinderszenen there is absolutely no trace of condescension: these are reminiscences on the part of a sensitive adult, not caricatures or diversions for children, and in Brendel's hands the sequence is poetry from first note to last. A very appropriate coupling, actually, and very nicely recorded.

The Nonesuch disc is the first solo recording by Richard Goode to come to my attention. He is no less serious an artist than Brendel and apparently no less thoroughly inside the music, but on the evidence here he strikes me as less capable of—or perhaps simply less concerned with—communicating what he finds there. These are not demonstrative performances, but rather ruminative ones, as if Goode were reminding himself of what he had long ago found and

digested in these works and now has no need to dramatize to himself. The playing is not without passion, but that quality is more insinuated than displayed, and I miss a sense of genuine momentum. There are some beautiful shadings here, though, and the Schumann lover able to accept Goode on his own terms may find a sort of communion without overt communication in these essentially well-proportioned, elegant, somewhat mystical explorations of fascinating works to which there will always be more than a single true path. The instrument itself is a noble one, and the digitally mastered recording is very good. RF

(Continued overleaf)

There aren't many records you'll call a bargain at \$16.

Read what Aaron Copland writes about the Audiophile Master Edition™of his conducting his own brilliant "Billy the Kid" Ballet Suite:

"...represents more realistically the composer's thought. The clarity and brilliance of sonic mixtures make the entire score seem much more present to the listener...the works in this presentation pack more of a wallop, and keep the separate lines more distinct and more true to the live sound...splendid accomplishment."

We accomplished it by sparing no sensible expense at any step in the production of our discs. Half speed mastering. 100% Teldec virgin vinyl. The absolute best electronics. And time. The time it takes to reproduce every nuance in our continually growing collection of historically thrilling performances.

Audiophile Master Editions. *More of a wallop.* That's what makes them a bargain.

Here are ten:

1 Journey to the Centre of the Earth- 2 Taxi Driver—Original Sound Track 3 Reunited Live—Frankie Valli & The 4 "Billy the Kid" Ballet Suite—Copla 5 Even in the Quietest Moments—Su 6 Frampton Comes Alive! **—Peter F 7 Great Scott!—Tom Scott 8 Stravinsky's "Petrouchka"—Lond 9 Mad Dogs & Englishmen **—Joe Co 10 Light up the Night—The Brothers J Write quantities desired for each edition in tl antee. Enclose S16 each (**Double Disc Edition for each additional album. CA residents add	4 Seasons and conducts pertramp rampton on Symphor cker obnson ne spaces. 7- n. \$22), cht 1.75 (or post	s London Sympl ny Day Money Bac eck or money or age & handling	k Guar- der. or fill
Name			
Address			_
City	State	Zip	
Visa MasterCard Acct. No		Exp. Date _	
Signature			
Sweet Thunder, PO Box 11438 For FREE catalog or Visa/MC o	Beverly	Hills, CA 9 11 800-421)0213 -0599.
AUDIOPHILE MAS	TER	EDIT	I O N

CIRCLE NO. 46 ON READER SERVICE CARD



HE Eurodisc album "Concert After the Concert" by violinist Gidon Kremer and his pianist wife Elena is a collection of old-fashioned trifles, encores, and bits of kitsch that is so unusual, so craftily put together, and so wonderfully played that it amounts to a completely delightful novelty. Appearances can be deceiving. A violin recital that begins side one with Sarasate and ends it with the Tchaikovsky Valse-Scherzo-with salon Sibelius, Chopin variations on Rossini (originally for flute!), a Ravel miniature, and a couple of Richard Strauss throwaways in between-might suggest dispensable frivolity. But everything here is so perfectly chosen and performed with such style and brio that it becomes impossible to dismiss.

And then what are we to make of side two? The first track is an unlikely set of "American folk songs"—entitled *Rippy Toe Ray, Cotton Eye Joe*, and *Candy Girl*—that have been elaborately, succinctly, and anonymously arranged. This is followed by short pieces by the flower of Eastern Europe's younger generation of composers, including a meditative work of the utmost simplicity and tonalism by Arvo Pärt (born 1935) and ending with a curious and moving meditation on *Silent Night* by Alfred Schnittke (born 1934). Both men have been associated with the Soviet avantgarde; apparently minimalism and the new simplicity have spread even to the Soviet Union.

Concert After the Concert" is a case of eating your kitsch and having it too. Gidon Kremer manages to make even the oldfashioned violin encores sound new and fresh. And, oh my, the playing! This is the violin at its greatest. The piano playing is also good, and the sound is good all around. — Eric Salzman

GIDON AND ELENA KREMER: Concert After the Concert. Sarasate: Habanera. Sibelius: Waltz, Op. 81, No. 3. Chopin: Variations for Flute on a Theme by Rossini. R. Strauss: Daphne-Etude; Allegretto in Eflat Major. Ravel: Berceuse sur le Nom de Fauré. Tchaikovsky: Valse-Scherzo, Op. 34. Anon.: Three American Folk Songs. Kupkovič: March. Pärt: Mirror in a Mirror. Barkauskas: Violin Partita: Grave; Toccata. Schnittke: Stille Nacht. Gidon Kremer (violin); Elena Kremer (piano). EURODISC 201264-366 \$9.98.

SHOSTAKOVICH: Symphony No. 5, in D Major, Op. 47. Cleveland Orchestra, Lorin Maazel cond. TELARC **D**G-10067 \$17.98.

Performance: Disciplined Recording: Tops

This most classical and formally orthodox of the Shostakovich symphonies gets a marvelously just recording here in terms of capturing the orchestral sonority and texture, but Lorin Maazel's reading seems rather too inhibited. It has neither the elemental impulsiveness of Leonard Bernstein's two recordings with the New York Philharmonic (analog in 1959, digital in 1980) nor the broadly lyrical sweep of Maxim Shostakovich's Melodiya/Angel recording (a reading that suggests this symphony could occupy a place in the Soviet repertoire comparable to that of the Sibelius Second in Finland as a work to be played on special state occasions). Although the Cleveland Orchestra plays with flawless discipline and finesse, and although the sonics are a superb example of the "purist" approach, musically this record left me unmoved. D.H.

STRAVINSKY: *Petrouchka*. Detroit Symphony Orchestra, Antal Dorati cond. LON-DON O LDR 71023 \$12.98, © LDR5 71023 \$12.98.

Performance: Theatrical Recording: Excellent

STRAVINSKY: *Petrouchka*. London Symphony Orchestra, Claudio Abbado cond. DEUTSCHE GRAMMOPHON **O** 2532 010 \$12.98, **©** 3302 010 \$12.98.

Performance: Toscaninian Recording: Crystal clear

So sharply etched is Stravinsky's 1947 revised scoring for *Petrouchka* that, given only sensible microphone placement and an intelligent production team, digital recording technology is hardly necessary to reveal all that is there. Abbado uses the 1947 revision in full, Dorati almost so, and the technical necessities are amply fulfilled on both these new discs, so one need merely concentrate on what the two conductors bring to the music.

Dorati, as an old ballet hand, shows more of a sense of theater in this, his third recording of the score, whereas Abbado treats it more as pure concert music. But with all the attention to detail Abbado brings to bear, he misses the drama of the closing pages, and for all the Toscaninian characteristics of the reading he elicits from the London Symphony players, he does not quite capture the demonic element Toscanini evoked. Digital technology or no, I do not find either of these readings convincing enough to entice me away from Stravinsky's own recording of the 1947 version and that of Boulez and the New York Philharmonic of the more luxuriant 1911 original scoring. D.H.

VERDI: Requiem. Montserrat Caballé (soprano); Bianca Berini (mezzo-soprano); Placido Domingo (tenor); Paul Plishka (bass); Musica Sacra Chorus; New York Philharmonic, Zubin Mehta cond. CBS MASTERSOUND **O** 36927 two discs, no list price.

Performance: Not inspired enough Recording: Very good

There are a lot of Verdi Requiems in the catalog, with such conductors as Abbado, Bernstein, Giulini, Karajan, Muti, Reiner, and Solti (the order is alphabetical). We can now add Zubin Mehta to this abundant list, noting that his new recording is digitally mastered. To my ears, that is not reason enough to crowd the field further. The recorded sound is impressive in both the silences and the climaxes, but neither instrumental nor vocal details emerge with consistent clarity, and the overall sonic image leans toward homogenized blandness.

I cannot rate this Requiem with the best (Giulini, Abbado, Karajan) because, though Mehta's leadership is thoroughly musical, I miss a truly spiritual element in his reading of this intensely moving music (the Kyrie, Lux Aeterna, and Offertorio sound particularly businesslike). Mehta also fails to bring out all the expressivity of which at least some of his singers have proved themselves capable.

This is Placido Domingo's third Verdi Requiem-he may have done more, but I am beginning to lose count. A consistently dependable singer, he is the only one among the soloists here who intones the opening "Kyrie eleison" firmly on pitch. Later on, he finds just the right kind of rapt mezzavoce for the "Hostias," and his "Ingemisco" is one of the set's highlights. Montserrat Caballé is less consistent. She delivers some stunning pianissimo phrases ("Salvame fons pietatis," for one), only to turn unsteady and under pitch in the opening measures of the Libera Me, then recovering for the andante section ("Requiem aeternam"), which she does ravishingly. The other two soloists are not quite in their league. Bianca Berini is a competent and musical singer who lacks strength of tone for the low-lying phrases. Paul Plishka's bass is plush and resonant, but he tends to lose focus. He serves the music well, but will not satisfy listeners who remember how Pinza and Ghiaurov sang those noble lines. It all adds up to an earnest but unmemorable recording.

COLLECTIONS

IRMGARD SEEFRIED: Lieder Recital (see Going on Record, page 58)

RECORDING OF SPECIAL MERIT

HOPKINSON SMITH AND PAUL **O'DETTE:** Italian Lute Duets. Francesco da Milano: Canon; Fantasia Sexta; Fantasia Terza; Spagna. Lassus: Missa Dixit Joseph, Gloria. Dalza: Calata; Saltarello; Piva. V. Galilei: Duo Tutti di Fantasia. Borrono: Pavana Milanese; Saltarello. Terzi: Canzona Prima & Canzona Seconda di Claudio da Correggio; Contrapunta Sopra Petit Jacquet di Claudio da Correggio. Piccinini: Toccata à Dui Liuti. Naich: Canti di Voi le Ladi. Pacolini: Passamezo: Saltarello. Anon.: Chi Passa; Amor e Gratioso; Contrapunto Primo & Contrapunto Secondo di B.M. Hopkinson Smith, Paul O'Dette (lutes). SERAPHIM S-60361 \$5.98.

Performance: Brilliant Recording: Excellent

The Italian Renaissance repertoire for two lutes is a vast and varied one. It draws on every known genre of the period, and in it one encounters contrapuntal ricercars and fantasias, free transcriptions of sacred and secular vocal works, and throbbing dance suites. Because of the popularity of their instrument, Renaissance lutenists developed superb technical abilities and brought incredible virtuosity to their music. Their duets are characterized by rich and intricate textures, brilliant figurations, and a subtle palette of tone color.

Hopkinson Smith and Paul O'Dette display a deep understanding of the music and the instrument in their performances here. Both lutenists are virtuosos in their own right, with dazzling showmanship, but they play as one person, their impeccable ensemble affording them a fine rhythmic flexibility. This is a stunning record. S.L.

KIRI TE KANAWA: Song Recital (see Going on Record, page 58)



IT'S IMPOSSIBLE TO PHOTOGRAPH our charcoal mellowing process. But this is a

charcoal mellowing vat. Into this vat we tamp finely ground charcoal. Then we seep our just-distilled whiskey slowly through the charcoal to mellow its taste before

aging. Once the whiskey drips into the vat, there's no way to photograph what's happening. But when you compare Jack Daniel's to any other whiskey, you'll begin to get the picture.



Tennessee Whiskey • 90 Proof • Distilled and Bottled by Jack Daniel Distillery, Lem Motlow, Prop., Inc., Lynchburg (Pop. 361), Tennessee 37352 Placed in the National Register of Historic Places by the United States Government.

Popular Music Briefs





HOSE strange rumblings in Opryland come from the White Animals, the first New Wave (?!) band from Nashville. I saw a fledgling version of this outfit about four years ago playing Sixties oldies in a little bar that brought new meaning to the words "low dive with continuous entertainment." At the time. I thought they were weird but great. Now comes a White Animals twelve-inch sixsong EP called "Nashville Babylon" (Dread Beat NR 13161, \$5.98), and I do not have to revise my opinion. The basic sound is a mutated admixture

THE first of this month's batch of rock chronicles is **Rock Record**, by Terry Hounsome and Tim Chambre (Facts on File, \$9.95). An interesting effort, actually, even if its authors are almost as free with exclamation points as I am from time to time. The cover shouts, for example, "4,500 recording artists! 25,000 musicians! 30,000 record albums! Everything you ever wanted to know about

of classic garage punk with dub reggae, and if you can imagine the Syndicate of Sound produced by Lee Perry, you'll have an inkling of what these guys are up to. The EP contains a couple of sharp originals, a psychedelic rave-up of the venerable Tobacco Road, and a nicely reverent cover of the Yardbirds' For Your Love. It's a trifle underproduced for my taste, but evocatively sweaty nonetheless, and I'd like to hear some more. Available from Dread Beat Records, P.O. Box 121356, Nashville, Tennessee 37212 -SS

damn near every rock record ever made—ever!" Pretty snappy stuff; the authors could have written ad copy for Cecil B. DeMille. But this is an extremely ambitious reference work, an almost frighteningly detailed discography of the entire history of recorded rock running from A. B. Skhy, the first entry, to Zzebra, the last (and don't worry, I never heard of either one of them either). It's extensively cross-referenced, just the thing for those who can't remember when their favorite obscure album was released (or where). As might be expected with a project of this scope (526 pages and *very* small print), there are a fair number of glaring omissions, typos, and general inaccuracies, but it's a worthwhile book, if only because nobody has ever attempted its like before. Kudos (and a vacation, if possible) to the authors.

Similarly obsessive, but considerably more fun, is Surf's Up! The Beach Boys on Record 1961-1981 by Brad Elliot (by mail from Pierian Press. P.O. Box 1808, Ann Arbor, Mich. 48106, \$17.95). The bulk of the book is made up of "a chronological discography of the American records the Beach Boys have been associated with as performers, writers, and producers," and the research, as far as this lapsed Beach Boys fan can determine, is pretty much flawless: Elliot seems to have gotten everything. He's interviewed old Capitol Records staff engineers, session musicians, the Beach Boys themselves; he debunks various myths; he explains why a band with one of the largest catalogs of unreleased material has been so rarely bootlegged: and in general he tells you more than you'll ever need to know. Lots of great illustrations too (some of those old singles sleeves are priceless). The perfect companion to a genuine mono pressing of "Summer Days (and Summer Nights)."

Finally, there's **The Year in Rock 1981-82**, edited by John Swenson (Delilah, \$12.95). About half the material here is new (written especially for the book, that is); the rest is culled from the pages of Musician, which for my money is far and away the best rock-oriented magazine on the market today, perhaps even the best since the glory days (circa 1970) of the old Creem. There are intelligent essays on genres (AOR rock, country), individual performers (Pat Benatar, Joe Ely), and various local scenes both here and abroad (Van Gosse on the New Psychedelics is one of the sharpest pieces of sociomusicology I've read in some time). But the most valuable stuff is the interviews, which are uniformly excellent: thoughtful, probing, and provocative. There's a fascinating conversation with Brian Eno, for example, a lively discussion between Robert Fripp and the Clash's Joe Strummer, a hilarious session with Steely Dan's Becker and Fagen, plus some chats with Tom Petty, Bill Wyman, and Lindsey Buckingham where all the right questions get asked. First-rate stuff, highly recommended, and worlds better than the competing Rock Yearbook reviewed last month. -SS

Q UESTION what do Gilbert and Sullivan, the Three Stooges, and Meat Loaf (the singer, not the dinner) have in common? Answer: Karla De-Vito. Ms. DeVito, of course, first came to national attention as the stage foil for Mr. Loaf during his "Bat Out of Hell" tour. When I met her, however, she was finishing her run as Linda Ronstadt's replacement in the Broadway version of G & S' *Pirates of Penzance* and gearing up to hype her new Epic album "Is This a Cool World or What?" As for the Stooges, more later.

We chatted in a conference room at CBS, where I discovered that Ms. DeVito is considerably shorter than she appears on stage (then again, so am I). Not conventionally pretty, she is nevertheless attractive in a pixie-ish way, and she has a particularly winning smile. She is also one of the most genuinely nice people I've ever interviewed. So, naturally, stinker that I am. I led off with an unpleasant question: How come your album contains yet another cover version of John Fogerty's Almost Saturday Night? Hasn't it been done to death?

She shook her head. "I could cry about that," she confessed. 'That is like the most sore subject of the whole record. Actually, Fogerty's version is definitive, as far as I'm con-I mean, I always cerned loved Creedence, and his voice is the ultimate rock voice. Anyway, when I was recording the album, I knew Rick Nelson was doing it and then I heard part of his version and I said, 'I don't care, I'll do it anyway, because the song is too great and he blew it' (and I love Rick Nelson). Then the Searchers came out with one, and even that didn't come near what I thought it should be. But then when I heard Dave Edmunds' version, it was like 'Get out the razor blades. Let's use the song for dental floss.' And it was all my



fault, because my record would have been out long before if I hadn't taken the *Pirates* gig."

I told her I was most impressed with the ease with which she handled the vocal part in *Pirates*, particularly in the more florid reaches that had given Linda Ronstadt trouble. Where did a self-styled rocker learn how to do that stuff?

"It was from the Three Stooges," she said. "There was this one woman who happens to be in a couple of Stooges movies, and in one of them Curly was dressed up as Senorita Cucaracha, and they

were trying to make some money. And they had this record playing, and Curly was faking it to the record, pretending he was an opera star. And then the record broke, and this blonde woman, who happened to be a real opera singer, ! think, ended up doing it. And that's where I learned how to use a vibrato. In high-school choir, I always sang the alto parts, 'cause they're the most interesting. The soprano is always the boring melody. And I used to do joke opera to amuse my friends.

I had read in other interviews

that her first performing experience had been imitating Grace Slick (*White Rabbit*) in a highschool band. Somehow, though, she had been sidetracked out of rock and into theater. How come?

"Liust didn't know how to go about it," she shrugged. mean, you don't go to college to learn rock-and-roll. The reason I left theater, about 1975, was because I felt what went on there didn't apply to me. The whole circuit around it, too; the cabaret scene was very big then. Hove singing those songs, but it just didn't apply. Now Red Rubber Ball, Midnight Confesthose songs made sions sense to me. The people who were writing for theater, for musicals, weren't writing anything that had to do with me.

"The thing that really set me off was going to see the Ramones at CBGB's. That's when Frealized I didn't have to go to the Berklee School of Music to rock-and-roll. All the musicians I had known up till that time were saying things like 'If you don't know your theory, don't bother, honey. Stick to poetry.' But the Ramones three chords, 1-2-3-4! and Boom! Just do it. And that was so energetic and powerful, I just said, 'Whew, I gotta get involved.

And so she did, going on the road with Meat Loaf for the better part of a year. "It was better than joining the Navy," she told me. "I got to see the world, and I got *training.*" -S.S.



BEE GEES: Living Eyes. Bee Gees (vocals, guitars); instrumental accompaniment. Living Eyes: He's a Liar; Paradise; Soldiers; Wildflower; Cryin' Every Day; and four others. RSO RX-1-3098 \$8.98, © CTX-1-3098 \$8.98, © 8TX-1-3098 \$8.98.

Performance: Getting back Recording: Very good

This finds the Bee Gees wending their way back from the disco grave site, at times hip deep in the weeds that are already growing there. Back to where, though? Their roots? Well, sort of. Robin is turned loose on a few throwbacks to the crying songs, and the old priorities---pretty melodies and tight, brotherly harmonies—are raised again. And not until the last song on side one does Barry give in to his falsetto obsession, so they're also almost into their post-Chip munks period. This isn't as good as "Life in a Tin Can," but it should remind you more of that album than any other. When it's good, as in the title cut and *Be Who You Are*, it temporarily restores my early faith in the Gibb boys. I Still Love You and Nothing Could Be Good, though, have plastic, store-bought melodies, and *He's a Liar* suggests once again that the boys tend to get lost when they try to harden up a song without the distancing gadgets built into disco. That still leaves some good soft ones, though, in which they do what they do best. N.C.

ANGELA BOFILL: Something About You. Angela Bofill (vocals); instrumental accompaniment. Time to Say Goodbye; Break It to Me Gently; Holding Out for Love: Something About You; On and On; and five others. ARISTA AL 9576 \$8.98, © ACT 9576 \$8.98, ® A8T 9576 \$8.98.

Performance: Good Recording Very good

Angela Bofill is being brought along to mainstream pop stardom with a lot of restraint and intelligence. Her talent was ob-



MARTIN BRILEY's talents, as displayed in his debut Mercury solo album, "Fear of the Unknown," bring to mind that classic line from science-fiction B-movies: "Think of all that power used for evil— Good Lord, the consequences!" He is a generously gifted songwriter but almost frighteningly misanthropic. The album is a marvel, but you may not want to hear it very often if you're the kind of person who pays close attention to lyrics.

Briley, a Briton residing in the U.S. since 1977, was a busy studio musician in England and a member of Greenslade, an artrock group active in the mid-Seventies. Since relocating, he's played bass on road tours with Ian Hunter and Mick Ronson, and he was Ellen Foley's musical director. His songs have been recorded by Pat Benatar (Take It Any Way You Want It) and Karla DeVito (I'm Just Using You). He freely admits to being cynical, with the cynic's excuse that people are hypocrites and his function is to expose them. But he goes even further with lyrics that suggest human relationships are not only futile and pointless, but foul as well.

For instance, the sleazy, strange I Feel Like a Milkshake features a tired man who staggers into a diner where a tarty waitress spills food in his lap, then attempts to seduce him while her husband, the cook, throws hamburgers at the walls. The man tips lavishly "so they wouldn't think the English are mean" (cheap) and staggers out into the night. He imagines God as "that Great Soda-Jerk in the sky," a diner proprietor who can't get food deliveries. Then there's Briley's ugly but apt description of a spoiled, sheltered young woman: "You were gonna stand still/And make the mountain move/Tomorrow's juice on your breakfast tray/And the world was your bidet." And here's Briley on lovers growing old together: "Too weak to hold a fork and spoon/Too dumb to recognize the room/Would you pull the plug and cut the juice?"

What makes Briley's talent insidious is the deceptively attractive presentation of these gloomy sentiments. His melodies, tempos, and arrangements have the bounce and sparkle of sunshiny love songs on Top-40 AM radio. Briley is a highly accomplished musician and arranger who knows how to use pop conventions for his own purposes. The contrast between the bright tunes and the dark lyrics makes his songs intriguing and disturbing.

Martin Briley is remarkable, though I wouldn't suggest you listen to him if you're going through emotional turmoil. He claims that his songs have little to do with his personal life and are merely author's fancies. "Reality is not interesting enough to sustain for three minutes," he says. Whether these songs are autobiography or fantasy, he certainly has a wonderful and terrible ability to describe the tip of each flame in the fires of *someone's* personal hell. *Joel Vance*

MARTIN BRILEY: Fear of the Unknown. Martin Briley (vocals, guitar, bass, percussion); vocal and instrumental accompaniment. Slipping Away; The Man I Feel; I Feel Like a Milkshake; First to Know; Heart of Life; A Little Knowledge Is a Dangerous Thing; I Don't Feel Better; More of the Same; One Step Behind; Fear of the Unknown. MERCURY SRM-1-4026 \$8.98, © MCR4-1-4026 \$8.98. vious on her early recordings, and on this one it has been carefully honed to sharpness. The songs (none very distinguished) and the production and arrangements (by Narada Michael Walden) wisely emphasize Bofill's sexy vitality and disco-doll energy. She's a natural delight in such things as Something About You or Holdin' Out for Love, but she displays real growth in Break It to Me Gently, a heavy-handed ballad that she manages to make gently moving. Performances like this show that she's learning. In no time at all her disco past will be completely behind her. Smart girl. P.R.

THE CARS: Shake It Up. The Cars (vocals and instrumentals). Since You're Gone; Shake It Up; I'm Not the One; Victim of Love; Cruiser; and four others. ELEKTRA 5E-567 \$8.98, © 5C5-567 \$8.98, ® 5T8-567 \$8.98.

Performance: Studied Recording: Excellent

The nearly unanimous critical disdain that greeted the Cars' second and third albums, "Candy-O" and "Panorama," revealed as much about the rock press' unrealistic expectations and instinctive tendency to recoil from the commercial monsters it helps create as about the group's music. Too much was made of the Cars' first album. too little of their music since. In spite of the reviews, after three solid-selling albums the Cars have secured a foothold in rock's hottest war zone, the disputed territory claimed by both pop and art rock, a region where the borderline between style and mannerism is difficult to draw and bitterly debated

Perhaps because the Cars are shellshocked by the critical barrage, "Shake It Up" is a rather tentative sally. Fans will appreciate the characteristically clever hooks, the intricate but accessible arrangements, and the comforting predictability of its frozen rhythms. Although leader Ric Ocasek has been called icy and dispassionate, he unterhers his emotions on a couple of songs here-at least once, on I'm Not the One, almost to the point of sentimentality. And while Greg Hawkes' synthesizer is a bit too fastidious, Elliot Easton's lead guitar gives the meticulous arrangements some muchneeded muscle. "Shake It Up" doesn't scale any heights or plumb any depths. Instead, it rocks along a deliberate, precarious path, avoiding both outright pop and electronic minimalism. It's probably an impossible balancing act to keep up, but the Cars deserve credit for trying. M.P.

ELVIS COSTELLO: Almost Blue. Elvis Costello (vocals, guitar); the Attractions (instrumentals); John McFee (guitar, steel guitar). Why Don't You Love Me (Like You Used to Do); Sweet Dreams; Success; I'm Your Toy (Hot Burrito #1); Tonight the Bottle Let Me Down; Brown to Blue; A Good Year for the Roses; Too Far Gone; and four others. COLUMBIA FC 37552, © FCA 37552, @ FCT 37552, no list price.

Performance: Embarrassing Recording: Adequate

Elvis Costello's "country album" is a puredee disaster. I can just picture some of the reaction to this turkey in Tootsie's Orchid Lounge and countless roadhouses. Some old boy is liable to put his boot through the jukebox, among other things. Costello made the apparently commonplace assumption (it was common enough in the movie Nashville anyway) that anybody can come in cold and perform country music-and it blew up, I'm happy to report, right in his face. Time after time he proves he doesn't really understand what this music is all about. You can also learn-if you get trapped into listening to the thing-something his other albums have only suggested: Elvis can't sing. He can get by, sticking with things like Pump It Up, where he has to hold pitch for only a quarter-note at a time, but these country songs take him into a realm where grunting and posing aren't enough. Pickin' and grinnin' ain't so simple. The Attractions seem as lost as he is, except for some decent piano fills by Steve Neive. Like a typical inept country band, they rely on the pedal steelplayed by nonmember John McFee-to cover up the mess they're making, and McFee is only passable. It says on the jacket that Billy Sherrill produced it. Now, I have a hard time picturing that, but it works if I imagine Billy with his hands over his ears the whole time. Ye gods, this is awful. NC

KARLA DEVITO: Is This a Cool World or What? Karla DeVito (vocals); vocal and instrumental accompaniment. Cool World; I Can't Stand to Reminisce; Heaven Can Wait; Midnight Confession; Big Idea; Almost Saturday Night; and six others. EPIC NFE 37014, © NET 37014, no list price.

Performance: Overdone Recording: Ditto

To be fair, I can't completely dismiss a record that includes a quote from Maynard G. Krebs on the inner sleeve, but in this case I'd really like to try. Karla DeVito is a terrific singer and performer, cute as a bug's ear, and one heck of a swell human being, but she has what sounds like a terminal case of Steinman's Disease. That is, her idea (or her producer's idea) of rock-and-roll is the overblown, overarranged, over-the-top theatrical exaggeration perfected by Jim Steinman, heard previously and to agonizing effect on his own record and on those by Meat Loaf. Here, for example, is Heaven Can Wait, a truly ghastly teenage ballad Steinman ripped off from what Bruce Springsteen left out of Thunder Road. The rest of the record-which, truth be told, does contain some potentially interesting material by the likes of Randy Newman, John Fogerty, and even Ms. DeVito herself-is similarly Steinmanesque aural overkill. Our heroine yowls over all this with a certain spunk and charm, but mostly the effect is akin to Kate Smith singing God Bless America over a Led Zeppelin backing track: in a word, preposterous. S.S.

NEIL DIAMOND: On the Way to the Sky. Neil Diamond (vocals); instrumental accompaniment. Yesterday's Songs; Only You; Save Me; Be Mine Tonight; and seven others. COLUMBIA TC 37628, © TCT 37628, @ TCA 37628, no list price.

Performance: Moony Recording: Very good

Neil Diamond doesn't just sing into a microphone; he purrs into it, he swoons over it,



A Brilliant, New Cartridge Designed For Today's High Technology Records.

At last, a low impedance cartildge which exceeds moving coil performance with moving magnet reliability. The Stanton 981LZS provides the highest level of performance with very low tip mass, the widest frequency response and unsurpassed trackability. The moving magnet (Samarium Cobalt design) offers a truly new, exciting and different sound experience. Stanton Magnetics, 200 Terminal Drive, Plainview, NY 11803

The 981LZS From STANTON

CIRCLE NO. 44 ON READER SERVICE CARD

STEREO CATALOG and FM DIRECTORY

Get all the newest and latest information on the new McIntosh stereo equipment in the McIntosh catalog. In addition you will receive an FM station directory that covers all of North America.

		0 0 0 5
SEND	McIntosh Laboratory, Inc. East Side Staion P.O. Box 96 Binghamton, N.Y. 13904-0096	SR
TODAY!	ADDRESSSTATEZI	P

If you are in a hurry for your catalog please send the coupon to McIntosh. For non rush service send the Reader Service Card to the magazine.



he makes love to it. The seductive singing style he favors is matched by the contents of these ballads, mostly his own, of which the gist can be summed up in a line from one of them: "Yesterday's blues/May be yesterday's news/But the good things will stay the same." In only one of them, the Rainy Day Song on which he collaborated with Gilbert Becaud, is there a theme that transcends the simple one of old-fashioned, crooning courtship. Despite his continuing popularity, Neil Diamond's music and the method he uses to disseminate it may be getting just a tiny bit outmoded. Not all the good things stay the same. PK

EARTH, WIND & FIRE: Raise! Earth, Wind & Fire (vocals and instrumentals). Let's Groove; Lady Sun; Kalimba Tree; My Love; Evolution Orange; and four others. COLUMBIA/ARC TC 37548, © TCT 37548, @ TCA 37548, no list price.

Performance: Windy Recording: Very good

Earth, Wind & Fire has been around for over a decade. It has an enviable string of hits under its belt, and it has garnered such a large and loyal following that it seems to have earned the right to an occasional artistic misjudgment like participation in the unspeakably bad Sgt. Pepper's Lonely Hearts Club Band film. But "Raise!" reflects not so much poor artistic judgment as it does a general feeling of having reached a dead end. Sure, the energy seems to be intact. As a band EW&F still performs with precision, and the characteristic blend of falsetto harmony and raw, unmusical vocal utterances continues to give it a strong identity. But the album that spawned the hit single Let's Groove is formula-ridden and terribly repetitious. Although it is delivered skillfully, it lacks the spirit of such previous releases as "Head to the Sky" and "Spirit."

All things considered, Earth, Wind & Fire remains one of the best bands in this genre, but leader Maurice White should beware of complacency. C.A.

DAVID GRISMAN: Mondo Mando. David Grisman (mandolin, mandola); Mike Marshall (mandolin, guitar); Darol Anger (fiddle); Rob Wasserman (bass); other musicians. Cedar Hill; Dawg Funk; Japan; Fanny Hill; Anouman; and three others. WARNER BROS. BSK 3618 \$8.98, © M5 3618 \$8.98.

Performance: Very good Recording: Good

For some reason, there is none of the usual guitar work by Mark O'Connor here. O'Connor fiddles on two cuts, but the guitar is turned over to Mike Marshall and, a couple of times, to dawg-music (and bluegrass) alumnus Tony Rice. It doesn't make a huge difference, you understand; Rice's flatpicking style goes very well with the opening cut, Cedar Hill. But the album is, as the title suggests, more mandolin-dominated than usual for Grisman's group, and the songs tend to blur together in your mind even more than his earlier ones did. You have to be a real dawg lover to stay perky through the whole thing. Ideally, you should hear this one cut at a time; there is good stuff here, but too much of it can dull the senses. I particularly like the subtle flavoring of Japan and the moody treatment of Django Reinhardt's Anouman, which has the nice side effect of slowing down all that musicianship so a person can catch a little more of it. NC

THE JOHN HALL BAND: All of the Above. The John Hall Band (vocals and instrumentals). You Sure Fooled Me; Crazy (Keep On Falling); Can't Stand to See You Go; Star in Your Sky; Somebody's Calling; *The Touch*; and four others. EMI/AMERI-CA SW-17058 \$8.98, © 4XW-17058 \$8.98, ® 8XW-17058 \$8.98.

Performance: Good Recording: Good

There's nothing very original here, but all of it is well done except for the lyrics, which are early-Eighties bubblegum. Of course, most lyrics being written nowadays are early-Eighties bubblegum in all the subdivisions of pop music except country, but I expected a little more of John and Johanna Hall, some of whose songs have stood out a little in the past. These are tuneful and played with some tastefully recycled progressive-rock licks, but they're shallow enough for the 1910 Fruitgum Company, if not the Archies. They are mostly moon-June rhymes about lovin' one's baby aimed at what used to be the fifth-grade level. Or an early-Eighties radio programmer. N.C.

THE ISLEY BROTHERS: Inside You. The Isley Brothers (vocals and instrumentals). Inside You; Don't Hold Back; Your Love; Love Zone; and four others. T-NECK FZ 37533, © FZT 37533, @ FZA 37533, no list price.

Performance: Solid soul fare Recording: Good

It has been more than twenty years since the Isley Brothers had their first hit single, Shout, and almost as long since they made their second, Twist and Shout. Now, several hits, misses, comebacks, and labels later, the brothers-up to five from the original three-prove that some things just get better with age. "Inside You" is the provocative title both of their newest album on T-Neck (the label they started in 1969) and of a single that climbed onto the charts soon after its release. Except for Love Zone, which gets the funk up a bit, this is a mellow, low-key set of eight tunes, all but one written by the group. I rather like it, but those Las Vegas glitter-cowboy outfits on the jacket have got to go. CA

MILLIE JACKSON: Just a Lil' Bit Country. Millie Jackson (vocals); instrumental and vocal accompaniment. I Can't Stop Loving You; Rose Colored Glasses; I Laughed a Lot; Pick Me Up on Your Way Down; Loving You; and five others. SPRING SP-1-6732 \$8.98, © CT-1-6732 \$8.98, @ 8T-1-6732 \$8.98.

Performance: Clean Millie ... almost Recording: Good

Millie Jackson's "Just a Lil' Bit Country" isn't your average farm fare, but most of the tunes do come from the country repertoire. Jackson, who first attracted attention some ten years ago with A Child of God, has a fine voice and the skill to use it. What often mars her performances, however, is her penchant for crude, base material that seems designed more to shock than to entertain. Non-singers like Grace Jones and Betty Davis need such gimmickry to get across, but Millie Jackson does not. She is a real singer, and she proves it once again on this album, which includes only one track of questionable taste, the gratuitous Anybody That Don't Like Millie Jackson. If anyone can offer a reasonable explanation of why (Continued on page 101) an artist who caresses every note of Neil Diamond's *Love on the Rocks*, who herself wrote and here beautifully performs *Loving You*, a very pretty ballad, has to stoop to the level of the off-camera Redd Foxx, I wish they would let me in on it. C.A.

THE JACKSONS: Live. The Jacksons (vocals and instrumentals); instrumental accompaniment. Can You Feel It; Things I Do for You; Off the Wall; Ben; Heartbreak Hotel; She's Out of My Life; ABC; I Want You Back; and six others. EPIC KE2 37545, © EZT 37545, © EZA 37545, no list price.

Performance: Captures their spirit Recording: Satisfactory

When musical prodigies in any genre grow up, they encounter the challenge of proving their artistic worth to those who no longer admire them simply because they are novel or cute. The Jacksons, whom we once knew as the Jackson Five (with some intermediate changes in personnel), have weathered that transition with exceptional aplomb. This double album, recorded at various live performances, enables us to make an assessment of their adult accomplishment, and it is considerable. They are so polished as performers that their act appears seamless. Each number blends smoothly into the next while the energy level remains high. No middle-aged men could keep up the pace; the songs all but dance off the vinyl. The selections cover the high points of the group's career as well as Michael's solo efforts. One particularly nostalgic segment features the voice of Ed Sullivan from the Jacksons' first television appearance. They've come a long way since then, but their boyishly appealing glow remains untarnished. PG

GARLAND JEFFREYS: Rock and Roll Adult. Garland Jeffreys (vocals); the Rumour (vocal and instrumental accompaniment). Wild in the Streets; 96 Tears; I May Not Be Your Kind; Matador; R.O.C.K.; and three others. EPIC FE 37436, © FET 37436, no list price.

Performance: Intense but uneven Recording: Very good

"Rock and Roll Adult" is a faltering step forward in the two-steps forward, one-stepback career of Garland Jeffreys. Recorded live last spring, mostly at New York's Ritz club, with the premier back-up band of the Eighties, the Rumour, the album is by turns convincing and revealing, mannered and self-indulgent. More than anything else, though, it is intensely emotional, an example of what Jeffreys has called "exorcising my demons." The problems and contradictions that doing this creates seem to come together in Cool Down Boy, a thirteen-minute encore in which Jeffreys wrestles with the ghosts of his Brooklyn boyhood. It moves from a couple of furious rock choruses to a discursive narrative that climaxes in a brief, ugly encounter between Jeffreys and his father. While the raw brutality of Jeffreys' re-creation is meant to give force to the message-rock-and-roll as escape from the misery of growing up-the confrontation is so startling and strong that the rest of the song (another five minutes) collapses from exhaustion. So does Jeffreys,

giving over long stretches of the remaining time to his audience. Cool Down Boy was unquestionably a moving experience in concert, but it's hard to imagine wanting to play it more than once or twice unless you're obsessed by some lurking demons of your own. It's just impossible to turn such emotion on and off with the ease of flipping a light switch.

In addition to taking on his past, Jeffreys squares off with some of his classic material. The results are mixed. Wild in the Streets suffers here from excessive posturing, and Matador is too cerebral for this kind of album. But most of the rest—I May Not Be Your Kind, R.O.C.K., Bound to Get Ahead Someday, and 96 Tears—shows what a unique mixture of soul and sinew Jeffreys has when he is in top form. M.P.

GEORGE JONES: Same Ole Me (see Best of the Month, page 79)

K. C. AND THE SUNSHINE BAND: The Painter, K. C. and the Sunshine Band (vocals and instrumentals). It Happens Every Night; Go Now; The Painter; Sway; All Through the Night; Something's Happening; and five others. EPIC FC 37490, © FET 37490, © FEA 37490, no list price.

Performance: Sunny Recording: Terrific

I like K. C. and the Sunshine Band. Their music is always bright-sounding, 'goodhearted, and terrifically listenable. On "The Painter," H. W. Casey and his large back-up group give us some fake funk, several fun dance selections (such as Summer Nights with its freewheeling vocals), an unexpected foray into electronics in Don't Say No (which has the album's most interesting arrangement), and even a straight, laidback reading of Van McCoy's Baby. I'm Yours. On several of the numbers Casey gives his falsetto a rest and tries a little soul searching with his pleasant baritone.

As always with Sunshine releases, the new songs are not very interesting in themselves. The Donna Summer/Bruce Roberts ballad All Through the Night sounds like a classic in this company. The sound, however, is brilliant and beautifully balanced, and there's no stinting on either the varied and apt arrangements or the production. These guys may not be creating great pop music, but they work hard to please. —Irv Cohn

KISS: (Music from) The Elder. Kiss (vocals and instrumentals); vocal and instrumental accompaniment. The Oath; Fanfare; Just a Boy: Dark Light; Only You; Under the Rose; and five others. CASABLANCA NBLP 7261 \$8.98, © NBL5 7261 \$8.98, ® NBL8 7261 \$8.98.

Performance: Nerve-wracking Recording A studio blitzkrieg

A new release from Kiss invariably sends critics hurrying to the thesaurus for new ways of calling the group abominable, atrocious, dreadful, egregious, and so on. Don't expect "(Music from) The Elder" to provoke any other kind of reaction. This is a concept album—if you use the term "concept" very loosely. The context is an indeterminate time in which everyone talks and dresses as if in a novel by Sir Walter Scott. (Continued on page 103)





Scrutinizing Entwistle

HE title song of John Entwistle's new Atco album, "Too Late the Hero," is about that prize psychological discovery of the late Seventies, the mid-life crisis. It is more fun than Gail Sheehy's prose in her book on the subject, and it goes with the way Entwistle looks in the cover photos, the very picture of an aging rock star. The song is about looking back over one's relative lack of accomplishments in life and reflecting on how different it is from the way it was supposed to be according to the movies. Entwistle, unlike other writers on the subject, gives it more of a wry than dire tone, conjuring up flamboyantly romantic scenes ("The arrows fall, the sky is red/The music gets higher and higher") in which he conquers all.

Just as he's about to kiss the princess in this imaginary escapade, you may find yourself looking at the cover photo again for signs of a tongue in his cheek—the song's a little too flamboyantly romantic to be straight. You won't find a tongue bulge, but you may notice a spider-web motif decorating Entwistle's space-age, trapezoidal, essentially zany-looking bass guitar. It is, I assume, a reminder of his "big" song, long ago on an old Who record, *Boris the Spider*. But remember that Entwistle set us up to view little Boris anthropomorphically, and then he squashed him.

Such are some of the bits and pieces of what we know about Entwistle, always the most elusive and vaguely defined (or vaguely understood) member of the Who. He wrote only two tiny segments for the "rock opera" Tommy, but notice which ones: Cousin Kevin, about the brat who was so mean to Tommy, and Fiddle About, written from the point of view of Uncle Ernie, who, as we would now put it, sexually abused the poor deaf, dumb, and blind boy.

Revealing little bits and pieces continue to show up through "Too Late," making the cumulative impression that Entwistle takes a certain delight in dismantling other people's houses of cards. *Talk Dirty* has the girl wanting to talk about Chopin and the boy wanting to talk about the can-can, she about revolution and he about prostitution, and so forth. Love Is a Heart Attack breezily asserts that love can kill you, Sleepin' Man toys whimsically with the symbol it has set up, as if what Entwistle would really like to do is make fun of symbolism itself, and Dancin' Master, cheerfully alluding to the way dancing has been rammed down people's throats in recent years, pauses in the middle to parody disco.

OR all this Entwistle has found himself two pretty sympathetic sidemen, Joe Walsh of the Eagles, another free spirit known to have a satirical turn of mind, and percussionist Joe Vitale; some pretty savvy rock gets played, some of it reminiscent of the sound of the early Who. But I don't want to give you the idea that there are a lot of obvious jokes here. The album works on your impressions, and you tot up sums of this tone and that attitude. I don't want to give you the impression that it's an unqualified success either. The first two songs, Try Me and Talk Dirty, don't have much melody propelling them, and the guttural back-up sounds, though appropriate for the vulgarity of the subjects, hardly soothe the savage breast. These don't get things off to much of a start, but Lovebird, a straight and somewhat softer rock song, is a good one, and things don't let down too much from there on out.

Better still, the record offers some relief from the blandness being committed all around us in the name of pop music these days. There's nothing radical about it—you could just sit there, numb, and absorb it the way you do Supertramp—but if you want to have your feelings tugged a little in unusual directions it can do that, and if you want to (God of the Eighties forgive me) think about what's in a song, there are the makings of some ideas here. And I'll thank you young squirts not to laugh; we music lovers routinely did that sort of thing back in the Sixties.

WOULDN'T presume to formulate a psychological profile of John Entwistle based upon this release and the other bits and pieces, but it seems safe to say there's a healthy skepticism still operating in him, as well as a disposition to turn a subject over and look at what may be its less attractive side. Re-examining the work of the Who in that light suggests that Entwistle may have had more influence than we suspected on ... well, on rock as we know it. Stuck as I am in a world given to taking itself too seriously, I certainly hope so.

-Noel Coppage

JOHN ENTWISTLE: Too Late the Hero. John Entwistle (vocals, bass, keyboards); Joe Walsh (guitar, keyboards); Joe Vitale (drums, keyboards); Billy Nicholls (backup vocals). Try Me; Talk Dirty; Lovebird; Sleepin' Man; I'm Coming Back; Dancin' Master; Fallen Angel; Love Is a Heart Attack; Too Late the Hero. ATCO SD 38142 \$8.98, © CS 38142 \$8.98, ® TP 38142 \$8.98. There's quite a bit of lip service paid to knowledge, wisdom, heroism, purity of heart, glory, and the like, though none of these qualities are much in evidence. A "lurking" evil is, predictably, loosed upon the world by an unnamed malevolent force, and "The Elder," a cosmic board of directors, commissions a hero to combat this evil. The hero is a boy. He gets a sword. He's initiated in a sacred rite resembling an est session. He starts thinking positively and using such words as "hell" and "balls." 'He makes a lot of promises. And that's it. There's no furious battle, no resolution. We never even meet the evil force.

Never mind that this is bad music. It isn't even a passable stab at a fantasy comic book. Not even the bizarre involvement of Lou Reed, who wrote two vulgar yet forgettable songs for it, can inject any starch into this impotent album. There's nothing here that the soundtrack of Star Wars didn't do much better. M.P.

THE KNACK: Round Trip. The Knack (vocals and instrumentals). Radiating Love; Soul Kissin'; Africa; She Likes the Beat; Just Wait and See; We Are Waiting; and six others. CAPITOL ST-12168 \$8.98, © 4XT-12168 \$8.98, © 8XT-12168 \$8.98.

Performance: Pathetic Recording: Very good

Ah, yes, the Knack. From overnight platinum superstars to embarrassing has-beens in less than two years. What a story. It's supremely satisfying, actually, at least if you subscribe to the idea that everybody likes to see a bum take a dive. One might work up some sympathy for them if they hadn't brought it all on themselves, as anyone who had the misfortune to hear their second album can attest. I mean, the first one, the one that two million suburban teenagers shelled out their lunch money for, had at least the courage of its convictions: it was smarmy and obnoxious, but it was up front about being smarmy and obnoxious. The followup, on the other hand, offered nothing but My Sharona played sideways ad nauseam and lame Phil Spector cops. This new one is the final nail in the coffin. With a real producer (Jack Douglas) on hand for the first time, it attempts to legitimize the boys as musicians, but it's a tedious failure, something like hearing a second-rate bar band trying to play late Beethoven quartets. The collective songwriting inspiration is so parched that at one point they're reduced to doing bad fusion jazz-this from the erstwhile Kings of Power Pop? You may remember that in the Fifties the cliché fallback job for One Hit Wonders was the car wash. What I want to know is, what's the Eighties equivalent? If anybody has the answer, drop the Knack a line care of Capitol 2.2. Records.

KOOL AND THE GANG: Something Special. Kool and the Gang (vocals and instrumentals); vocal accompaniment. Good Time Tonight; Be My Lady; and six others. DE-LITE DSR 8502 \$8.98, © DCR4 8502 \$8.98, @ DC8 8502 \$8.98.

Performance: Nothing special Recording: Okay

Are you ready for retro-disco? I'm a fan of disco, so trust me when I say that this al-





Some Singer!

FRANK SINATRA's first new album since the "Trilogy" monster of two years ago is called "She Shot Me Down," the title presumably deriving from Sonny Bono's Bang Bang (My Baby Shot Me Down), which rounds off side one. But on the jacket the single name "Sinatra" looms in type so much larger than the title that you get the impression the latter was a more or less inconsequential afterthought. Which is as it should be. One buys a Sinatra album for the singer, not the songs, and the titles serve merely to distinguish one album from another or to indicate the character of the contents. Yet, as I listened to this sequence of wistful recollections of loves that didn't last and the loneliness of the aftermaths, another name loomed as large in my mind's eye as the one on the jacket: Mabel Mercer.

It is a familiar part of the Sinatra story that he learned from Tommy Dorsey how to sustain and shape a musical phrase and from Mabel Mercer how to handle a lyric. While "She Shot Me Down" offers examples aplenty of his unique way with a phrase, including a couple of characteristically eloquent carry-overs, the album is memorable and treasurable not for what he does with melodies but for what he does with words. There are lots of good words too, most notably those of Loonis McGlohon for Alec Wilder's A Long Night and South-To a Warmer Place, Stephen Sondheim's for his Good Thing Going, Moss Hart's for Richard Rodgers' It Never Entered My Mind, Leo Robin's for Ralph Rainger's Thanks for the Memory, and Pamela Phillips' for Don Costa's Monday Morning Quarterback.

Some of these songs were included in the TV special Sinatra, the Man and His Music, aired on November 22, 1981, which I had the good fortune to catch on a Stateside visit. Hearing them now on the record, I was reminded again of Mabel Mercer because I reacted with pleasure and admiration, but not with as *much* of either as I remember from the telecast. Listening to Mercer on records was never as moving and enthralling an experience as catching her at work in a small room. Much of her artistic magic emanated from her presence. Sinatra has made better records than Mercer, but he too is quintessentially a public performer. Without his visible, vibrant presence, his facial expressions and gestures, something is missing.

Still, the new album is vocally fascinating, with a sound hardly credible from a singer who has lived as long and sung as much as Sinatra has. One might say the same of the late records of Bing Crosby, Perry Como, and Fred Astaire, but they never gave their voices the hard usage Sinatra has given his. His basic pitch has fallen, as it does with all aging singers, and there is audible strain on the baritone E-flat, E, and F. But Sinatra manages to work the strains into the lyrics, making a virtue of a deficiency. He is now more bass-baritone than baritone, and some of these songs might have been sung more comfortably in lower keys. But he still commands a good two octaves, and at the end of the concluding medley, after having reached for and gotten a high F-sharp, he makes an astonishing glide down to a basso E-flat! Some singer!

-Henry Pleasants

FRANK SINATRA: She Shot Me Down. Frank Sinatra (vocals); orchestra. Good Thing Going; Hey Look, No Crying; Thanks for the Memory; Bang Bang (My Baby Shot Me Down); Monday Morning Quarterback; South—to a Warmer Place: I Loved Her; The Gal That Got Away/It Never Entered My Mind. REPRISE FS 2305 \$8.98, © F5 2305 \$8.98. bum sounds like three-year-old stuff that's been left in a drawer. Even disco enthusiasts will agree that the genre needs freshening up to compete with other dance-oriented music these days. Nobody told Kool, apparently. These are nearly all monotonous, thumpy productions of songs about steppin' out an' gettin' down. No Show is the one exception. With its clever lyric and inventive arrangement, it soars above the rest. Lead singer James "J.T." Taylor is as smooth and easy as ever. His Nat Cole warmth, especially in ballads, deserves to be nurtured, but the Gang desperately needs a new musical perspective. -Irv Cohn

ALVIN LEE: RX5. Alvin Lee (vocals, guitar); vocal and instrumental accompaniment. Hang On; Can't Stop; Nutbush City Limits; Fool No More; Double Loser; and five others. ATLANTIC SD 19306 \$8.98, © CS 19306 \$8.98, © TP 19306 \$8.98.

Performance: Good Recording: Good

Alvin Lee is a good guitarist, all right, but with two exceptions this album suffers from overly predictable material, particularly Hang On (written by band member Steve Gould) and Rock and Roll Guitar Picker (written by Lee). Tired song concepts tend to make a band sound tiresome. Things perk up notably with Lee's version of Tina Turner's Nutbush City Limits, which is not as sexy as her original but is played and sung with the same aggressive swagger. The best track is Lee's own Can't Stop, a mediumtempo number with a vocal hook that reminds me of both Exile's Kiss You All Over and Ace's How Long. Lee's fervent solo suggests there's some real emotion going on inside him. Too bad the rest of the album doesn't measure up. J.V.

RECORDING OF SPECIAL MERIT

BARRY MANILOW: If I Should Love Again. Barry Manilow (vocals, piano); orchestra. The Old Songs; Let's Hang On; Break Down the Door; Fools Get Lucky; No Other Love; and five others. ARISTA AL 9573 \$8.98, © ACT 9573 \$8.98, ® A8T 9573 \$8.98.

Performance: Excellent Recording: Very good

Say what you will about Barry Manilow and just about everyone has, including the pop elitists who claim that while Manilow may be all right, they just wouldn't want their kid sisters to go to one of his concerts—you have to admit he has the true pop touch. Even in such hard-breathing efforts as his own I Haven't Changed the Room or If I Should Love Again, there's a nice edge of humor and lightness. He seems to be having fun no matter how intense the material. Always present in his work is the joy of a musician making music, his music, and to hell with the critics.

Nowhere is Manilow's genial looseness more evident than in his rip-roaring runthrough here of the 1965 hit *Let's Hang On* (for which he obligingly provides the twenty-four, count 'em, tracks of background vocals). The rhythm-track arrangements in several of the songs are, as usual, models for the best in mainstream pop today. Unlike many of his contemporaries, Manilow never plays down to his audiences, nor does he attempt to flatter or cajole them (as Neil Sedaka sometimes does). Rather, he seems unabashedly content simply to try to entertain them at the same time he's entertaining himself. He usually succeeds. *P.R.*

THE STEVE MILLER BAND: Circle of Love. The Steve Miller Band (vocals and instrumentals). Heart Like a Wheel; Get On Home; Baby Wanna Dance; Circle of Love; Macho City. CAPITOL ST-12121 \$8.98, © 4XT-12121 \$8.98, ® 8XT-12121 \$8.98.

Performance: Stuff and nonsense Recording: Very good

The best part of this is the rainstorm at the end of Macho City, which, occupying all of side two, is eighteen minutes of doggerel and sound effects. Apparently Steve Miller was trying for a kind of short-haired psychedelia. The thing is well produced, and there are some bright instrumental moments in Heart Like a Wheel (this is not the one by Anna McGarrigle) and some more conventional psychedelic-style instrumental fooling around at the end of the title song, plus all the pretentious nonsense on side two. But even at his best (the two songs just mentioned), either Miller presumes his listeners can block out his lyrics from their heads or else he presumes his listeners are double-digit-IQ mouth breathers. The words are pretty hard to ignore, as he mixes the vocals up where you can hear them. Anyone who hears this stuff and doesn't feel patronized is probably too naïve to survive

in this world. So where does that leave the rest of us? N.C.

GARY NUMAN: Dance. Gary Numan (synthesizers); instrumental accompaniment. Slowcar to China; Night Talk; A Subway Called 'You'; Cry the Clock Said; She's Got Claws; Crash; Boys Like Me; and four others. ATCO SD 38-143 \$8.98, © CS 38-143 \$8.98, © TP 38-143 \$8.98.

Performance: Chilling Recording: Excellent

Gary Numan's "Dance" is one of the most disturbing yet fascinating albums I've ever heard. The music blends layers of oozing, ticking, almost biorhythmic electronic sound with bizarre, disembodied vocals that expand upon David Bowie's "Ziggy Stardust" conceit. Numan's unblinking vision looks out on a bleak, surreal landscape, a night world of reptilian emotions where men and women transact a desolate commerce: men as prostitutes among women who are cruel, bored, lonely. The lyrics retreat from fully shaped ideas, instead stringing together dark, puzzling, abrupt images. It's as if Numan were unable or unwilling to make more than tentative stabs at coming to grips with his surroundings.

The album's ironic title (there isn't a single track here that is remotely danceable) comes from the running theme of dance as a metaphor for sex and love. There is something false, or at least artificial, about Numan's vision. yet it seems more real than just about anything else I've heard recently. To say that it is extreme, even one-dimensional, is to understate the case. That I like it I find surprising and sobering. M.P.

RECORDING OF SPECIAL MERIT

PENGUIN CAFE ORCHESTRA. Penguin Cafe Orchestra (instrumentals). Air à Danser; Yodel 1; Walk Don't Run; Paul's Dance; Telephone and Rubber Band; Cutting Branches for Temporary Shelter; Pythagoras's Trousers; Numbers 1-4; and seven others. EDITIONS E.G. EGM 113 \$8.98.

Performance: Spirited Recording: Very good

This charming, almost hypnotic album suggests what might happen if a string group like David Grisman's were plopped down in a rural English pub and plied with two or three rounds before they'd played a note. "Penguin Cafe Orchestra" might be classified as a modern-day tavern divertimento: a little swing, a little folk, a little rock, even a sprinkling of Cajun-and all a little spaced out. The compositions are clever, the solos inventive and full of surprises. The Penguins may not hit every note, but they go after them all with abandon and have a lot of fun in the chase. The tunes are played on a wide assortment of odd and oddly compatible instruments, including ukulele, telephone, ring modulator, rubber band, accordion, oboe, penny whistle, violin, and the more conventional guitar and piano. The (Continued on page 107)

Stereo Review of the Accurate Accurate Stereo Review of the Review of the Accurate Accurate Street Accurate Street Accurate Street Accurate Accurat	TORS AND TECHNICAL STAFF OF STEREO W PRESENT THE MOST COMPRIHENSIVE, E AND EASY-TO-USE TEST RECORD EVEN TI4-A HAS BEEN REVISED AND UPDATED ORIGINAL SRT14 VERSION USING MORE TIED TEST SIGNALS TO MAKE THE JOB OF EVALUATING YOUR SYSTEM EVEN EASIER. SRT14-A record contents
This latest version contains everything you need to get the fullest, most realistic reproduction from your stereo equipment. Whether you've spent thousands on your stereo system or have a more modest setup, the SRT14-A is an indispensable tool for helping you realize the full potential of your equipment. Best of all, you don't have to be an electronics engineer to use it. You can actually perform a complete stereo system checkup by ear alone. A test lab in a record jacket Employing the most advanced recording, mastering, and pressing technics, the Stereo Review SRT14-A is produced to strict laboratory standards. Engraved in its grooves are a series of precisely recorded test tones, trequency sweeps, and pink noise signals that enable you to accurately analyze and check your stereo system for: Prequency response. Stereo separation. Cartridge tracking ability. Channel balance. Hum and nolse, including	CARTRIDGE TRACKING, HIGH FREQUENCY FREQUENCY RESPONSE, 20 kHz to 25 Hz SEPARATION, LEFT-TO-RIGHT SEPARATION, RIGHT-TO-LEFT CARTRIDGE TRACKING, LOW FREQUENCY CHANNEL BALANCE CARTRIDGE TACKING, LOW FREQUENCY CHANNEL BALANCE COULT AND SPEAKER PHASINE LOW-FREQUENCY NDISE TURNTABLE FLUTTER FREQUENCY-RESPONSE SWEEP, 500 TO 20,000 Hz, LEFT CHANNEL FREQUENCY-RESPONSE SWEEP, 500 TO 20,000 Hz, LEFT CHANNEL FREQUENCY-RESPONSE SWEEP, 500 TO 20,000 Hz, LEFT CHANNEL FREQUENCY-RESPONSE SWEEP, 500 TO 20,000 Hz, LEFT CHANNEL STANDARD "A" STANDARD "A" CHROMATIC OCTAVE FLUTTER AND SPEED ACCURACY FNe final step Start getting the most out of your stereo system. Make the SRT14-A your next record purchase. Just complete the coupon and mail it along with your remittance today!
turntable rumble. Standards, and moremuch more. Step-by-step instructions Included with SRT14-A is a detailed instruction manual, complete with charts, tables, and diagrams. This takes you step by step through the test- ing process. It explains the significance of each test. It tells you what to listen for. It clearly describes any aberrations in system response. And it details corrective procedures. For professionals too The usefulness of the SRT14-A is not confined to the nontechnical lis-	Test Record. Dept. 30013, P.O. Box 278, Pratt Station, Brooklyn, NY 11205 Please send SRT14-A Sterec Test Records @ \$9.95 eacut(\$11.95 outside U.S.A.) Enclosed is S VISA MasterCard Diners Club American Express Account # Exp. Date
the usefulness of the SATI4-A is not commed to the horizontal his- tener. Included on the record are a series of tests that call for the use of sophisticated measuring instruments, such as oscilloscopes, chart re- corders, and distortion analyzers. These tes's permit the advanced audio- phile and professional to make precise measurements of transient response, recorded signal velocity, anti-skating compensation, 1M distortion, and a host of other performance characteristics.	Signature Print Name Address City/State/Zlp Residents of CA, CD, DC, FL, HL, MA, MI, MO, NJ, NY State, OH, SC, TN, and VT add applicable sales tax.



Tim Hardin Remembered

T HE idea of someone literally killing himself for his art, his work, whatever one calls it, probably strikes the early Eighties as romantic nonsense. And maybe it is. Surely we were too romantic for our own good a decade or so ago, and romanticism just as surely has its perverse side in which self-destructiveness is somehow attractive. The late Tim Hardin made a wry comment about this in a song called *Black Sheep Boy*: "I'm the family's unowned boy/Golden curls of envied hair/Pretty girls with faces fair/See the shining black-sheep boy."

But the "realism" of the Eighties has its perverse side too. Cynicism sticks to it just as idealism stuck to all that romanticism we threw out, and cynicism is, of course, an excuse for doing nothing about anything.

Tim Hardin died of a heroin overdose in December 1980, the same month John Lennon was assassinated. That Hardin was a romantic was obvious in his work, as can be verified by listening to "The Tim Hardin Memorial Album," a new Polydor collection of some of his best-known songs. (All of Hardin's albums were out of print at the time of his death.) His work was not idealistic in narrow political terms but aesthetically, in the manner of Byron and Van Gogh; he had a passion for examining how people work, and therefore how the world does. And in the manner of Byron and Van Gogh and countless other romantics before him, he sought an edge. But, as we all know now, edges can cut.

That Hardin's death related directly to his art is, of course, not provable. But anyone who has worked in music and aspired to be something more than a hack knows that getting beyond yourself—which an artist inevitably attempts to do—is to get into scary territory. John Lennon had enough of a balance between cynicism and romanticism—and, up to a point, enough luck—to keep things in perspective and stay off hard drugs. But Hardin was, as you can hear in his singing voice, a tangle of vulnerability.

The details of his addiction that have been made public are sketchy. At one point in England, where he was based for seven years starting in 1971, he was said to be taking a "sleep cure" for it. His life up to then had been what the Chinese would call interesting (as in the curse, "May you live in interesting times").

IM HARDIN was born in Oregon. His father was a bass player and later a realestate salesman; his mother was concertmistress of the Portland Symphony. He was a bona fide descendent of the outlaw John Wesley Hardin. He served a hitch in the Marines, of all things. Indeed, the memorial album's liner notes (by PolyGram Records vice president Len Epand) say that Hardin's platoon corporal was, in the late Fifties, the first American casualty of what later became known as the Vietnam War.

Hardin made the folk scenes in Greenwich Village and Cambridge, and he pioneered the kind of thing Tim Buckley, John Martyn, and others were to take to their bosoms, a sort of merger of the folk and jazz sensibilities. The memorial album includes two songs from the album "Tim Hardin 4" (the last and poorest-selling one he made for Verve), How Long and Hello Baby, that offer some insight into how he came to embrace jazz phrasings by way of the blues. But his best songs—If I Were a Carpenter, Reason to Believe, Don't Make Promises, How Can We Hang On to a Dream, Lady Came from Baltimore—were expressions of the folk romanticism that helped define the late-Sixties American troubadour.

The memorial album's selections were recorded between 1966 and 1970, so the production isn't up to today's standards. But the songs remain fresh and poignant, and Hardin's own versions are definitive, although they never sold as well as other people's (Johnny Cash's Carpenter, Rod Stewart's Reason to Believe, etc.). His songs and his singing were all of a piece. Where other singers' voices flow out relaxed and maybe a trifle unconcerned, Hardin's sounded squeezed out, painfully, a raw spot scraped along every nuance. Yet he didn't ask for pity or even mercy; what he conveyed to you, by style as much as content, was that some other romantic out there knew how it felt.

There is something mystical about a high percentage of the relatively small number of songs Hardin left us. If we could talk precisely about it, I suppose there wouldn't be a need for music, but it probably has to do with poetic ambiguity. I can listen to some of his pieces for the hundredth time and still get new ... what? Not ideas, exactly, and not exactly feelings either, but little twinges of something that contains elements of both. Nostalgia has little to do with it. The songs do evoke memories of what was happening when I first heard them, but that's only because both the stuff going on then and the songs made big impressions on me. The songs aren't about any of that stuff, though. They're about human nature and, for want of a better name, Something More.

NowADAYS, at least on the surface, we seem to have deliberately unlearned the few things we learned at the time these songs were written. But that's not really the case. In some ways we have muddled toward a better understanding. We did impose some standards on occupants of the White House, and we no longer become violent about one another's haircuts, among other things. Tim Hardin was part of a milieu that did something for us, and individually he did a great deal for us. Maybe he tried to do too much. —Noel Coppage

TIM HARDIN: Memorial Album. Tim Hardin (vocals, guitar); instrumental accompaniment. If I Were a Carpenter; Black Sheep Boy; Misty Roses; Green Rocky Road; How Long; Don't Make Promises; Smugglin' Man; Hello Baby; Reason to Believe; How Can We Hang On to a Dream; Lady Came from Baltimore; It'll Never Happen Again. POLYDOR PD-1-6333 \$8.98, © CT-1-6333 \$8.98, @ 8T-1-6333 \$8.98. record may be hard to come by, but it's worth the effort of tracking it down. There's plenty of lighthearted, engaging music here to reward the search. M.P.

RUSH: Exit... Stage Left. Rush (vocals and instrumentals). The Spirit of Radio; YYZ: A Passage to Bangkok; Jacob's Ladder; The Trees; Xanadu; Free Will; Tom Sawyer; and five others. MERCURY SRM-2-7001 two discs \$12.98, © MCR4-2-7001 \$12.98, ® MC8-2-7001 \$12.98.

Performance: Good Recording: Good

Rush is a hard-working, carnest, and youthful trio from Canada that has built a growing audience over the past few years. Their songs are ambitious and fantastical without being pompous, so they don't quite fit into the (shiver) "art-rock" category. They're beginning to push at the inherent limitations of the trio format, however-you can do only so much with just bass, drums, and lead guitar no matter how much noise you make (as witness Cream and Grand Funk Railroad). Rush really needs a bigger sound to match their imagination. As it is, after a while the earnestness and energy begin to pall, especially on a two-disc live album like IV this one.

ROD STEWART: Tonight I'm Yours. Rod Stewart (vocals); vocal and instrumental accompaniment. How Long; Tear It Up; Young Turks; Jealous; Just Like a Woman; Never Give Up on a Dream; and four others. WARNER BROS. BSK 3602 \$8.98, © M5 3602 \$8.98, © M8 3602 \$8.98.

Performance: Pro at work Recording: Good

I have never heard a convincing argument against a musician's earning a living—even if he has committed the sin of becoming a superstar—so I don't agonize much over Rod Stewart's alleged artistic decline. He is still a highly professional and occasionally very exciting singer, as this latest album released to coincide with his recent tour abundantly demonstrates.

Of course, there is some of his usual schlock (the title song and the hit single Young Turks), but Stewart's career at this point depends on his purveying a certain amount of prurient pap. Then there are the songs meant less for recording than their effect in live performances, the maudlin ballad Sunny and the raving Out with the Boys (on which his back-up band tries its damnedest to sound like the Rolling Stones). What saves the album are the cuts where Stewart is more relaxed and sings with some of his old fire. Not surprisingly, these selections are rock standards: Dylan's Just Like a Woman, Johnny and Dorsey Burnette's Fifties classic Tear It Up, and How Long, a minor masterpiece from the early Seventies by the now-defunct group Ace.

Stewart may not be artistically ambitious these days, but how many established stars are working as hard to stay in place? J.V.

LUTHER VANDROSS: Never Too Much. Luther Vandross (vocals); vocal and instrumental accompaniment. Never Too Much; Sugar and Spice (I Found Me a Girl); She's a Super Lady; You Stopped Loving Me; A



2 OZ. PRODICY

If you think lightweight headphones mean lightweight sound, prepare to be amazed.

They're the incredible new HD 40, Sennheiser's latest-and lightest-Open-Aire® model. With the electrifying clarity and definition that earned their forerunners world renown. Plus the wide frequency response and natural dynamic range that are Sennheiser trademarks.

Come hear Sennheiser's latest triumph at your dealer today. The price is so modest, you won't feel anything but the music.

ELECTRONIC CORPORATION 10 West 37th Street, New York 10018 (212) 239-0190 Manufactung Plant: Bissendori/Hannow, West Germany

Sennheiser Electronic Corporation (N.Y.)

CIRCLE NO. 30 ON READER SERVICE CARD

House Is Not a Home; and two others. EPIC FE 37451, © FET 37451, ® FEA 37451, no list price.

Performance: Less than expected Recording: Very good

Luther Vandross has gotten a lot of attention for this debut album, thanks largely to ample airplay and hard-hitting promotion. Some of his admirers have been fans since he was a back-up singer for David Bowie, Bette Midler, and Roberta Flack. He is credited with having helped shape the basic vocal sound for such runaway pop groups as Chic and Kleer, and some have even gone so far as to compare him with the incomparable Al Jarreau.

Well, I don't mean to be a spoiler, but I was mightily disappointed by this album. Admittedly, Vandross has a very appealing, resonantly full, and flexible singing voice, but his material (he wrote most of the songs) and interpretation are hardly anything to shout about. They merely reflect currently popular, highly commercial r-&-b with little that's at all new or special. The one saving grace here, which almost makes the record worth its price, is the final track, a truly wonderful rendition of the Burt Bacharach/Hal David standard A House Is Not a Home (long identified with Dionne Warwick). Here Vandross does ascend to the heights of imagination occupied by top performers like Jarreau; he sings the lyrics with such stinging intensity that the listener is set aquiver. It whets my appetite to discover what else he might have to offer beyond the superficial. P.G.

RECORDING OF SPECIAL MERIT

VANGELIS: Chariots of Fire. Vangelis (instrumentals); vocal accompaniment. Titles;

Five Circles; Chariots of Fire; and four others. POLYDOR PD-1-6335 \$8.98, © CT-1-6335 \$8.98, © 8T-1-6335 \$8.98.

Performance: Fresh and vital Recording: Topnotch

Vangelis will be familiar to many for his big, symphonic main theme for the PBS series Cosmos, and his electronic score for Chariots of Fire, a British film about the 1924 Olympics, can only add to his growing reputation. Half of this album consists of music from the film soundtrack—including an arrangement of Charles Hubert Parry's famous (in England) choral song Jerusalem that is performed by the Ambrosian Singers. The other half is Vangelis' own synthesis of his music for the film into something like a piano concerto.

While the film score is big and ambitious, it avoids the excesses of, say, John Williams' Star Wars and Superman. The music is very much in Vangelis' style, yet it is perfectly suited to the action and atmosphere of the film, with gorgeous pastoral melodies that capture the feel of England between the wars. The themes are simple, almost hymn-like, but sumptuously augmented by rich electronic effects, including what sounds like swelling strings and thrumming percussion. The reworking of the same material on side two is less successful. It isn't a bad idea to try to make film music into something more durable, but in this case the arrangement is overblown and the result pretentious. Kudos, though, for the sound. The bass is impressive, and the clarity is just about perfect throughout the wide dynamic range.

-Irv Cohn

NEIL YOUNG AND CRAZY HORSE: Reactor (see Best of the Month, page 78)





RECORDING OF SPECIAL MERIT

AT HOME ABROAD (Howard Dietz-Arthur Schwartz). Archival reconstruction of the 1935 production. Eleanor Powell, Ethel Waters, Beatrice Lillie, Reginald Gardiner, others (vocals); Cicely Courtneidge, Ivor McLaren, Lawrence Green (actors); Tommy Dorsey and His Orchestra; Russell Wooding and His Orchestra; Arthur Schwartz (piano). SMITHSONIAN COLLEC-TION R 024 \$8.98 (plus \$1.00 shipping and handling from Smithsonian Recordings, P.O. Box 10230, Des Moines, Iowa 50336).

Performance: Resourceful Recording: Well dubbed

The Smithsonian Institution's latest "archival reconstruction" is of the 1935 Broadway revue At Home Abroad. Those who saw one of its 198 performances in the depths of the Great Depression (they had to reduce prices from \$4.40 tops for an orchestra seat to \$3.30 to keep the show going) still number it among the happiest experiences of their lives. There was Beatrice Lillie swinging in front of a Moulin Rouge poster singing Paree, performing her hilarious sketch about the lady in a London department store trying to buy a "dozen double damask dinner napkins," and popping up amid the "Ladies of the Ensemble" in their cherry blossoms and lacquered wigs to warble Get Yourself a Geisha. There was Eleanor Powell tapping to Got a Bran' New Suit, Ethel Waters as the Empress Jones, and Reginald Gardiner turning himself into a train.

Fortunately, the songs by Miss Lillie and Miss Waters were made available to the Smithsonian by the Liberty Music Shop, which has been selling its own recordings of them through the years. Mr. Gardiner's Trains can be heard courtesy of Decca, and Eleanor Powell, taps and all, with Tommy Dorsey and His Orchestra in several lively numbers, appears here thanks to RCA. Nancy Dussault, by arrangement with Monmouth-Evergreen, winsomely sings Love Is a Dancing Thing. Not so fortunately, it isn't Lillie herself but Cicely Courtneidge, dubbed from an old HMV disc, who is heard here, less sensationally amusing, in Dinner Napkins, and things kind of peter out a bit in the end with composer Arthur Schwartz at the piano muttering several reprises instead of a big smash ensemble finale. These reconstructions lack the flow and unity of the latter-day original-cast recordings to which we've become accustomed. Even so, the album affords more than a hint of the charms which turned At Home Abroad into a legend. The photographs and text are up to the usual high Smithsonian standard, and Stanley Green's

notes are full of absorbing information and intriguing sidelights. *P.K.*

BUSTIN' LOOSE. Original-soundtrack recording. Roberta Flack (vocals, piano); vocal and instrumental accompaniment. MCA MCA-5141 \$8.98, © MCAC-5141 \$8.98, @ MCAT-5141 \$8.98.

Performance: Very good Recording: Good

Roberta Flack has not had much luck with her recordings lately, but this soundtrack album from Richard Pryor's film *Bustin' Loose* may just change that. Sure, there are a couple of instrumentals that give away the original purpose of the music, but they are not of the trite banjo-down-the-highway variety, and one, *Qual e Malindrinho*, is even rather nice. However, it's the ballads that carry this album, and Roberta Flack can sing a ballad. I particularly like the two songs she co-wrote with singer Eric Mercury, *Just When I Needed You* and *Love (Always Commands)*.

Peabo Bryson sings Ballad for D (dedicated to the late Donny Hathaway); it is his only input here, but you will want to hear it more than once. Also involved in this set is Barry Miles, whose handling of a keyboard I have previously likened to an elephant with vertigo stomping through a china shop. Well, I always knew that jazz was not the right idiom for Miles, but I was wrong to think he ought to get out of music altogether. He has found his niche in commercial, mellow funk. If you have a taste for that, you'll like this album. C.A.

COLLECTION

RECORDING OF SPECIAL MERIT

AMERICAN MUSICALS: Jule Styne. Bells Are Ringing: Gypsy; Funny Girl. Original-cast recordings. TIME-LIFE STL-AMO5 three discs \$24.95, © STL-AMO5 \$27.95 (plus \$2.81 postage and handling charge from Time-Life Records, 541 North Fairbanks Court, Chicago, Ill. 60611).

Performance: Definitive Recording: Still very good

After seeing Gypsy, Kenneth Tynan wrote that Jule Styne was "the most persistently underrated of all popular composers." After listening to this rerelease package of three of Styne's most memorable Broadway shows, I think I agree with Tynan. Melody after melody pours out here from the Styne treasury: Just in Time and The Party's Over from Bells Are Ringing, Everything's Coming Up Roses and Small World from Gypsy, People and Don't Rain on My Parade from Funny Girl. These aren't just "tunes," nor are they "Broadway Art Songs"; they are luminescent examples of the American lyric theater at its best.

All three shows were star vehicles with much of the material written specifically for their leading ladies. The much-missed Judy Holliday, star of the 1956 Bells Are Ringing, had vocal equipment that was less than overpowering, but she shines authentically throughout this recording, not only because of her tailor-made lyric material (especially I'm Goin' Back "to the Bonjour Tristesse Brassiere Company"), but because the music Styne wrote for her captures the warmth and wistfulness that were just below the surface of her comedy.

Gypsy is probably Styne's masterpiece. Ethel Merman insisted that he be hired to write the music even though the original plan was for Stephen Sondheim to provide both words and music. The result of the triple collaboration of Merman, Styne, and Sondheim is a recording that is as shattering a theatrical experience, nearly twentyfive years later, as it was on the day it was released. Certainly Merman's blazingly ferocious performance here is the best thing she's ever done on records. She had the best role of her career, knew it, and slammed across her unforgettable songs—Some People, Small World, You'll Never Get Away from Me, and the demonic Rose's Turn—with a power and conviction that lifted her performance into the once-in-a-lifetime category.

Funny Girl was Streisand's second Broadway show, her first in a leading role, and the one that sent her career into orbit. Of the three shows in this package it seems the most dated, perhaps because of the overfamiliarity of so much of the special material, particularly *People*. Still, the recording is a stunning souvenir of a Star Being Born, and Streisand's virtuoso performance remains full of comic wonder and dramatic power. *P.R.*

(Continued on page 111)



Perfect piston motion. The new ULTRA Tweeter vibrating at 3kHz.



The COMPLETE BUYER'S GUIDE TO STERED/HI-FI EQUIPMENT calls it "the technology of today."

We call it ULTRA^{**}: our exclusive Ultraaccurate Laser Topographic Response Analysis system. A computerized laser interferometer that lets our speaker designers see, for the first time ever, the vibrating surface of a speaker diaphragm, frozen n time and magnified for detailed examination. Yielding the secrets of how best to determine critical

dimensions, select moterials and modify physical ard electrical characteristics. The result? The

following quotes from the COMPLETE BUYER'S GUIDE review of the new Ditton 100 loudspeaker, designed with ULTRA, speak for themselves: "There is a tendency to compare all speakers in this configuration to the LS3/5A, and that's not really a fair test the latter speaker costs well over twice what Celestion asks for the Ditton 100" Nonetheless... the Celestion was the clear winner in high frequency response, apparent deep bass, and—to the ears of half a dozen critical listeners—overall sound quality.

... Celestion has managed to achieve better results for less money using the technology of today. And that, friends, is what audio is still all about: bringing fine sound within the reach of all who have the desire to hear it."

Audition the Ditton 100 or one of the other superb Dittons at your Celestion dealer. And discover why the COMPLETE BUYER'S GUIDE closed their review with: "Brazo Celestion!"



*Celestion's suggested retail price: \$130.

Celestion Speakers Kuniho m Drive, Box 521, Hol iston, MA 01746

@1982, Celestion Industries, Inc.

CIRCLE NO. 43 ON READER SERVICE CARD

THE new "Stop and Smell the Roses" is the best album that Ringo Starr has ever made, mostly because he's allowed to be himself. Nobody—not even a fan like me—would claim that Ringo's a versatile singer, but he is certainly a charming entertainer and a real personality. Remember the Liverpudlian sense of humor that, among other things, made the Beatles so endearing in their early days? Well, Ringo

Drumming Is My Madness), two by George Harrison (Wrack My Brain, You Belong to Me), one by Stephen Stills (You've Got a Nice Way), and one by Ringo and Ron Wood (Dead Giveaway).

McCartney's contributions are disappointing. Even when he's trying to write specifically for Ringo, he has trouble hearing past the sound of his own voice. Both Attention and Private Property are bur-



Ringo Smells the Roses

never lost it, and here he has a chance to display it. He also takes on the songs with a gusto that is largely missing on his previous solo albums.

"Stop and Smell the Roses" is a potpourri of tracks produced by various folks, and the lack of a single producer trying to impose order on the proceedings works to Ringo's advantage. No one connected with the album was especially concerned about its being cohesive—or even coherent. It is madcap, funny, rowdy, spiteful, nostalgic, and convincing.

Three of the cuts were produced and/or written by Paul McCartney (Private Property, Attention, Sure to Fall), three by Harry Nilsson (Stop and Take the Time to Smell the Roses, Back Off Boogaloo, dened with arrangements featuring overdubbed saxes to create a "big-band" effect. Private Property caters to Ringo's limited vocal range so cautiously that he sounds stifled. Attention has admirable construction, but the modulations are tricky for Ringo, who's usually a by-the-note singer rather than an interpreter. The third McCartneyproduced cut-this one successful-is the old Carl Perkins rockabilly ballad Sure to Fall, which the Beatles kept in their stage act for years with John and Paul singing double lead. The version here is more relaxed in tempo and includes a sing-along vocal chorus, lots of happy chatter in the background, and two solos on pedal-steel guitar by that Nashville great Lloyd Green.

George Harrison produced the 1952 chestnut You Belong to Me as a gag, and Ringo runs through it with a vaudevillian geniality. Much less genial is Harrison's own Wrack My Brain, an exasperated and irritable attack on Beatles crazies who live in the past: "What I have you don't want/ What you want I can't give/I got out of touch with you and yours/The way that you live.... [T]here's no way I can see/Coming up with something you'd enjoy/As much as TV." That just about says it all.

HARRY NILSSON hasn't been heard from much lately, but his contributions here provide most of the antic moments. Drumming Is My Madness is pure flapdoodle. There are no real lyrics, only disconnected phrases backed up by a Van Dyke Parks arrangement for a ten-piece orchestra with Ringo singing and drumming along in giddy glee. Back Off Boogaloo is a surreal reprise of Ringo's 1971 hit single with Nilsson vocally interpolating snatches of Beatles tunes in a manic manner. Stop and Take the Time to Smell the Roses gives Ringo a long spoken monologue wherein, like a stump preacher, he exhorts the listeners to stop everything they're doing and buy the album, concluding with, "I'm going crazy with this record business-I want to stop-you want me to stop it-everybody wants it to stop!"

Ringo and Ron Wood co-wrote and coproduced the ominous *Dead Giveaway*, about a loser living off a reputation that has long since run out. This is the most compelling track on the album. You've Got a Nice Way by Stephen Stills and guitarist Michael Stergis is the most romantic. It has Stills' modal trademarks and tight harmony back-up singing balanced with Ringo's straightforward sincerity.

T has long been assumed that Ringo was the Beatle who most needed the association, but that's just not true. In the last ten years he's had more hit singles than any other ex-Beatle except Paul, he has been praised for his comedic acting skill in films, and he has turned into a capable songwriter. Don't forget that it was Ringo who wrote *Early* 1970, an affectionate but realistic portrait of his fractious comrades, and that he has since written or co-written most of his own hits. Ringo hasn't had any trouble making it on his own.

"Stop and Smell the Roses" is simultaneously Ringo's farewell to Beatledom and a display of his own strengths as an entertainer, which are considerable. And I also think—listen careful, now—that he's a good drummer. —Joel Vance

RINGO STARR: Stop and Smell the Roses. Ringo Starr (vocals, drums); Paul McCartney (bass, piano); George Harrison (guitar); Ron Wood (guitar, bass, saxophone); Stephen Stills (guitar); other musicians. Private Property; Wrack My Brain; Drumming Is My Madness; Attention; Stop and Take Time to Smell the Roses; Dead Giveaway; You Belong to Me; Sure to Fall; You've Got a Nice Way; Back Off Bugaloo. BOARDWALK NBI-33246 \$8.98, © NBT-33246 \$8.98.



COLLIER AND DEAN: Whistling Midgets. Tom Collier (vibraphone, marimba); Dan Dean (bass); Don Grusin (Fender Rhodes); Alex Acuna (drums, percussion); Gary Herbig (saxophones); Norman Durkee (keyboards); other musicians. San Juan; Sunrise; Old Friends and Relatives; Fog Tight; Cowboys and Christians; and four others. INNER CITY IC 1126 \$7.98, © TIC 1126 \$8.98.

Performance: Very good Recording: Very good

Vibraphonist Tom Coller and bassist Dan Dean have long been "studio buddies," playing behind such notables as Ry Cooder, Peggy Lee, Shelly Manne, B. B. King, and Olivia Newton-John as well as on soundtracks and in jazz and symphonic concerts. Their own music is an ingratiating mixture of very listenable jazz slightly flavored with pop. Both of them are talented composers (all the material here is theirs), and the worthy group they've assembled around them plays in a relaxed, confident, and occasionally frisky way.

Sunrise is my choice for the best cut on "Whistling Midgets," followed by the title tune and with A Song for M running a close third. Their music doesn't make any demands, but Collier and Dean take such an evident delight in playing it that you can't help delighting in hearing it. J.V.

RECORDING OF SPECIAL MERIT

JOE DERISE: House of Flowers. Joe Derise (vocals, piano); Bill Popp (bass). Minstrel Man; Sophisticated Lady; East Side of Heaven; If I Had a Talking Picture of You; I'm in Love with Someone; Blues My Naughty Sweetie Gave to Me; and five others. AUDIOPHILE AP-153 \$7.98 (from Audiophile Records, 3008 Wadsworth Mill Place, Atlanta, Ga. 30032).

Performance: Charming Recording: Good

Joe Derise gives his songs a warm hug, squeezing every drop of meaning out of their lyrics. As one might expect from someone so caring, he also chooses his material with a keen ear, and you can hear the results of his musical love affair on only a couple of albums in the current catalogs, a lovely Inner City set called "I'll Remember Suzanne" (IC 4003) and this new, more intimate, live session, "House of Flowers," recently released by Audiophile. This one includes four Derise originals, three familiar favorites (including the rarely recorded If I Had a Talking Picture of You), an obscure Cole Porter tune, and some songs that will have you wondering why you haven't heard them before. It all adds up to a very personal set, loaded with charm. Derise's first recordings appeared on a Bethlehem album in 1955 and a 1958 set with the Australian Jazz Quartet, and then he disappeared for close to twenty-five years. I hope he makes more than the two albums this time around. C.A.

RECORDING OF SPECIAL MERIT

DUKE ELLINGTON: Symphony in Black. The Smithsonian Jazz Repertory Ensemble, Gunther Schuller cond. Symphony in Black; Night Song; The Clothed Woman; I'm Beginning to See the Light; and three others. SMITHSONIAN COLLECTION N1024 \$8.98 (plus \$1 postage and handling from the Smithsonian Collection, P.O. Box 10230, Des Moines, Iowa 50336).

Performance: Devilishly Dukish Recording: Excellent remote

This album captures a concert by the Smithsonian Jazz Repertory Ensemble held in the Museum of Natural History in Washington, D.C., almost two years ago, and it takes its name from an extended work that occupies all of the second side. Symphony in Black-probably performed here for the first time in its entirety-was written by Duke Ellington for a 1935 Oscar-winning musical short that also featured teenager Billie Holiday. It is a kind of suite divided into four main sections, and it sounds like an early blueprint for later works-most notably Black, Brown and Beige. Some of this music subsequently appeared out of context under more familiar titles; thus Dance is Ducky Wucky, Harlem Rhythm is Merry Go Round, and Big City Blues is The Saddest Tale. Big City Blues features a vocal by Beverly Rohlehr, who, like so many singers Ellington himself hired, has a lackluster voice and no discernable style.

The Ellington orchestra was unique, and conductor Gunther Schuller makes no attempt to imitate it. But the Smithsonian Jazz Repertory Ensemble does reasonably and splendidly re-create the essence of early and middle Duke. Mike Abene does a fine job at the keyboard, and there is good solo work by such players as Lew Soloff, Sal Nistico, Jimmy Knepper, and David Berger, but the most outstanding individual here is saxophonist Bob Wilber, who wears Johnny Hodges' hat as well as he does Sidney Bechet's, yet is indisputably Bob Wilber. Granted, as long as we have good recordings of the originals, "re-creations" are more valid as stage presentations than recordings, but this is one live performance that merited preservation. C.A.

RECORDING OF SPECIAL MERIT

DAVE FRISHBERG: The Dave Frishberg Songbook. Dave Frishberg (vocals, piano); instrumental accompaniment. I'm Hip; A Little Taste; Z's; Sweet Kentucky Ham; Do You Miss New York?; and five others. OM-NISOUND JAZZ N-1040 \$8.98 (from Waring Enterprises, Inc., Delaware Water Gap, Pa. 18327).

Performance: Intimate wit Recording: Good

I haven't seen Dave Frishberg since I produced an album featuring him with Bud





BOBBI ROGERS

GENE BERTONCINI

Rogers/Bertoncini

BOBBI ROGERS' second album, "Crystal and Velvet," is a joint effort with guitarist Gene Bertoncini. It is also a soft pillow for your ears, full of downy sounds of a kind one rarely hears any more. Bertoncini plays acoustic guitar, and he pays as much attention to Rogers as she does to the lyrics in their eclectic program, so this is *not* a set of vocals with guitar accompaniments; it is a set of nine superb duets.

The arrangements are by Bertoncini, and they are true to the artistry with which they are executed (just listen to the way he introduces *You Must Believe in Spring*). Bobbi Rogers is still teaching nursing in Middletown, Connecticut, but, listening to the way she nurses a song, one wonders how long it will be before music becomes her main occupation. Well, perhaps one shouldn't wonder, for popular music is a tough field to survive in, especially when an artist has only quality to offer. So treat yourself to this set, and producer Mort Fega—a connoisseur of tasteful jazz and pop—just might be encouraged to create a follow-up album.

-Chris Albertson

BOBBI ROGERS/GENE BERTONCINI: Crystal and Velvet. Bobbi Rogers (vocals); Gene Bertoncini (guitar). Once You've Been in Love; A Time for Love; My Funny Valentine; Close Enough for Love; I'm a Stranger to Myself; Two for the Road; You Must Believe in Spring; It Never Was You; Isn't It a Pity? FOCUS 338 \$8.98 (from Focus Productions, P.O. Box 17312, West Hartford, Conn. 06117).

Freeman twenty years ago. 1 was immediately impressed with his piano playing, so it did not surprise me to see him join the Al Cohn/Zoot Sims group a couple of years later. In the early Seventies, Frishberg moved to California, where he became a member of Herb Alpert's band, and also began making a name for himself as a writer of clever little songs eminently suited for delivery in intimate lounges and tailor-made for the enjoyment of anyone with a sense of humor. "The Dave Frishberg Songbook" is an album of just such songs.

I find only one thing wrong with this release: there is not enough of Frishberg's piano, and—especially after hearing his delicious work on Saratoga Hunch—one begins to hunger for more. That is easily remedied, however, because Frishberg has also made an instrumental album, "You're a Lucky Guy" (Concord CJ-74). Now, if you really want to indulge yourself, I suggest you also check out a Concord release—"Getting Some Fun Out of Life" (CJ-37)—which brims with Frishberg's infectious Wallerinspired piano and has him singing other people's songs as well. I guess what I am saying is that you can't go wrong with any Frishberg album around. I highly recommend that you get all of them. C.A.

RECORDING OF SPECIAL MERIT

PUG HORTON: Don't Go Away. Pug Horton (vocals); Bob Wilber (saxophone); Sir Roland Hanna (piano); Milt Hinton (bass). If: I Can Dream; By Myself; Tipperary; Melancholy; and seven others. BODESWELL BW 102 \$8.98 (from Bodeswell Records, P.O. Box 624, Brewster, Mass. 02631).

Performance: Good Recording: Good

This is a nice surprise. Pug Horton has a creamy, sultry voice not unlike the great Peggy Lee's and a style of delivery that is direct and to the point. She *thinks* about her lyrics and quickly and consistently establishes a dramatic mood, whether it be the feigned indifference of *By Myself* or the sweet resignation of *I Can Dream*. Her full and equal collaborator here is Bob Wilber

on saxophone; his work with her is much more part of a dialogue than mere accompaniment. Sir Roland Hanna on piano and Milt Hinton on bass round the personnel out in a totally professional way, but the real news is the combination of Horton and Wilber. I'd like to hear more. P.R.

MARK MURPHY: Bop for Kerouac (see Best of the Month, page 77)

ART PEPPER: Among Friends. Art Pepper (alto saxophone); Russ Freeman (piano); Bob Magnusson (bass); Frank Butler (drums). Blue Bossa; What's New; I'll Remember April; Besame Mucho; and four others. DISCOVERY DS-837 \$8.98 (from Discovery Records, P.O. Box 48C81, Los Angeles, Calif. 90048).

Performance: Excellent Recording: Very good

If Art Pepper doesn't watch out, he is going to have too many albums on the market. Having them released one on top of the other can easily depress sales, and Pepper is simply too valuable a player to have his recordings end up in the cutout bins. His latest album-at this writing, at least-is actually a reissue, for "Among Friends" originally appeared in 1979 on Interplay (IP 7718). I doubt if that release was adequately distributed, and at least this one reached me so I can sing its praises. Sure, it is a so-called "blowing session," the kind without much planning, but planning can often get in the way when experienced mu-sicians get together. With the rhythm section headed by pianist Russ Freeman, things go smoothly, if perhaps somewhat routinely at times. This is not Pepper's best effort in recent years, but it does deserve a place in the upper half of an output that on the whole has maintained a high average level. C.A.

RECORDING OF SPECIAL MERIT

ZOOT SIMS: I Wish I Were Twins. Zoot Sims (soprano and tenor saxophones); Jimmy Rowles (piano); Frank Tate (bass); Akira Tana (drums). Georgia; Changes; The Fish Horn; You Go Your Way; and three others. PABLO 2310-868 \$8.98, © K70-868 \$8.98.

Performance: Zootable Recording: Excellent

There is no doubt about it, saxophonist Zoot Sims is one of the most consistently satisfying players on the jazz scene today. Record after record, performance after performance, he manages to swing his creative energies with freshness and technical skill, all the time maintaining a timeless ease and grace. Here, once again with the equally tasteful Jimmy Rowles on piano (this is their fifth Pablo album together), Sims breezes through an interesting program of seven tunes, most of which you are not likely to hear anywhere else in a year of concentrated listening. Recommended. C.A.

RECORDING OF SPECIAL MERIT

BUDDY TATE: The Great Buddy Tate. Buddy Tate (clarinet, tenor and baritone saxophones); Warren Vaché (cornet); Hank (Continued on page 115)

STEREO REVIEW CLASSIFIED

CLASSIFIED RATES: Per Word, 15 Word Minimum. COMMERCIAL: \$3.70. EXPAND-AD^{*}: \$5.55. PERSONAL RATE: \$2.00. DISPLAY: 1" x 2¼", \$450.00. 2" x 2¼", \$900.00. 3" x 2¼", \$1,350.00. GENERAL INFORMATION: Frequency rates and prepayment discounts available. Payment must accompany order except credit card — Am. Ex., Diners, MC, VISA (include exp. date) — or accredited ad agency insertions. Copy subject to publisher's approval; must be typewritten or printed. First word set in caps. Advertisers using P.O. Boxes MUST supply permanent address and telephone number. Orders not acknowledged. They will appear in next available issue after receipt. Closing date: 5th of the 2nd month preceding cover date (e.g., Mar. issue closes Jan. 5th). Send order & remiltance to: Classified Advertising, STEREO REVIEW Magazine, 1 Park Avenue, New York, NY 10016. Direct inquiries to Rose Lynch, (212) 725-7686.

EQUIPMENT

DIAMOND NEEDLES and STEREO CARTRIDGES at DIS-COUNT PRICES for SHURE, PICKERING, STANTON, EM-PIRE, GRADO, AUDIO TECHNICA, ORTOFON, ACUTEX and ADC. Write for free catalog. LYLE CARTRIDGES, Dept. 5, Box 69, Brooklyn, NY 11218. For fast COD service Toll Free 800-221-0906. 9AM - 8PM except Sunday.

WHOLESALE PRICES on stereo/esoteric components, cartridges, tonearms, tapes. Free Catalog. Audio Unlimited, 1798 Technology Drive, San Jose, CA 95110. (408) 279-0122 1-6 M-Th.



SPEAKERS SAVE 50%. Build your own speaker system. Write: McGee Radio Electronics, 1901 McGee Street, Kansas City, Missouri 64108.

TOP QUALITY SPEAKERS AND KITS. Send \$2.00. Speaker Warehouse, 801 North Route 441, Hollywood, FL 33021.

USED HI FI. Buy, Sell. Trade: Broker. Bob Heenan, Box 782, Brookline Village, MA 02147. (617) 969-2727. Wanted McIntosh, Marantz: Western Electric Tube Equipment.



BEST IN THE WEST! Haffler, Nakamichl. Dahlquist. DCM, Magneplanar, Beveridge, APT, Threshold, Polk, Oracle, Harmon Kardon, B&W, Adcom. Rocky Mountain HI-FI, 812 Central, Great Falls, MT 59401. (406) 761-8683.

ACCURATE, QUALITY AUDIO: Reasonable Prices. Car/ Home. Denco, P.O. Box 6104-R. El Monte, CA 91734. (213) 961-6158 Evenings, Weekends. Monthly Specials.

HAFLER IN STOCK TRADES ACCEPTED. Morel Electronics, 57 Park Place-SR, New York, NY 10007. (212) 964-4570.

WOOFERS-MIDS-TWEETERS-CROSSOVERS at tremendous savings. EV. Becker, Seas, Polydax. Peerless, Philips, Emilar, Gai and many others in stock for immediate delivery. Speakers for Hi-Fi, custom auto, repairs, pro-Sound and musicians. Largest selection of parts and accessories in the U.S. For speaker builders and hobbyists. Send \$2.00 for the ALL NEW '81 CATALOG (refundable with first purchase) to: SRC Audio, Dept. SR3, 3238 Towerwood Dr., Dallas, Texas 75234.

Fresh on your Ears.



Speakerlab speakers feature recent technology like polypropylene woofers, Samarium cobalt leaf tweeters, edgeless box construction, passive radiators and ports. They're styled in silm oak veneer or rosewood Clearseal* enclosures. Send for our FREE catalog and see our completely new line plus our huge offering of raw parts which now include musical instrument speakers and high-end car stereo speakers.

Dept. CSR23, 735 N. Northlake Way

Seattle, Washington 98103

3D ACOUSTICS, N.A.D., Mission, Amber, etc. Shipping paid. Audio File, 1202 South Congress, Austin, Texas 78704. (512) 443-9295.

HAFLER, FRIED kits, SAE, CARVER, SONY, KLIPSCH, more. In stock. Immediate, FREE shipping! READ BROTH-ERS STEREO, 593-B King Street, Charleston, South Carolina 29403. (803) 723-7276.

SPEAKER BUILDERS: JBL, EV, AUDAX & computer designed plans. Catalog \$2., refundable. Gold Sound, Box 141SR, Englewood, CO 80151.

PHILIPS, AUDAX AND DYNAUDIO LOUDSPEAKERS in stock with good prices and competent service. Crossover components also. MADISOUND SPEAKER COMPONENTS, 8982 Tablebluff, Box 4283, Madison, WI 53711. (608) 767-2673.

BEFORE YOU BUY — CHECK OUR PRICES. Send for free catalog featuring audio and video equipment and accessories at discount prices. House of Tape, P.O. Box 191, Mineola, NY 11501.

WE HAVE IT ALL! Audio and Video Tape, Accessories. Recording Equipment, Fine Audio Components. KNOWLEDGE-ABLE Staff! COMPETITIVE Prices! FREE Buyers Guide! SOUND IDEAS, Dept. SR. Box 671, Cary, NC 27511-0671. (919) 467-8462.

PROTECT AUDIO EQUIPMENT, TV, VCR and Records from "pops", "buzz" and "hash" caused by motors, appliances, tools. Plugs Intc any outlet. (1250 watt-Model KW-333) \$50.95 ppd. SASE for brochure. ELECTRONIC SPECIAL-ISTS. INC., 171 S. Main, Natick, MA 01760. (617) 655-1532, MC/VISA accepted.

HIGH MAIL ORDER PRICES? NOT AT STEREO VILLAGE! Offering you the best prices on the top names in audio, video, television and car stereo. Call around, then call us last! STE-REO VILLAGE INC., 3021 Peachtree Rd. NE, Atlanta, GA 30305. CALL 404-233-5346. (10:30AM-7PM EST). Stores in Atlanta and New Orleans.

ATTENTION! The most extensive line of STEREO, VIDEO, and CAR EQUIPMENT at WHOLESALE PRICES. Campus representatives needed! THE AUDIO FACTORY, 42-40 BELL BOULEVARD, Mailorder division #203, Bayside, NY 11361. CALL (212) 939-8561.

HARMAN/KARDON HIGH TECHNOLOGY separates, receivers, cassette decks; Electro-voice interface A,B,C,D speakers; Thorens turntables. In stock, immediate shipment. East: (305) 462-1976; West: (213) 243-1168.

AMATEUR MICROWAVE T.V. ANTENNAS. Receive uninterrupted movies, full guaranteed. Also in Kit form. For Information and plans send \$8.00 to: MDS Specialist, P.O. Box 67-B, Southaven, MS 38671.

CROWN DISTINCTION SERIES, COMPONENTS. Best prices - in stock - immediate shipment to any destination. (213) 467-5725.

CONNECTICUT: ADVENT APT-Holman, B&O, Carver, Dahlquist, DCM Time Windows, Polk, Hafler, Mitsubishl, Nakamichi, Otofon, Micro-Acoustics, N.A.D., Stax, Cizek, Signet, QED, Teac, Marcoff, Boston Acoustics, will ship prepaid. Sounds IncredIble, 39 Federal Road, Brookfield, Conn. 06804. Call Ira for quote (203) 775-1122.

AUTOMOTIVE AUDIOPHILES TAKE NOTE: MIAH sells and installs all premium brands including ADS, Mitsubishi, Infinity, Concord, Dahlquist, Alpine, Sony, Altec, Lansing, JBL, Visonik, Blaupunkt, EPI, Bose, Linear Power, Monster Cable and many more. Call toll free. MIAH, 6660 Busch Boulevard, Columbus, Ohio 43229. 800-848-7383, 614-885-5298. VISA/MC/AMEX ACCEPTED.

AUDIO DISCOUNTS offers a quality selection of audio components at DISCOUNT PRICES. For speakers, receivers, cassette decks to turntables, cartridges, etc. or a new car stereo. Great prices and service. Our friendly sales staff will be glad to assist you. For more information, Mon-Sat, please call (301) 593-8244/301-593-8224 or write to: AUDIO DISCOUNTS, 1026 McCeney Ave., Silver Spring, MD 20901. We honor VISA, M/C or C.O.D. for your convenience.

LOWEST PRICES. BOSE. NAKAMICHI, HAFLER, and MORE. Dynamic Sound, Box 168(A), Starkville, MS 39759. (601) 323-0750. 1 P.M.-9 P.M.

SAVE ON ALL AUDIOPHILE OUALITY COMPONENTS. FAST, helpful service. Call before your next purchase. Audio-World, Eox 6202R, Grand RapIds, MI 49506. (616) 451-3868.

SAVE 60% TO 75%, BUILD YOUR OWN SPEAKER SYSTEM. P/C Crossovers, Woofers, Mids, Tweeters, instructions. Complete selection, Hi-Fi, M.I., Pro, disco and auto systems. Send \$2.00 for catalog. Refundable with purchase. DKI AUDIO, Box 284, Davis, IL 61019.

CALL TOLL FREE 1-800-826-0520 for Acoustet. Carver, NAD, Polk; 3D, Onkyo, AudioControl, B&W. Amber, Bedini, Micro-Seiki, Dahlquist, Hafler, dbx, Tandberg, Vandersteen, DCM, Grace and more! THE SOUND SELLER, 1706 Main St., Mainette, WI 54143. (715) 735-9002.

HIGH-END RAW SPEAKERS, kits and auto systems. Audax, Datesford, Dynaudio, JVC Ribbons, Becker, Phillps, SEAS, Peerless polypropylene, GAI. Free price list. A&S SPEAK-ERS, Box 7462S, Denver, CO 80207. (303) 399-8609.

SHERWOOD MICRO CPU tuner CLOSE-OUT. Used demos, \$400-600. (Originally \$2000) Limited quantity. Phone 6-8pm weekdays. AUDIO CALIBRATION, Box 250, Westminster, MA 02473. (617) 874-0706.

AUDIO REPLAY is New England's leading dealer in second hand audio. Now you don't have to come to New Haven to browse through our inventory. Two dollars will bring you our current listing, typically 100-200 items long. We recondition and warranty what we sell, so you can shop with confidence. Audio Replay, Dept. SR, 252 Park St., New Haven, CT 06511.

UPTOWN AUDIO AT DOWNTOWN PRICES: featuring ADC, Celestion Thorens, Ortofon, Nikko, Optonica, Audio Control, EV and much more. Specializing in 110-120 volt. We ship World Wide. Audio Audio 42 Canal Street

42 Canal Street New York, NY 10002 (212) 925-5868

WHERE ARE YOUR ALBUMS? Why not display them in a beautiful, hand-finished solid walnut case. FREE brochure of albums and cassette cases available. Write: CARV, Box 6084, Omaha, NE 66106. Money back guarantee.



REMOVES VOCAL FROM MOST STEREO DISC: The Thompson Vocal Eliminator can actually remove most o virtually all of a solo vocalisit from a standard stereo record an yet leave most of the background music untouched! Not a equalizer! We can prove it works over the phone Write or ca for a brochure and demo record below. COST: \$295.00

Time Delay/Ambience Superior: •Realism •Frequency Response •Versatility •Dynamic Range

Contrade and the set

Time delay is new to consumer audio. Recording Studios have been doing it for years. They have developed much more realistic systems than are presently offered for consumer use, with One notable exception.....Our TAD-4.





Organize Your Cassettes



- 11" cube with beautiful walnut, grained vlnyl finish
- Brass drawer pulls
- Constructed of ½" thick high densily particle board
 No risk purchase

We refund price and shipping if not salisfied

THE CASSETTECUBE®

\$4500 plus \$350	for UPS shipping
VISA, Check, or Money	Order to: Soundlaste, Inc.
Phone orders	7714 Eastlake Terrace
312-465-1115	Chicago. IL 60626

AUDITION NOW IN A FRIENDLY AND COMFORTABLE ATMOSPHERE - Adcom, Allison, Alpine, Amber, Apature, Audible Illusions, Audio Control, Audiopro, Beyer Dynamics, Boston Acoustics, Cizek, Counoisser, D.N.R., D.C.M., Dynavector, Fried, Grace, Isobase, L.A.S.T., Luxman, Mobile Fidelity, Monster Cable, Mordaunt Short, N.A.D., Nagatronics, Niles Audio, Nitty-Gritty, Plexus, Pyramid, Jim Rogers, Sound Connections, Spectre Audio, Spectre Acoustics, Stax, S.T.D., 3D Acoustics. Prompt, courteous service. FREE shipping in U.S.A. - Feel free to call for information. SOUND STAGE AUDIO, 184-10 Horace Harding Expressway, Fresh Meadows, NY 11365. (212) 762-3220 Exit 25 (Utopia Parkway) L.I.E., MC VISA.

DYNACO OWNERS: 60,000# Parts/Accessories Inventory! Supply Dyna numbers. SCC, Box 551, Dublin, OH 43017. UNIQUE variable-voltage power supply powers car stereos in home. Easy to build! Free details! J-Cal, Dept. S, 409 East Maryknoll, Rochester, Michigan 48063.

UNDERGROUND SOUND Audiofile stereo. A.R. turntable modification available. 2125 Central Ave., Memphis, TN 38104 (901) 272-1275.

SPEAKER PARTS AND KITS - Polypropylenes Ribbons, Domes, Coils, Capacitors, and complete kits. Send \$1,00 for Catalog. Soundbox, Dept. S, 411 S. Carlisle, Philadephia, PA 19146.

TAPES & RECORDERS

1930-1962 RADIO PROGRAMS. Beats Television!! Tapes, \$1.00 Hour! Established esteemed dealer. Informative 250 page catalog, \$1.25. AM Treasures, Box 192SR, Babylon, N.Y. 11702.

Qual	IL	, Tape	5
Maxel UDXL for 11 C-90 Maxel UDXL for 11 C-60 Maxel XL for 11 S C-90 Maxel UD C-90 Maxel UD 35-90 Maxel UDXL 35-906 Maxel Cass Demag (HE-44)	\$3.09 2.45 3.89 2.39 5.39 6.69 16.49 10.50	TDK SA C-60 TDK SAX C-90 TDK AD C-90 TDK D C-90 TDK D C-60 TDK LX35-90 TDK LX35-90 TDK LX35-90	\$2.79 2.15 3.99 2.19 1.55 1.18 5.35 5.85 7.89 14.75 \$13.40 18.96
Sony Waikman II Sony Waikman TCS-310 Awa CS-31 Awa PM-01 Koss Music Box Order now—while supplies last mum Send money order or chec and signature or CALL 212-434-	125.99 145.99 169.99 164.99 57.99 Please a ck Gredit 1720 Price UALIT	Maxell HG T-120 Panasonic T-120 Scotch T-120	15.75 12.65 12.35 12.45 14.95 50 mine

OLD TIME RADIO — original broadcasts on quality tapes. Free catalog. Carl R. Froelich, Route One, New Freedom, Pennsylvania 17349.

	1-800-245-3986	TAPE WORLD	H 40 12 12 12 19 1
TDM SA-C90	2.79	TDK VAT-120.	12 19
TOK SAX-C90		TDK MAR-90	7 19
TDK AD-C90	2.39	TDK: LX35-908.	5.39
FDK. ADX-C90		TDK. GX35-90B	7 99
TDK SA-C50	2.19	TDK LX35-180BM	16.95
TDK D-090	1.65	TDK. GX35-180BM	19.39
TDK. MA-C90	4.99	TOK. HD-OI(Cass Head Dema	e). 14 69
TOK VAT-HG120	15 99	BASF. PRO 1.11.or IIIC90	2 59
TDK. L-750.	12 99	Fuji FX I or II-C90	2 79
Maxell. UDXL 1.IIC-90	3 19	SCOTCH. 207-7R1800.	5.49
3.50 Shipping any size ord	er in US, Visa & MC no i	extra charge Dealers COD no ex	tra charge PA Ph
sales tax. We will honor a	any price in this book	Personal checks I week delay.	412-283-8621
	Tape World 220 Sprin	g St Butler, PA 16001	

OPEN REEL TAPES. Prerecorded. Catalogue. \$1.00. Barclay-Crocker, Room 1470-S, 11 Broadway, NYC 10004.

OPEN REEL TAPE - Mostly Ampex, used once, unspliced, unboxed, 1800' or 2400' 50 Reels: \$65.00, Sample \$2.00. Ten 3600' 10½r reels: \$25.00, Sample \$2.50, C-60 premium cassettes (New) Sample \$1.00, AUDIO TAPES, Box 9584-K, Alexandria, VA 22304.

LIVE OPERA TAPES. Incredible Variety. Free Catalogue. LIVE OPERA, Box 3141, Steinway Statlon, L.I.C., NY 11103.

GOLDEN AGE RADIO — Your best source for radio tapes. Free catalog. Box 25215-T. Portland, Oregon 97225. 40.000 OLD RADIO SHOWS on Tape. Jazz Big Band remotes. Country Western, discographies, anthologies, chronologies. Send \$2 for huge catalog (refundable). McCoy's Recording, Box 1069S. Richland, Washington 99352.

AMPEX 1800' 7" REEL TAPES. New in boxes. 10 reels \$19.95. 20/\$35.00. Add \$3.50 shipping. Tower, Dunkirk, MD 20754-0213.

OLD TIME RADIO PROGRAMS on cassette tape. Free list MB/JB ENTERPRISES, Box 724, Spencer, Iowa 51301.

		FREE T-SHI	RT WITH
	E	ACH ORDER	OVER \$75.
SAC-90	2.89	HD-01 Cass. De	mag 14 49
SAC-60	2.15	VIDEO C	
ADC-90	2.15	T120	12.99
ADC-60	1.69	T120HG	16,99
MAC-90	5.99	L500	9.99
SAXC-90	3.99	L500HG	12.49
ODC90	3.30	L750	12.99
LX35-90	5.35	Headcleaner	12.99
SH	URE PHONO	CARTRIDGES	
M95ED	24.99	M97HE	53,99
M95HE		V15-4	94 99
Add 5% shippi sign # and ex	ng with \$3.5 p. date.	0 min. MC and	VISA Include
	TAPE P		
BOX	477. SUNAF	EE. NH 03782	
	03) 445-562		

RECORDS

SHOW ALBUMS, Rare, Out-of-Print LP's. 64 pg. list. \$1.00. Broadway/Hollywood Recordings, Georgetown, Conn. 06829, STORE: 68 Sugar Hollow (Route 7) Danbury, Conn.

COLLECTORS' Soundtracks. Mint. 75 cents (refundable). Jemm's, P.O. Box 157, Glenview, III. 60025.

OLDIES oldies, 45rpm. Also current hits. Free Catalog. Corny's Record Shop, Box 166T. Mason, Ohio 45040.

RARE ORIGINAL RECORDS, all kinds, mostly mint, 5000 list \$2.00, refundable. Carl, Box 828, Princeton, NC 27569.

RECORD HOUND, Box 88, Eagleville, PA 19408. Fills "wantlists"? DOGGONE RIGHT!! 33-1/3 Specialist. Fast, Friendly Service.

FREE RECORD CATALOG. New releases at discount prices and huge selection of classical, soundtrack, popular and jazz special values. Rose Records, Dept. R, 214 S. Wabash, Chicago, IL 60604.

DIRECT — DISC, DIGITAL, half-speed masters, and DBX encoded discs. Free catalog. DISConnection, P.O. Box 10705, Tampa, FL 33679.

RECORD COLLECTORS SUPPLIES plain cardboard, replacement jackets 35c. Plastic lined sleeves 15c. Postage \$2.00. Opera boxes, 78 sleeves. Free catalog. Cabco, 400-2, Box 8212, Columbus, Ohlo 43201.

PROTECT your LP's — Poly sleeves for jackets 12 cents; Round Bottom Inner Sleeves 10 cents; Square Bottom 6 cents; Poly lined paper 15 cents; while Jackets 35 cents. Postage \$2.00. Record House, Hillburn, N.Y. 10931.

THOUSANDS of like new LPs and prerecorded tapes catalogue \$2.50. Records, Hillburn, New York 10931.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15 (MINIMUM
16	17	18	19	20
21	22	23	24	25
OMMERCIAL: \$3. OF WORDS	27 page of this section for ad placement 70. EXPAND-AD *. \$5.55 # 0	5. F <mark>IN</mark> SERTIONS	29	30
ase refer to heading on first OMMERCIAL: \$3. OF WORDS	page of this section for ad placement 70. EXPAND-AD *. \$5.55	nt Information: 5. F INSERTIONS	29	30
ase refer to heading on first OMMERCIAL: \$3. OF WORDS PAYMENT ENCLOSED	apage of this section (or ad placement) 70. EXPAND-AD *. \$5.55 # 0	nt Information: 5. F INSERTIONS		
ase refer to heading on first DMMERCIAL: \$3. OF WORDS PAYMENT ENCLOSED : CHARGE: You will be b	Page of this section for ad placement 70. EXPAND-AD [®] . \$5.55 # # 0 \$	nt information: 5. F INSERTIONS press	a 🗆 MasterCharge-Inte	
ase refer to heading on first DMMERCIAL: \$3. OF WORDS PAYMENT ENCLOSED : CHARGE: You will be b count #	Page of this section (or ad placemee 70. EXPAND-AD [®] . \$5.55 # 0 5 	nt Information: 5. F INSERTIONS press	a 🗆 MasterCharge-Inte	/bank #
ase refer to heading on first OMMERCIAL: \$3. OF WORDS PAYMENT ENCLOSED : CHARGE: You will be b icount # GNATURE	Page of this section for ad placement 70. EXPAND-AD °. \$5.55 # 0 \$	nt Information: 5. F INSERTIONS	a 🗆 MasterCharge-Inte	/bank #
ase refer to heading on first OMMERCIAL: \$3. OF WORDS PAYMENT ENCLOSED : CHARGE: You will be b scount # GNATURE RINT NAME	age of this section (or ad placement 70. EXPAND-AD [®] . \$5.55 # 0 5 1illed monthly. □ American Exp	nt Information: 5. F INSERTIONS press	a 🗆 MasterCharge-Inte	/bank #

WHILE YOU WERE LOOKING FOR "Out-of-Print" Records you should've been looking for us! DISContinued (213) 846-9192

GILBERT & SULLIVAN by D'Oyly Carte Opera Company. Choose: Pirates of Penzance/Mikado HMS Pinatore/Gondo-llers/Iolanthe. Librettos included. 2 LP sets \$15.96; 2 Cassette sets \$17.96. Specify, Add .95c post. FREE Complete Catalog: MUSICAL CONCEPTS, Box 53SR3, Cedarhurst, NY 11516.

1200 CLASSICAL LP's, like new. Send SASE to: Classical LP's, 4818 11th, Lubbock, Texas 79416.

TUBES

TV and Radio Tubes 49 cents. Free 48 page color catalog Cornell, 4215-H University, San Diego, California 92105.

WANTED

GOLD, silver, platinum, mercury, tantalum wanted. Highest prices paid by refinery. Ores assayed. Free circular. Mercury Terminal, Box 191, Norwood, MA 02062.

CASH FOR YOUR Unwanted LP's and Prerecorded Reel to Reel Tapes. Reder, Box 323S, Hillburn, NY 10931

TOP PRICES paid for: AUDIO RESEARCH, MARANTZ, McINTOSH, Box 18009, Seattle, WA 98118. (206) 323-4987.

TOP DOLLAR PAID for good condition LP's. All types, quanti-ties. FESTOON'S, 15 Whitney, New Haven, CT 06510. (203) 789-8210

(WANTED) Anne Phillips Albums 'Born To Be Free.' John Robbins, P.O. Box 373, Lyndhurst, NJ 07071.

WANTED: Older British speakers: Tannoy 8 ohm 12"-10" 'Golden' and Altobass each dual concentrics. Hartley 12' wide range, 10" coaxial. Lowther PM-6, PM-7. Stentorian 12"-15" duplex coaxials, Vitavox 12" coaxial du 120. Goodmans 12" axioms, triaxioms. Bakers 12" "Ultra-Twelve". Duode 12" #12C, #12B-C. Norelco full range 12"-8". Old Western-Elec-tric 12" full range #728-B. Calrad 12" triaxial, coaxial, 8" coaxial. No cabinets. Ask, write: British Friends. Kalish, 565 Walnut Ave., Redlands, CA 92373.

BUSINESS OPPORTUNITIES

STEREO REPRESENTATIVES NEEDED!!! Lowest Possible Prices!! Over 100 Brands!!! Krasco-Rep SR, 998 Orange Ave., West Haven, Conn. 06516.

ERASE DEBTS with little-known law - CREATE wealth! Details FREE - Blueprints, No. DD3, La Grangeville, NY 12540.

BORROW BY MAIL! \$500.00 - \$50,000.00. No collateral, bad credit no problem!!! Write: Gelco Financial Services, Box 34293-BJ, Indianapolis, IN 46234.

BORROW \$25,000 "OVERNIGHT." Any purpose. Keep indefinitely! Free Report! Success Research, Box 29070-RC, Indianapolis, Indiana 46229.

MAKE MONEY IN COLLEGE: Sell Audio Video/Car Stereo on campus - 70 brand names - 10,000 items in stock, Dealer catalogue 220 pages. Ask for Kathy 800-241-6270.

CAMPUS REPRESENTATIVES earn commissions, start a career selling Hi-Fi equipment on campus. Large national firm. Call toll free 1-800-638-8806. 9a.m. to 9p.m.

BORROW \$30,000 without interest! All eligible. Repay anytime. Free details. Infohouse, Box 1004-S3, New York, NY 10003.

FREE BOOK "2042 Unique, Proven Enterprises." Fabulous 'unknowns," second inflation income. Haylings-M, Carlsbad, CA 92008

YOUR OWN RADIO STATION AM, FM, Cable, licensed, unlicensed, low cost transmitters! Free information. BROADCASTING, Box 130-R3, Paradise, CA 95969.

BORROW \$125,000 even if refused elsewhere! No glmmicks. IFC, Box 1146-SR3, Lawrenceville, Georgia 30246.

EMPLOYMENT INFORMATION

BOCKY MOUNTAIN EMPLOYMENT NEWSLETTER! Colorado, Idaho, Montana, Wyoming!! Current openings - all occupations!! Write today for FREE details to: INTERMOUNTAIN-W, 3506 Birch, Cheyenne, WY 82001.

ELECTRONICS

ELECTRONICS BARGAINS, Closeouts, Surplus! Parts, stereo, industrial, educational. Amazing values! Fascinating items unavailable in stores or catalogs anywhere. Unusual FREE catalog. ETCO-014, Box 762, Plattsburgh, NY 12901.

MOVIE FILMS/VIDEO TAPES

16mm SOUND Features, Shorts, New, Used for Sale. Free Catalog. National Cinema, P.O. Box 43, Ho-Ho-Kus, NJ 07423.

VIDEOTAPES - 8MM/16MM MOVIES. TWO 72 page catalogs \$1.00 each. Both \$1.50. Reelimages, Box 137SR, Monroe Connecticut 06468.

GOVERNMENT SURPLUS

JEEPS, CARS, FROM \$35.00! - 700,000 ITEMS! - GOVERN-MENT SURPLUS - Most comprehensive directory available tells how, where to buy - YOUR AREA - \$3 - MONEYBACK GUARANTEE. SURPLUS INFORMATION SERVICES, Box 3070-EC38, Santa Barbara, California 93105.

MUSICAL INSTRUMENTS

MUSICAL INSTRUMENTS HOT LINE! Incredible prices: Amps, PA gear, All instruments. Huge selection. Sam Ash, established 1924. 800-645-3518. NYS: (212) 347-7757.

BOOKS & MAGAZINES

PUBLISHERS' OVERSTOCK. BARGAIN BOOKS 2,000 titles, all subjects! Free catalog: Hamilton's, 98-58 Clapboard, Danbury, CT 06810.

EVOLUTION - The Sound Magazine. Quad and audiophile software plus hardware. For information: Evolution, 23757 Canzonet, Woodland Hills, CA 91367.

ON THE ROAD, monthly newsletter-magazine devoted to big band news, Itineraries. \$12.00/year. On The Road, 1745 Houston, New Albany, IN 47150.

FREE CLASSIFIED AD for you in Consumer Electronics Marketplace. Buy, sell, trade Microcomputers, Software, Video, HiFi, Send your ad and \$6.00 for subscription. Box 86B, High-land Mills, NY 10930.

EDUCATIONAL OPPORTUNITIES

LEARN WHILE ASLEEP. Hypnotize! Astonishing details, strange catalog free! Autosuggestion, Box 24-ZD, Olympia, Washington, 98507,

DOCTORAL OR MASTERS DEGREE Counseling Psychology—Education —Health Svcs Momt

For protessionals with extensive exp. who are licensed in their field & who want to enhance their career position by earning a degree through our Guided Independent Study Program (GISP). No residency. One-on-one faculty counseling. For no-cost per-sonal evaluation send resume or call (213) 278-1094. CENTUMY UNIVERSITY, 9100 Wilshire Blvd., Dept. 72, Beverly Hills, CA 20212 90212

FOR INVENTORS

INVENTIONS WANTED NO IDEA TOO SMALL FREE CONSULTATION

registration. Potential cash or royalties from manufacturers seek s. For free information on how to register your ideas, call or write

AMERICAN INVENTORS CORP.

59 Interstate Dr. Dept SR. West Springfield, MA 01089 (413) 737-5376 A Fee Based Marketing Company

FOR SALE

HAFLER DH-101 SUPERMOD. Audio Gram says for the here and now, this is the one. Brochure available. Musical Concepts, 1060 Fifth Plaza. Dept 2, Florissant, MO 63031. (314) 831-1822.

PERSONALS

MAKE FRIENDS WORLDWIDE through International correspondence. Illustrated brochure free. Hermes-Verlag, Box 10660 Z, D-1000 Berlin 11, W. Germany.

PENFRIENDS - ENGLAND - USA, Through correspondence, Send age, Interests. Free reply, Harmony, Box 89SR, Brooklyn, New York 11235.

CORRESPONDENCE FOR FRIENDSHIP IN PHILIPPINES. MALAYSIA. Free information. AACC-(SR). Box 1542, Canoga Park, CA 91304.

CORRESPONDENCE for friendship! Mexico, Philippines, Europe, USA. Free information. International, Box 1716-RV, Chula Vista, CA 92012.

RUBBER STAMPS

RUBBER ADDRESS STAMPS, BUSINESS CARDS. Free Catalog - Fast Service, Jackson's, Brownsville Road-E-101, Mt. Vernon. III. 62864.

MISCELLANEOUS

FREE! World's Leading Novelty Catalog. 1600 Jokes, Tricks, Science, Sports, Hobbies, Johnson-Smith, C-202, Mt. Clemens, MI 48043.

Jones (piano); other musicians. On Green Dolphin Street; At Sundown; Bernie's Tune; Shiny Stockings; and four others. CONCORD JAZZ CJ-163 \$8.98, @ CJ-163 \$8.98.

Performance: Smooth Recording: Very good

Buddy Tate spent the Forties in Count Basie's reed section. Need I say more? That alone should tell you that Tate has a fine capacity for eloquent swing and a way with notes that will delight the most discriminating connoisseur of Swing Era jazz. On "The Great Buddy Tate," with Warren Vaché's cornet providing the perfect complement, Tate, now sixty-five, pours on the sound like a rich sauce, breathing new life into mostly familiar tunes of no particular vintage. His son Paul Tate also gets into the act, singing a velvety rendition of I Realize Now, a relatively obscure tune from Nat King Cole's repertoire; he has a pleasant voice but some trouble keeping it in key. The rhythm section-Hank Jones, Milt Hinton, and, on separate selections, drummers Mel Lewis and Jackie Williams-is everything one would expect of its personnel. This album is a safe investment, sparkling as a diamond and just as durable. CA

MEL TORMÉ: And Friends. Mel Tormé (vocals, piano); Jonathan Schwartz, Cy Coleman, Janis Ian (vocals); Gerry Mulligan (saxophone); other musicians. Pick Yourself Up; Mountain Greenery; Cottage for Sale; Isn't It a Pity; Love for Sale; New York State of Mind; The Best Is Yet to Come; Wave; Isn't It Romantic; I Guess I'll Have to Change My Plan; and ten others. FINESSE W2X 37484 two discs, C WTX 37484, no list price.

Performance: Tasteful Recording: Good

This two-disc set was recorded live at Marty's, a chic, very expensive jazz club/restaurant on the Upper East Side of Manhattan. Mel Tormé pulls out all the stops for his obviously entranced audience, and he is joined at different times by such gratin of the jazz, pop, and theater worlds as Gerry Mulligan, Janis Ian, Jonathan Schwartz, and Cy Coleman. The atmosphere is so thickly "in" and red-hot show-bizzy that it would probably make even Douglas Fairbanks, Jr, feel he'd just gotten off the boat from Lodz with shopping-bag luggage and his hat on backwards. The respectful swoons of admiration for Tormé from his peers and the music press have always mystified me somewhat, but for years I went along with the superlatives in much the way Charlie the Tuna, anxious to prove his "good taste," nods sagely and appreciatively at a Van Gogh hung upside down. Listening to this album, in which Tormé displays his usual superb timing, distinctive voice, and eclectic musicianship, I finally came to the conclusion that he's good, but he's not all that good, at least to my ears. What he may be is the best salesman around of a particular kind of jazz/pop hipness that first placed itself above criticism some time in the Fifties. Ah, showmanship! P.R.

JAMES BLOOD ULMER: Free Lancing. James Blood Ulmer (vocals, guitar); Amin Ali (electric bass); G. Calvin Weston



Versatile Glenn Zottola

FIRST heard trumpeter Glenn Zottola a few months ago at Eddie Condon's, a venerable New York jazz club, and I was immediately impressed with the way he combined the subtle elements of modern jazz with the exuberance of traditional forms, moving from one to another with assured ease and infectious zest. It was in September 1980 that the newly formed Glenn Zottola Quintet came into Condon's for their first-ever public performance. It was recorded, and Dreamstreet has now released it as an album.

The quintet plays modern jazz, and for their debut Zottola doubled on trumpet and alto sax—not an easy thing to do since the embouchures and fingering are different. But he is as proficient on sax as he is on trumpet, moving as easily between them as he does from style to style. His trumpet on My Melancholy Baby is both cheerful and intimate, as is his sax on Charlie Parker's My Little Suede Shoes. His romantic decoration of Erroll Garner's Misty is glittering and effusive—he makes the most of the alto's tone—and his bravura trumpet on I'm Confessin' is an all-out declaration with no extraneous frills.

OTTOLA hand-picked the personnel for this date, all of them with extensive credentials. You'd never know this was their first public appearance as a unit from their smooth exchanges and musical in-jokes (quotations from *Oh*, You Beautiful Doll and the Grand Canyon Suite, among others). They are certainly a playful quintet, especially pianist Harold Danko and tenor saxophonist Al Klink. Zottola is acquiring a deserved reputation in New York as one of the most imaginative and versatile younger jazz musicians, and this album will show you why. —Joel Vance

GLENN ZOTTOLA: Live at Eddie Condon's. Glenn Zottola (trumpet, alto saxophone, flugelhorn); Al Klink (tenor saxophone); Harold Danko (piano); Linc Milliman (bass); Al Harewood (drums). My Melancholy Baby; Misty; Like Someone in Love; Three Little Words; My Little Suede Shoes; Easy to Love; I'm Confessin'; Blue 'n' Boogie. DREAMSTREET DR-105 \$8.98.

(drums); other musicians. Timeless; Pleasure Control; Night Lover; Where Did All the Girls Come From?; High Time; Stand Up to Yourself; Happy Time; and three others. COLUMBIA ARC 37493, © ACT 37493, no list price.

Performance: High intensity Recording: Good

James Blood Ulmer is an anomaly: an experimental jazz guitarist who is relentlessly funky, a colleague of Ornette Coleman for much of the Seventies whose manic intensity has now garnered him a large, enthusiastic following among New York's punk crowd. With "Free Lancing," his first major-label U.S. recording (he's made previous albums for custom jazz labels here and in Europe), Ulmer should begin to reach a wider audience of free-jazz fans.

Ulmer's guitar style is strongly influenced by Coleman's "harmolodic" improvising: a linearly structured style in which the musicians move together through different keys rather than taking their cues from conventional chord progressions. When it works, it produces solos of thrilling breakneck spontaneity; when it doesn't, the results range from confused to tortured. "Free Lancing" has its share of both hits and misses. It features Ulmer in three different settings: a guitar-bass-drums trio, a quartet that adds a second guitar to the core trio plus three back-up vocalists, and a sextet of the trio plus tenor and alto saxes and a trumpet. The sextet appears on three of the album's ten tracks, and it is by far the most successful format, largely because of the exciting solos of David Murray (tenor), Oliver Lake (alto), and Olu Dara (trumpet). The least satisfactory tracks are the three quartet numbers, where Ulmer contributes sort of growling vocals that are as uncertain as they are unintelligible, though they are not without feeling. The four trio cuts will sound familiar to those who have seen UImer perform; they're dissonant, lean, and aggressively rhythmic.

"Free Lancing" is not easy listening. Like free improvisation in general, it demands as much discipline and concentration from the listener as from the player(s). But it's full of the kind of challenging, risk-taking music that major labels all too rarely take a chance on and offers the serious jazz listener plenty to chew on. M.P.

_	VERTISERS' INI	
READ		PAGE NUMBER
_		
2	Aiwa Akai America, Ltd.	
	Allison Acoustics	
	Angel/EMI Records	
3	Audio-Technica U.S., Inc.	7
4	Bang & Olufsen	
5	BASF	
42	B&W Loudspeakers. Blue Angel, Inc.	
6	BSR-Spectrum Analyzer	
	Robert C. Bosch	
	Bose Corporation Brown & Williamson	
9 43	Carver Corporation	
10	Consumera Company	
41	DAK Industries	19, 21
40	Discount Music Club	
13	Discwasher	Cover 4
	Harman Kardon, Inc.	32
14	Hi-Fi Buys.	
	Illinois Audlo	
15	International HiFi Dist.	
16	International Wholesalers	
	Jack Daniel's	
17 18	J & R Music World Jensen/Automotive Div.	
	Kenwood Electronics	
19	Loran	
	Mariboro	
20	Manboro Maxell Corp. of America	
21	McIntosh	
22	Memorex Corp	
	NAD USA	20
	Nakamich	
	National Guard	
23	Ortofon	89
24	Phase Linear	5
25 26	Polk Audio	
20	P.H.U.C.E.	
	Radio Shack R. J. Reynolds/Camel	
	R. J. Reynolds / Vantage	
	R. J. Reynolds / Winston	
27 28	Sansui Electronics Corp.	
29	Santa Fe Express	
30	Sennheiser Electronic Corp.	107
31	Smirnoff. Sony Corp.	
32	Sound Reproduction	
	Southern Comfort	
44	Stanton	
33	Stereo Corp. of America	
	Stereo Discounters	
46	Sweet Thunder	
34	TDK Electronics	1.
35	TDK Electronics	
36	Teac Corporation of America	
38	Vector Research	
39	Wisconsin Discount Stereo	



Stereophonic Imaging and the Bose® 901® Direct/Reflecting & Loudspeaker.

Front View

Single full-range driver provides the direct sound energy necessary for realistic perception of transient detail.

Rear View

Phased 4-driver arrays focus and reflect 89% of total system power output off interior surfaces of listening room.





- A sound field wider than the space between the speakers:
- Clear center imaging from almost any listening position;
- Elimination of enclosures or drivers as point sources;
- Natural-sounding transparency and spaciousness.

A few speakers can meet one or two of these objectives. But no conventional design will ever be able to satisfy them all. That's why we abandoned traditional design philosophy in developing our 901 Direct/Reflecting® Loudspeaker System.

Each 201 speaker contains nine full-range drivers mounted in a proprietary multi-directional array. Sound energy is focused and reflected in a complex 3-dimensional pattern that effectively eliminates the imaging restrictions imposed by conventional speaker designs. The result is an astonishingly wide and spacious stereo presentation, without the need for special seating arrangements or signal processing.

Ask your authorized Bose dealer for a side-by-side comparison of the 901 Direct/Reflecting[®] Loudspeaker with any other speaker, regardless of size or price.



Bose has prepared a technical booklet on the unique engineering concepts incorporated into the 901 Direct/Reflecting® Loudspeaker System. For a free copy, write Bose Corporation, Dept. SR, The Mountain, Framingham, Massachusetts USA 01701.



Covered by patent rights issued and/or pending. 901 speaker design is a registered trademark of Bose Corporation @Copyright 1982 Bose Corporation. All rights reserved

Protect Your Stereo System and Maintain Its Sound



The highly active D4 fluid and unique directionally fibered pad removes harmful microdust and debris that car cause permanent damage to your recordings.

The SC-2_™ Stylus Care System

SC-2 fluid with the exclusive nylon fibered brush effectively loosens and wipes away stylus contamination, a major contributor to record wear.



The Discwasher® D4 Record Care System and the Discwasher SC-2 Stylus Care System are available separately or together as DiscSetm.

For a free copy of our "Guide To Record Care" write to Discwasher.

PRODUCTS TO CARE FOR YOUR MUSIC

1407 No th Providence Road, Columbia, MO 65201 USA A DIVISION OF JENSEN an ESMARK Company DIRCLE NO. 13 ON READER SERVICE CARD