

INTRODUCING A TURNTABLE THAT KNOWS A GOOD SONG WHEN IT SEES ONE.

In the history of recorded music, there have probably been one ... maybe two



people who liked every song on a record If you're not one of them, chances are you'll take an immediate liking

to the new Pioneer PL-88F turntable. It's programmable.

Which, simply put, means that your index finger can now spare your ears from a less-than-favorite tune. Just push a button or two, and the turntable will play only the cuts you select. And skip right over the

ones vou don't.

Of course, before you know what order to play them in, you'll want to know what order



they're recorded in. And for that, there's Index Scan, which plays the first ten seconds of each cut.

What makes this turntable so smart? A brain.

A tiny microprocessor that works in

conjunction with an optical double eve sensor. The sensor actually "reads" the record grooves to carry out the commands you've programmed into the turntable.

That same microprocessor even makes the PL-88F smart enough to improve

your recordings. A special deck-synchro system sees to it that the tape deck is placed in the pause mode whenever the turntable tone arm lifts off the record.



At the touch of a button the PL-88F's platter glides out. Drop a record on. push the button again and the platter retructs and starts to play auto matically

(Providing that you're smart enough to use a Pioneer Auto Reverse Tape Deck.)

Of course, the most impressive part of the new PL-88F turntable comes when you put on your favorite record, sit down in your favorite spot, relax and do something you've probably been too busy to do with your ordinary turntable.

Listen to music





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Presenting High Bias II and the Ultimate Tape Guarantee

MEMOREX

Memorex presents High Bias II, a tape so extraordinary, we're going to guarantee it forever

We'll guarantee life-like sound

Extraordinarily flat frequency response at zero dB recording levels, combined with remarkably low noise levels, means music is captured live. Then Permapass,^M our unique oxide-bonding process, locks each oxide particle—each musical detail—onto the tape. So music stays live. Not just the 1st play. Or the 1000th. But forever.

We'll guarantee the cassette.

We've engineered every facet of our transport mechanism to protect the tape. Our waved-wafer improves tape-wind. Silicone-treated rollers insure precise alignment and smooth, safe tape movement. To protect the tape and mechanism, we've surrounded them with a remarkable cassette housing made rigid and strong by a mold design unique to Memorex.

We'll guarantee them forever.

If you ever become dissatisfied with Memorex High Bias II, for any reason, simply mail the tape back and we'll replace it free. VOU'LL FOREVER WONDER IS IT LIVE, OR IS IT NEMOREX

About This Issue

Inside the pages of February's HIGH FIDELITY

During the past several weeks, as I've visited manufacturers from Boston, Massachusetts to Bellingham, Washington, one thing has become increasingly apparent to me, and that's the sense of real excitement over the newest generation of audio equipment. This is reflected in many product categories, perhaps none more so than the cassette deck. Certainly your letters tell us that more and more of you are becoming involved with cassette recording; moreover, as technical editor Michael Riggs points out in "Sound Views," prerecorded cassettes are outselling LPs by an everwidening margin.

So we've devoted much of this issue to tape. For our lab tests, we've selected six cassette decks that are representative of the broad spectrum of current models. "Basically Speaking" discusses how tape recording works, while in "How to Make Great Cassette Recordings" author Peter Mitchell's own fascination with the medium shines through in a very thorough, step-by-step home recording guide.

If you have questions about which tape to use, Alexander Retsoff answers them in "Retsoff's Remedies." And if you need a place to store your expanding cassette collection, contributing editor Christine Begole uncovers an array of handsome and ingenious storage alternatives in "Audio-Video Environments." Another regular, R. D. Darrell, reviews several new classical cassettes—including some that are DBX-encoded on his personal portable. The results, he says, are spectacular.

Speaking of portables, this month's video "Hands-On Report" finds Toshiba's monitor/receiver to be a handy adjunct to take-it-with-you video systems. Also in this issue, you'll find more of our tribute to the late Glenn Gould, the concluding installment of a review of new *Messiah* recordings (along with a survey of older ones), and an exchange of open letters between violin virtuoso Gidon Kremer and our own Harris Goldsmith. And the outspoken Billy Joel takes on his critics in the appropriately titled BACKBEAT interview, "Don't Call Me a Brat."

Next month, we'll have our special spring sneak preview of audio and video components being introduced at the Winter Consumer Electronics Show. (Complete WCES coverage will appear in April.) In addition, we'll give you advice on "How to Take Control of Your Stereo System." Consulting technical editor Robert Long details how to accommodate signal processors and other system add-ons with and without switching boxes.—W.T.

 Survetiles ways to Make Great Tape Recordings1 (Page 00)

 DECAL TAPE ISSUE

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PURE

The Carver Magnetic Field Power Amplifier M-400a

201 watts minimum continuous power per channel into 8 ohms, 20 Hz-20 kHz, with no more than 0.05% T.H.D.

Within this 7-inch, 9-pound cube is, quite possibly, the most powerful story in the history of high fidelity amplifier design.

The genius of a music loving physicist was turned loose and the result is an elegant technology that substantially reduces the massive bulk, weight, and cost of high power audio amplifiers. Conventional amplifier power supplies are very costly and inefficient because they produce a constant high voltage level at all times — irrespective of the demands of the everchanging audio signal — even when there's no audio in the circuit at all!

In sharp contrast the M-400a's power supply is signal responsive and highly efficient. It produces exactly and only the power the amplifier section needs from moment to moment to carry the signal with complete accuracy and fidelity.

Once the crudeness of conventional power supplies was overcome, a wholly uncompromised signal path was designed: Fully complementary topology from input to output; the latest, fastest, highest current transistors; direct coupling; linear metalized film capacitors; precision and finally, an output inductor whose corner frequency is connectors; laser trimmed resistors; vapor-deposited 24 Karat gold almost a quarter of a megahertz.

Audition the Carver M-400a and hear the difference: transparency, openness, detail. Without the clipping, distortion, and constraint of lesser amplifiers. With Carver the *pure* sound of music can be, very affordably, yours.



P.O. Box 664 14304 N.E. 193rd Pl. Woodinville, WA 98072





The Hafler equalizer, model DH-160, is a frequency shaping control unit which, in many cases, can improve the sound of a high quality audio system. It permits correction of deficiencies in loudspeaker and room acoustics as well as reduction of aberrations in the recording process. It is of a quality level which matches the finest audiophile sonic requirements. Your authorized Hafler dealer can demonstrate the DH-160 for you and can supply it in either kit or assembled form.

Write to us for comprehensive data on the DH-160. If you enclose \$1.00 with your inquiry, we will send you a DH-160 construction and application manual (normally \$3.00) so you can see how easy and enjoyable the economical kit building option can be. We will also include a compilation of test reports and reviews on other Hafler products.



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The new Technics cassette decks with dbx." They don't just reduce tape noise. They eliminate it.

There is a new line of Technics cassette decks so technologically advanced they are capable of reproducing music with virtually no audible tape noise. None.

They not only feature Dolby* noise reduction, but also the dbx noise elimination system. With dbx, a Technics cassette deck compresses the signal so the dynamic range is halved. When a tape is played back, the process is reversed. The original dynamic range is then restored and noise is pushed below audibility. Loud passages can be recorded without distortion, and soft ones without tape noise. There is even dbx disc decoding available for playing dbx encoded records.

The Technics RS-M255X goes even further.

Wide range (-40 to +18 db), three-color FL meters handle the dynamic range dbx gives you. An electronic tape counter doubles as a remaining time indicator to show how much time is left on your cassette. Bias and EQ levels are automatically selected for any tape formulation. Microprocessor feather-touch controls give you fast, easy, mode switching. And Technics RS-M255X gives you the stability and accuracy of a two-motor drive system.

Audition all of the sophisticated Technics cassette decks with dbx. Including the very affordable RS-M228X.

Why settle for tape noise reduction when you can have tape noise elimination? From Technics.

Dolby is a trademark of Dolby Laboratories, Inc. # dbx is a registered trademark of dbx, Inc.



Letters

Tascam Tips

As the owner of a Tascam Model 244 cassettedeck/mixer, I was very interested in J.B. Moore's article, "Compact, Portable Multitrack Studios" ["Input Output," November 1982]. I'd like to add the following comments about the Tascam 244:

1. You *can* punch out without stopping the deck, either by moving RECORD SELECT to "safe" or by pressing RECORD and PLAY while the deck is in RECORD. 2. When the deck is in the four-channel record mode, the meters will monitor all four record inputs simultaneously. Otherwise, you could record only two channels at once and the meters would monitor the L and R output buses of the mixer. (The meter modes are controlled by the record status of the transport. It's very confusing and not fully explained in the manual.)

3. If you move the tape back and forth a lot on the 244, the counter will drift considerably, making the zero-return function unreliable. I have confirmed this problem with Teac, and the company says it has no plans to change the counter's design. I would be interested in Mr. Moore's comments on this.

4. Page 46 of the owner's manual contains a

BES speakers. Music in the Round.

The natural sound no other speaker can recreate.

Now there's a speaker that produces sound the way nature produces sound: In 360° waves. Front and back and in all planes. Place them anywhere and free yourself from the tyranny of narrowly-beamed box speakers. The reviewers raved: "Open," "Clean" and "Elegant." What are your superlatives? cryptic warning about "unpredictable effects" that can occur when you bounce adjacent tracks. I haven't checked this out, but I suspect that they are talking about DBX mistracking in the channels being played back, caused by the recorded signal being picked up from the adjacent track. (You can hear it in the cue bus while overdubbing—it sounds like random pumping—but it does not affect the record signal.) John W. Spalding

Atlanta, Ga.

Mr. Moore replies: Taking your points in order:

1. While you can punch out the 244 without stopping the deck, that does nothing to solve the problem of punching out when you're playing an instrument.

2. My mistake—the 244 will monitor all four record inputs simultaneously.

3. You'll run into the same tape-counter problem on some professional multitrack recorders. The answer is to reset it every third or fourth use.

4. I suspect that the ''unpredictable effects'' of adjacent track-bouncing are caused by some tracks bleeding into others. As I mention in the article, tracking is always something of a problem when you are working on such narrow tape at a slow speed without any provision for head alignment. Nevertheless, when you consider the price, the Tascam 244's capability is remarkable. And thanks for your informative letter.

Fanfare for Marsalis

I enjoyed Don Heckman's article on "The Postwar Jazz Trumpet" [September 1982], but he neglected to mention one very important name: Wynton Marsalis. Marsalis is one of the most brilliant young jazz artists around, and his playing has injected new life into what was a dying art.

Terry Nigrelli New York, N.Y.

Mr. Heckman reviewed "Wynton Marsalis" in the April 1982 issue.—Ed.

Automated

In the August 1982 "CrossTalk," Sumner Northcutt asked where he might find an American equivalent of a highly flexible programmable timer he had purchased and used in Germany. Consulting technical editor Robert Long asked for readers' recommendations, and we have received a number of responses, most of which fall into two categories. A representative letter from each group follows.

The letter from Summer Northcutt is an opportunity to share the results of my long search for a similar timer. Frustration at not finding a suitable unit had me on the verge of building one from a design based on a commercial microprocessor. However, at work I ran into a laboratory timer called the ChronTrol that was the perfect solution. It has ten (optionally forty) independently programmable memories that can actuate four different circuits over a one-week period, and it can be set to work on any or all days of the period. You can order it with any combination of AC outlets or dry contacts on a terminal strip.

I use the ChronTrol in my audio system primarily to record live radio broadcasts of Bos-

Ask us for your nearest BES dealer 800-592-4644 714-549-3833

Circle 8 on Reader-Service Card

ton Symphony concerts from Tanglewood. I perform in the chorus, so before I leave for Tanglewood I program the unit to switch on AC power about an hour before the concert begins, so the system is warmed up. At concert time, the timer closes the contacts that put my Revox into the record mode via its remote control connector. Power is shut off after the tape runs out. The setup has never failed me, and I have gotten some beautiful recordings.

I ordered the ChronTrol two years ago for well under \$300 from Lindburg Enterprises. Inc. [9707 Candida St., San Diego, Calif., (714) 566-5656 or (800) 854-1999 outside California]. Mr. Lindburg was most helpful, explaining the options available (tabletop or rack mount and numbers of AC outlets or dry contacts). Peter J. Wender

Cambridge. Mass.

A number of other readers were also enthusiastic about the ChronTrol. The second group of letters suggested that Mr. Northcutt adapt his German timer to American current and voltage. Here's a response from Leo Unger, the technical director of Cosmos Trading, 9104 Exposition Dr., Los Angeles, Calif. 90034. (213) 652-7370.

Please advise Mr. Northcutt that—one way or another—it is possible to retrofit his German timer for 60-Hz current, assuming that the unit is an electronic (not a mechanical) timepiece.

We at Cosmos specialize in converting American household appliances for export and have adapted 60-Hz electronic clocks and timers of various sorts for 50-Hz current. We can make a similar change in the other direction. We can even rewind the timer's transformer so an outboard transformer would not be needed. Cosmos makes transformers ranging in size from 3 VA to 2 kVA. By the way, in the past we've found that if the owner has a service manual for the device, the conversion process is greatly eased. Leo Unger

Los Angeles. Calif.

Music for the Blind

Do you have any information on music published for the visually handicapped, either in Braille or on cassette? Waverly Smith

Cambridge, Mass.

The American Printing House for the Blind (P.O. Box 6085, Louisville, Ky. 40206, (502) 895-2405) offers Braille sheet music, primarily of classical works. A Braille music catalog is available free of charge. Recordings for the Blind, Inc. (215 E. 58th St., New York, N.Y. 10022, (212) 751-0860) has cassettes of books on music, which are distributed to visually impaired persons who have registered with RFB. On a less exalted (but highly practical) level, we have noticed that at least one tape manufacturer, Fuji, is now embossing Braille side designations on its cassette shells.—Ed.

Elusive Libretto

I recently purchased an imported recording of Leoncavallo's opera *La Bohème*, only to find that it had no libretto or annotation. I wrote to the distributor, who was unable to help. Inquiries to my local classical music station, the library, and

the university music department have failed.

Do you have any information about the work? It seems quite melodious, and while not a neglected masterpiece, it clearly is neglected. **Charles N. Hubbell** Kenmore, N.Y.

According to Grove, both the Puccini and the Leoncavallo Bohèmes were based on Henri Murger's novel Scènes de la vie de bohème. An English translation of the Leoncavallo work was prepared for an intended production at the Roosevelt University Opera Workshop. You might be able to obtain a copy from: Opera Workshop, Chicago Musical College. 430 S. Michigan Ave., Chicago. Ill. 60605. This comes to us courtesy of the Central Opera Service, a quite amazing organization housed at the Metropolitan Opera that acts as a clearinghouse for all kinds of operatic information. With its files on some 28,000 operas, the service should be the source of first recourse for those with questions about the subject. Information may be obtained from Central Opera Service, Metropolitan Opera, Lincoln Center. New York, N.Y. 10023, (212) 799-3467. Please enclose a stamped, self-addressed envelope.—P.H.

Letters should be adaressed to The Editor, HIGH FIDELIFY, 825 7th Ave., New York, N.Y. 10019. All letters are subject to editing for brevity and clarity.

NO OTHER CARTRIDGE, AT ANY PRICE, GIVES YOU ALL THESE FEATURES...



shonk-a Shure exclusive feature-combines the high stiffness and low mass of pure Beryllium. with a revolutionary ultra-thin wall tubular construction, to offer the lowest effective mass of any stylus shank available. The result is highfrequency trackability at an ur believable 60 cm/sec (peak velocity) for unprecedented reproduction of high frequencies and a truer, more musical sound, with greatly reduced record and stylus tip wear.

Exclusive Dynamic Stabilizer/Destaticizer This Shure exclus ve feature ridas record warps (present or all records) like a shock absorber to eliminate audible "wow," distortion, groove skipping and cartridge bottoming, while reducing record wear.

The Destaticizer consists of 10,000 electrically conductive fibers that discharge static electricity while removing microscopic dust particles from the record groove. This eliminates "pops" caused by static and debris.



Exclusive Hyperelliptical MASAR™ Polished Stylus Tip The Hyperelliptical (HE) stylus tip has longer, norrower contact areas to previde an audible advantage over spherical and ell ptical stylus tips, givinc you pure, naturol, musical sound without the distortion.

The stylus/groove contact areas are MASARpo ished to reduce friction at the interface between record and stylus, for less wear on both.

The end result is the most accurate reproduction, with the least record and tip wear you can get from any phono cartridge.





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Shure Brothers Inc., 222 Hartrey Avenue, Evanston, IL 60204

AUDIO High Fidelity News

New equipment and developments

Pay-Per-Play Radio

San Francisco-based Codart, Inc., has announced an automated home recording scheme designed to bring convenience and economy to music purchasing. Scheduled for launch sometime this year, the system uses a microprocessor-based device that "listens" for coded radio transmissions, switching on a tape recorder when the inaudible codes match its preprogrammed instructions. Panasonic will manufacture the switching device, both as an add-on component and as an integral feature in some of its tape decks. National Public Radio will transmit the encoded programs to its 273 member stations for rebroadcast nationwide.

Subscribers choose programs they would like to purchase from a monthly catalog and call in their selections to Codart's toll-free number. Having secured the necessary billing information, the operator then



Studio in a Suitcase

Designed to assist the A/V producer, Sharp's Model RD-688AV portable recording studio (\$650) combines two cassette recorders with independent access to a separate sync control track, a stereo power amp, mike mixing and fader controls, two built-in mikes plus inputs for external sets, two speakers, and an optional (\$110) suitcase-style carrying case. There are also a music search function, manual and automatic level controls for recording, and line input jacks for taping from an external mixer. Sharp claims that the RD-688AV can be used with virtually all multi-image slide programmers.

Circle 71 on Reader-Service Card

Fighting Infrasonics

A passive infrasonic filter that plugs into the inputs of a cassette deck or the tape-out jacks of a preamp or receiver, Nakamichi's SF-10 is an economical (\$15 per pair) way to ensure good dubs from warped LPs. The gives the subscriber a numerical code specific to the selected program. The subscriber enters this code into his switcher on a 20-key panel, tunes the receiver to the local NPR affiliate, and puts his tape deck into the timer recording mode. Everything else takes place automatically.

To prevent unauthorized taping of premium material, Codart will supply its material to NPR in segmented form; thus, several different programs might be interleaved with each other in ten-minute coded pieces. The home-based decoder makes sense out of the broadcasts by switching the recorder on and off in accordance with codes embedded in the transmission. Information on what will be available in this payradio format is still sketchy, though a close reading of Codart's initial announcement indicates an emphasis on drama, educational, and informational programming, at least in the beginning.

Circle 73 on Reader-Service Card

SF-10 is said to provide 10 dB of attenuation at 10 Hz and 16 dB at 5 Hz. *Circle 69 on Reader-Service Card*



Behold, a **Behemoth**

At 100 pounds, Yamaha's PC-5002M is quite literally a heavy-duty professional power amp. Said to deliver 500 watts (27 dBW) per channel into 8-ohm loads and 750 watts (28¾ dBW) into 4 ohms, the amp can be bridged via a rear-panel switch for a mono output of 1,500 watts (31¼ dBW) into 8 ohms. To make powering it practical from standard 15-amp AC circuits, two line cords leading to separate left- and rightchannel power supplies are used. The PC-5002M has a rated frequency response of 10 Hz to 50 kHz, ± 0 , $-\frac{1}{2}$ dB, and harmonic distortion is said to be below 0.005%. Despite its high power consumption and output, the amp relies entirely on convection cooling via side-mounted heat sinks. Circle 93 on Reader-Service Card

CBS/Sony to Market and Manufacture CDs in the U.S.

A long-awaited and extremely important announcement by CBS and Sony indicates that the digital future is truly nigh. CBS/ Sony, Inc., a joint venture of the U.S.based record manufacturer and the Japanese codeveloper of the Compact Dise format, will bring Japanese CD pressings to the U.S. market in the first quarter of '83. Even more significant is the news that CBS/Sony will start domestic production of Compact Discs in 1984. This makes CBS the first major American record label to enter the Compact Disc market. (The only other announcement so far has been from the West-Coast audiophile label RealTime Records.)

CBS/Sony was formed in 1968 to manufacture and market LPs in Japan. Early reports from Japan, where CD players and CBS/Sony discs went on sale in October, indicate phenomenal acceptance, resulting in four- to five-week back orders for players and similar shortages of software.



Firming Up the Bottom

Striking in looks and price, Canton's \$2,400 Plus-A subwoofer promises output down to 16 Hz and comes complete with three built-in power amps—one rated at 160 watts (22 dBW) for the subwoofer itself and two at 75 watts (18¼ dBW) for satellite speakers. Crossover to the satellites is selectable at 90. 110, or 130 Hz, and bass response can be increased or decreased in 3-dB steps over a 12-dB range. All controls are microprocessor-mediated, with settings displayed on a front-panel readout. The subwoofer switches on automatically when it senses the presence of a musical signal; after a five-minute absence of audio input,



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AUDIO High Fidelity News

it turns itself off. A variable sensitivity control enables the Plus-A to be driven with a line-level signal or the output from a receiver. It comes in black or white lacquer; various wood veneer finishes are available on special order.

Circle 91 on Reader-Service Card



Aural Excitement for Sale

The mysterious Aphex Aural Exciter, so ubiquitous in pop recordings, is now available in a \$500 Type B consumer version. This is particularly good news for "distortion" fans, in light of the fact that the Aphex professional unit is available only on a rental basis at about \$30 per recorded minute. The Exciter's effect is variously described as adding clarity or brightness to the original sound. There are various controls on the Type B that let you alter the amount of enhancement mixed into the program; a bypass switch lets you make quick comparisons of the device's effect. *Circle 66 on Reader-Service Card*



Pyramid on a Budget

Designed by Dick Sequerra, the Pyramid Met 11 is a three-way, four-driver system comprising an 8-inch woofer, a 5-inch midrange driver, and two 2-inch tweeters. All drivers are said to be Time Aligned, and frequency response is stated as 34 Hz to 22 kHz, ± 3 dB. The Met 11s are priced at \$500 per pair; their nicely designed 12-inch-high wooden stands sell for \$75 a pair. *Circle 90 on Reader-Service Card*

An Owl for Collectors

The designer of the Owl 1 preamp claims that it can supply the proper equalization for any electrical or acoustic recording, including cylinders. There are seven selectable equalization turnover points (including flat and RIAA), and treble rolloff can be adjusted to reduce output by 5 to 16 dB at 10 kHz. High-frequency notch and rumble filters provide tunable noise reduction, and a bypass option enables signals to pass

10



through unaltered. As a "starter kit" for collectors of 78s, the manufacturer offers a specially designed Stanton pickup with an optimum tracking force of 8 grams and two custom-designed stylii. The Owl 1 (\$300) and cartridge kit (\$160) are available directly from the manufacturer. For more information, write to Conductart, Dept. HF, P.O. Box 616, Ansonia Station, New York, N.Y. 10023.



A Front End with Finesse

Jensen's latest in-dash car cassette player/ receiver is said to boast the best FM reception yet from a Jensen front end. To assure optimum reception. the \$500 RE-530 continuously samples the strength and quality of the broadcast signal reaching the car antenna, adjusting the tuner's circuitry in accordance with the changing signal. The unit is equipped with both Dolby noise reduction and the single-ended DNR (dynamic noise reduction) system. The cassette player features automatic reverse, music search, and locking fast wind. The RE-530's power amp is said to produce 4 watts of output into 4 ohms. Circle 68 on Reader-Service Card



In the Pink

Dubbed the EQ-One, Audio Source's first venture into home audio electronics is a combination spectrum analyzer, infrasonic filter, and ten-band, dual-channel equalizer. Each band is matched to a nine-segment analyzer display, switchable to show 2- or 4-dB intervals, with an overall range of 16 or 32 dB, respectively. The equalizer duplicates the tape monitor inputs and outputs it occupies in a receiver or preamp, and a full complement of front-panel switches permits it to be inserted before or after a tape recorder. The \$400 EQ-One includes a built-in pink-noise generator and a calibrated microphone.

Circle 83 on Reader-Service Card



TDK

You, the audiophile, are the toughest critic we know when it comes to sound performance. You're very selective in deciding the perfect equipment for your recording and listening needs. And you're just as selective in here the perfect equipment of the selective in the perfect equipment of the selective in the se

And you're just as selective in choosing your recording tape. TDK knows that. So we developed a line of high performance audio cassettes that meet your critical requirements. We call it the TDK Professional

We call it the TDK Professiona Reference Series. You're probably using TDK SA-X high bias cassettes new because of their superior perfermance characteristics. In addition, TDK has developed normal bias AD-X which uses TDK's famous Avilyn particle formulation and delivers a wider dynamic range with far less distortion than ever before. Plus, TDK's unique metal bias MA-R cassette which features high-energy performance in a one-of-a-kind unibody die-cast metal frame.

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HIGH RESOLUTION

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High Position

③TDK SA-X90



AUDIO CrossTalk

Practical answers to your audio questions by Robert Long

Reach Out

At about sixty-five miles from New York City, I have been unable to pull in WQXR, WNCN, or WNYC on my Tandberg receiver. It is now hooked to our cable service, which carries these New York classical stations, but the reception is not acceptably clean. I have tried a Realistic Color Supreme antenna, but to no avail. Do you know of any FM antenna that will pull in these stations?—W.K. Schneider, Center Moriches, N.Y.

In theory, a commercial cable system should be able to run rings around a housetop antenna; in practice, the FM (a "gravy" service piggybacked on the real moneymaker, TV) often gets the short end of the stick. You should do better with a top-notch FM-only antenna than with a TV model (some of which have traps to filter FM out of the signal) or even a TV/FM type. You may also find one of the new generation of supertuners helpful. (See our test report on the Carver TX-11 in last month's issue.) But ultimately, how well you succeed will be limited by the reception problems inherent to your home location.

Fazed by Phase

Would you please explain just what is meant by "phasing" loudspeakers?— James Austin, Tallahassee, Fla.

If you're fastidious about attaching the red ("hot") output terminals of your amplifier to the red terminals on your speakers and, likewise, black to black, your speakers should be correctly phased. That is, pulses of the same polarity in both channels will move the driver cones of both loudspeakers in the same direction. If this isn't so, you won't get good stereo imaging and you may sometimes hear very stange effects.

To check phasing, switch your amplifier to MONO to play the same signal (interstation hiss from an FM tuner works particularly well) through both speakers. It also helps if you move the speakers away from the walls for this test. Stand equidistant from and close to the speaker pair, moving your head from side to side. If the phasing is correct, the sound will appear to come from a spot between the two speakers and to move toward the nearer speaker as you move away from dead center. If the speakers are out of phase, the image will be diffuse and ambiguous, and therefore difficult or impossible to localize. In that case, reverse the hot and ground connections for one speaker only, at either the speaker or the amplifier (not both), and repeat the test to make sure the phasing is now correct.

Thumper Redux

My audio system also has the "thumper" problem described by Ralph Abbott in your October [1982] issue. And we're not alone. I'm about ninety percent sure that the thumps don't come from amplifier clipping, but from the component common to all the systems I know of that suffer from the same problem: the Technics SL-10 tangent-tracking turntable.—Marius Page, Grand Falls, N.B., Canada.

When we tested the SL-10 in May 1980, we experienced no such thumps, and we were so delighted with the turntable that we used it in our test system for much longer than we otherwise might have. However, Mr. Abbott has written again, supplying some additional details. If, as I now understand it, the thumps occur even between cuts, the SL-10's arm drive might be the culprit. As another reader with a similar problem-Richard Kerr of Mercer Island, Washington-points out, the recording pitch (that is, the spacing between adjacent grooves, and therefore the speed with which the stylus must move in tracing them) is often greater in the superdiscs Mr. Abbott had trouble with than it is in standard discs. Anyone with an SL-10 and Mr. Abbott's problem should refer his factory-authorized service center to the manufacturer's Bulletin No. 82-3, which deals with possible malfunctions that could cause such problems. If the repair station does not have the appropriate bulletin, write to us and we will pass your request on to Technics. [Address all requests to: HIGH FIDELITY, Dept. LS]

Tighten Your Belt

I have been disappointed by the belt drive systems in my cassette decks. The older one (a Pioneer CT-F900) required modification before it would stay working, and the newer one (a CT-F1250) is now being repaired to correct similar problems. Are belt drives inherently inferior to the beltless transports of Revox and perhaps others? Wouldn't your reports be more useful if they included information about the drive system?—Richard Reid, Grand Rapids, Mich.

By and large, I'd say that direct drive is better than belt drive in cassette decks, but it's usually more expensive, as well. (Look at the price of the Revox reported on in this issue.) For one thing, direct-drive systems are more consistent than belt couplings. But for that same reason, our experience with one or two samples of a belt-drive unit would not necessarily predict yours with that model, even if we were to delay our reports long enough to permit long-term reliability testing. And belts can do a very good job long-term in a well-designed transport.

Fuse Confusion

I use a Phase Linear 400 Series 2 amp with an Apt Holman preamp, a Thorens TD-115 turntable, a Grace cartridge, and two AR-11 speakers fused at 2½ amps. Sporadically—usually in the afternoon, when I turn on the preamp—there is a loud cracking sound and the speaker fuses blow out. If I replace the fuses and try again, there's no problem. What causes this?—George R. Hanna, Washington, Pa.

The most difficult problems to solve (and the most expensive, if you're relying on commercial help) are always the intermittent ones. A corollary of Murphy's Law dictates that if anything can go right while you're trying to isolate what's going wrong, it will. It seems clear that a turn-on transient is coming from somewhere and getting into the speaker lines. The first step is to determine which component is producing the surge. The only probable candidates are the amp and the preamp (more likely the former, since the Apt preamp has a muting relay to prevent turn-on or turn-off transients from reaching the amp). Make a practice of turning them on separately, first the power amp and then the preamp. If the fuses continue to blow when you turn on the amp, it is at fault; if they don't blow until you turn on the preamp, the problem lies with it. Should the culprit be the preamp, you can block the surge from reaching the speaker lines simply by switching on the amp a few seconds after the preamp.

We regret that the volume of reader mail is too great for us to answer all questions individually.

THE VENERABLE WASHINGTON HI FI SHOW HAS A WONDERFUL NEW HOME

The oldest established audio exposition in the United States is moving to its sixth location in February and, as far as the show producers are concerned, it's a permanent one. It took an act of Congress to give Washington and the Hi Fi Show a facility that combines closed space, needed for sound demonstrations, open space, useful for home electronics in general, and spacious lobbies and theater areas. All of this is to be found in the brand



new Washington Convention Center, opening to the public just four weeks before the 1983 Washington Hi Fi Stereo & Video Show, which plays Friday, Saturday and Sunday, February 11, 12 and 13.

First presented in downtown Washington in 1954, the Washington show has consistently been the most successful and best attended of expos of its character for the general public. The 1983 edition, while continuing to feature high fidelity audio components, will devote a considerable area of its 75,000 square feet to high quality video, and its allied fields which include satellite reception, electronic games and computers for home and business. The show will be distributed over two floors of the Convention Center, conveniently connected by escalators.

The central downtown location of the Center will be another great convenience. Bounded by 11th. 9th and H Streets and New York Avenue, it is a short walk from the Metro Center Station of the Washington subway system. There is nearby parking for upwards of 3.000 cars on commercial lots, and substantial street parking is available during the weekend hours of the show.

In accordance with principles established from its beginnings 30 years ago, manufacturers and their representatives will be heavily participating as exhibitors. Side by side with factory people will be selected retailers who are encouraged to sell — either taking orders for delivery from their stores or allowing customers to

take their selections with them right from the exhibit floors. In the Convention Center this procedure will be marvelously efficient, since purchases can be picked up directly from a drive-in ramp, supermarket-style.

A dominant attraction at the 1983 show is expected to be the Hi Fi Video Cafe Theater. The name pretty well describes the transformation of one of the Center's great halls into a kind of dinner theater demonstrating the latest large-screen and TVrecording techniques. Area broadcast media will participate directly in the theater and other aspects of the enlarged Hi Fi Show.

The High Fidelity Music Shows, as they were originally called, were founded by and are still produced by M. Robert Rogers and Teresa Rogers. They have operated in major markets nationwide since 1964. After Washington in 1983, on the docket are New York, Houston and Detroit. Because of the new Convention Center, the Washington show, which has been operating every two years, will now become annual.



AUDIO Retsoff's Remedies

Simple solutions to common stereo system problems

Choosing the Right Audio and Video Tape

WHEN I FIRST BECAME interested in high fidelity, about 1950, I really wanted a tape deck, but they were too expensive and rare as hens' teeth. Now I have four cassette decks in active service at home, two $10\frac{1}{2}$ -inch open-reel decks, a personal-portable tape player, and a cassette deck in my car—not to mention the two VCRs hooked up to my TV receiver. Tending to this menagerie is the subject of this column, and although there are general guidelines that apply to all sorts of tapes, specifics differ from one type to another.

Let's start with audio cassette tape, which comes in four general classes: Type 1, the gamma-ferric-oxide formulations; Type 2, the chromium-dioxide formulations and cobalt-treated ferric-oxide tapes that have recording characteristics similar to those of the chromes; Type 3, the socalled ferrichromes; and Type 4, the pure metal-alloy tapes. There are also the garden-variety ferric tapes that follow the original Philips-based DIN spec. HIGH FIDELI-TY has called this group Type 0. Each tape type requires a different bias level and a somewhat different recording equalization to achieve best results.

Note that the differences mainly affect recording. There are only two standard playback equalizations: 120 microseconds, used for Type 0 and 1 tapes, and 70 microseconds. for Types 2. 3, and 4. So even if your deck is not set up to record on ferrichrome or metal, it can reproduce such tapes made on another machine via its chrome (Type 2) equalization setting. I'm always amused to read ad copy for a carstereo deck or a personal-portable player that touts its ''metal compatibility'': If the player is chrome compatible, it is ipso facto metal compatible.

Decks of recent vintage are, at minimum, usually equipped to make recordings on Type 1, 2, and 4 tapes. Although I have used decks that do an excellent job with ferrichrome (Type 3) tape, the majority do not, so I tend to stick with the three major tape types.

Metal tape is substantially more expensive than ferric or chrome/ferricobalt, and I reserve it for the most demanding situations—a live session or dubbing an audiophile disc that has a lot of treble energy. Metal's strong suit is its superior high-frequency headroom—not lower noise, as is generally thought. To take advantage of that headroom requires a superior cassette recorder that will not limit tape performance by premature head saturation or electronic overload. If you can't afford such a deck, why waste your money on exotic tape?

My workhorses remain the ferrics and chrome/ferricobalts. Ferric tapes span a wide price range. The least expensive (Type 0) tend to have limited high-end response and higher noise, but they're fine for speech recording. The premium ferrics (Type 1) have wider response and lower noise. I use them mainly for recording rock and pop music, which usually have a rather limited dynamic range. The best Type 1 tapes overload very gracefully and have remarkably stable response. Chromes and ferricobalts are quieter than straight ferrics,

Do not assume that all tapes will work equally well in your deck.

mainly because of the change in playback equalization. True chromes are actually the quietest tapes I've used, but they don't quite match the "chrome-equivalent" ferricobalts in high-frequency headroom. I use both for recording classical music, choosing between them on the basis of the particular piece and its instrumentation.

Do not assume that all tapes will work equally well on your deck. Even within each classification there are differences in sensitivity and in the precise bias level that produces optimum results. If your deck has bias and recording-level (sensitivity) calibration controls and the necessary test tones and indicators that enable you to adjust to specific tapes, you're in great shape. You can use almost any formulation on the market and be reasonably assured that you're getting the best it has to offer. If your deck does not have these controls and relies on fixed internal bias and EO settings, you're wise to stay with the tapes the manufacturer recommends. These are usually outlined in the owner's manual. If not, call the manufacturer and demand specific guidance.

If you don't want to play it by the book, I suggest you refer to HF's cassette

by Alexander N. Retsoff

tape reviews to find other brands similar to those recommended or make several trial recordings on a new brand before using it for an important job. If you find a new tape that you like and are willing to stick with in the future, have a competent service technician readjust the deck's internal controls for best results with that formulation.

On a three-head deck with monitoring provisions, I use music for tape evaluation, switching back and forth between the source and the tape. On decks that do not permit monitoring, you might be best off recording FM interstation noise-which is fairly consistent in nature-and then, in playback, switching between tape and tuner on your preamp for comparison. Don't try to record the noise at too high a level (or you will dull the high end), and make sample recordings both with and without the deck's Dolby circuitry switched in. First listen to the section of tape recorded without noise reduction. If it sounds brighter than the original, the tape is probably underbiased. You may like the brighter sound, but it isn't accurate and is likely to be distorted.

If your sample recording is deficient in highs, the tape may be overbiased. To be sure, try recording at an even lower level. Remember to readjust the volume so that tape playback and source are equal in loudness: If there are level differences, your ear may fool you into thinking that louder is better.

Assuming that the reproduction is very close to the original, the bias level is probably pretty much on the nose. Now it's time to check the sensitivity. Actually, this is important only when using level-sensitive Dolby noise reduction systems. Dolby C is much more critical than Dolby B in this regard and provides a more realistic barometer of tape sensitivity. (DBX noise reduction is not level sensitive and is therefore unaffected by differences in tape sensitivity.) Compare the sections of tape recorded with Dolby noise reduction to the source. Again, strive for equal playback loudness and listen for differences in midrange and high-frequency response. Make sure, however, to do this test at a very low recording level-approximately -20 dB or less. Only at these levels will the action of the Dolby circuitry be readily apparent.

Selecting tape for an open-reel deck is somewhat simpler. First, there aren't many brands on the market, and those that are available are not continually reformulated. Furthermore, manufacturers of open-reel decks tend to be more specific about the particular formulations to use with their recorders. If you do want to use different brands, I suggest a listening test similar to the first one outlined above. There are several new EE (extra-efficiency) open-reel tapes available. These are incompatible with normal formulations in both bias and equalization requirements and can be used only on decks with provision for them. That applies to both recording and playback.

Selecting a video tape is also less of a hassle than choosing an audio cassette tape. Video information is recorded without bias current, thus eliminating one variable; tape sensitivity is also relatively unimportant in obtaining a good picture. On the audio track, bias *is* used, and on those VCRs with Dolby noise reduction, sensitivity should theoretically be important. But since little attention has been devoted to the audio characteristics of VCRs (though that situation promises to change), they lack the appropriate controls to redress the sensitivity problem.

For the best possible picture quality, you should try to find a tape that yields few dropouts, low chroma noise, and low luminance noise. Most VCR users tend to record at the slowest speed possible to give the longest recording time. The myth that this makes extraordinary demands on the tape has convinced many video recordists that only a high-grade tape will do. As far as dropouts are concerned, that's true. But in my experience, any top-brand video tape is adequate for slow-speed recording; indeed, whatever differences might exist among various tapes in color purity, chroma noise, and luminance noise are unlikely to show up except at the faster speeds. So when making visual comparisons, record at the highest speed available to you.

Dropouts appear as a momentary loss of picture, with a horizontal streak extending partially or completely across the screen. They occur most often at the very beginning and end of a tape, so those may be the best places to look. For that very reason, avoid recording valuable programs on the first or last minutes of any video cassette. Luminance (or video) noise shows itself as grain or snow in the picture. Chroma noise shows up in two ways: as a black streak or blotchy character in the background color, most noticeable in solid-red areas, or as random shifting of colors from their nominal hues.

No article on selecting magnetic tape would be complete without the following advice: Choose a name brand and avoid apparent bargains. A manufacturer with a reputation to uphold usually enforces stringent quality control. The product, therefore, can be counted on to be uniform in quality. With off-brand tape, the name on the box offers no such assurances; in fact, it is possible that the tape is some other company's reject or overrun. A once-in-a-lifetime recording is too valuable to risk on such a product.



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AUDIO Basically Speaking

Audio concepts and terms explained

by Michael Riggs

How Tape Recording Works

EIGHTY-FIVE YEARS AGO, in 1898, Vlademar Poulsen invented magnetic recording. He introduced his "Telegraphone" which used steel wire on a rotating cylinder and a moving head connected to a simple carbon microphone—as a dictating machine. Just twenty years ago, history repeated itself with Philips' introduction of the compact cassette, also intended primarily for dictation. Although both devices found use in speech recording, their significance has proved far greater in music reproduction and data storage.

Tape recording, as such, was developed in the Thirties and has made great strides since. Modern recording tape consists of a thin polvester backing coated on one side with very fine particles of an iron-oxide compound (most commonly), chromium dioxide, or an iron alloy. All of these coating substances are ferromagnetic, which means that they are capable of being magnetized. In conventional analog recording (1 will discuss digital recording another time), the music signal is recorded as variations in the strength and polarity

of the particle's magnetization, corresponding to the amplitude and polarity of the input.

You can visualize the process by thinking of the particles as containing microscopic bar magnets, each with its own north and south magnetic pole. In raw tape, these magnets are randomly oriented, so that the net magnetic field from the tape is virtually nil. A tape deck's recording head is essentially an electromagnet with its external field concentrated in the vicinity of a small gap in the head's metal pole piece. The pole piece has a wire wrapped around it. This wire carries the input signal current, which induces an alternating magnetic field in the pole piece. The field emerges from the gap so that as the tape slides across the head's surface, the magnetic field penetrates and magnetizes nearby particles in the tape coating.

The polarity of the current through the head winding (positive or negative) determines the polarity of the magnetic field in the gap; the amplitude of the current determines the strength of the field. The particles in the tape coating tend to align themselves magnetically with the field in the gap, so that their south poles face in the direction of what is, at that moment, the gap's north pole, and their north poles face in the direction of the gap's south pole. The stronger the input signal (and therefore the field in the gap), the more uniform the magnetic orientation of the tape particles. And the greater the magnetic uniformity among the particles, the stronger the field retained by the tape.

Thus, the electrical properties of the input signal are mirrored in the magnetic characteristics of the recorded tape. All that is necessary to retrieve the original signal is to reverse the process. The tape is passed



over a second head (or the same head, in cassette decks with combined record/play heads), and the variation of the magnetic field passing the gap induces a current in the head winding corresponding to the changes in the field strength and the magnetic polarity, thereby reconstructing the recorded signal. It's almost as simple as that.

But not quite. Tape responds nonlinearly to weak fields, because of what you might think of as magnetic friction: It takes a certain amount of energy just to get the particles to begin any magnetic reorientation. This creates severe distortion at low signal levels. For that reason, all modern tape decks mix an ultrasonic tone, called bias, with the input signal, to keep the recording head's field strength up out of the tape's nonlinear region. (Bias is typically at frequencies around 100 kHz and is therefore completely inaudible apart from its effect on how the tape accepts the signal.) The exact amount of bias required varies widely according to the tape formulation. Consequently, all tape decks have internal (sometimes external) bias trimmers for making the necessary adjustments. This is one of the reasons it's so important with most decks to follow the manufacturer's tape recommendations: The machines are preadjusted at the factory for the recording characteristics of certain tapes, and if the tape you use is too dissimilar, you will get poor recordings.

Another problem is the tape's limited ability to become and remain magnetized. Beyond a certain point, increases in recording level will just give you more distortion—not more signal on the tape. Tape saturation, as the phenomenon is called, is formally deemed to have occurred when distortion reaches 3%.

But distortion is only one of several interrelated problems connected with signal level, and the others are often more audible. For example, tape has a tendency to lose its magnetization at high frequencies as it passes out of the field of the recording head. Known as self-erasure, this nettlesome propensity is aggravated by the treble boost in the recording equalization, since unfortunately, it becomes worse as the strength of the recording head's magnetic field increases. As a result, the high end will begin rolling off with increasing steepness as the signal level goes up. This is also the reason that the

amount of bias affects high-frequency response: too much depresses the treble frequencies. Bias adjustment is always a compromise between low distortion and highfrequency headroom.

Another compensation regularly used in tape recording is playback equalization. Because the playback head senses the rate of change in the amplitude of the recorded magnetic flux, rather than the amplitude itself, its response slopes upward. A complementary curve is applied in the playback electronics to eliminate this characteristic.

The last major difficulty in analog recording is hiss, which is why noise reduction systems are so important. Dolby B is the de facto standard for cassette noise reduction, but lately, many decks have been incorporating the more powerful Dolby C and DBX circuits as well. The development of effective, low-cost noise reduction techniques was vital to the cassette's transformation from a mere dictation aid to a high fidelity recording and playback medium.

HOW COULD A CASSETTE DECK WITH TWO HEADS BE SO HARD TO GET?



The Kyocera D-801 Cassette Deck is hard to get because so much more is built into it. For example, it has five circuit boards where most decks have only one or two. But that's only the beginning.

It more than meets the ultimate tape deck challenge.

The challenge is to move tape across the heads at as nearly a constant speed as possible. Variations in speed, of course, come out in your speakers or headphones as wow and flutter.

Many decks claim a wow and flutter figure of 0.05% WRMS– trouble is, speed variations of 0.05% are clearly audible with piano music (one of the most revealing tests you can give a cassette deck-try it on the D-801 and marvel!).

The D-801 by Kyocera comes through with a remarkably low wow and flutter figure of 0.02% WRMS -and that is derived from a unique, three-motor, dual capstan drive mechanism. Two capstans are driven by a direct drive motor. A beltless/clutchless simple DC motor drives the feed and takeup reels. while a third motor is used as a head-position assist drive (it greatly prolongs head-to-tape azimuth accuracy). The dual capstan system provides that sensationally accurate tape travel, maintaining proper tension between capstans to eliminate external shock source modulating noise.

It more than meets the needs of the audio perfectionist.

The D-801 goes above and beyond even the fussiest audiophile's needs with 3-position bias/equalization selection (with fine bias adjustment). 400 Hz calibration tone, Automatic Program Mute Recording, automatic search, and electronic 4 digit display, including counter, elapsed time and time remaining functions.

The D-801's noise reduction systems were built for the audio purist. It has *two*-Dolby* B & C- Dolby B for music material of limited dynamic range, Dolby C for music of the widest dynamic range, so noise reduction can be tailored to program material.

Finally, the specs everyone wants: frequency response of $30-20,000 \text{ Hz} \pm 3 \text{ dB}$ using metal or CrO₂ tape, and a S/N ratio of 78 dB with metal tape in Dolby C NR mode.

If you have any trouble finding a Kyocera dealer, contact: Cybernet International Inc., 7 Powder Horn Drive, Warren, NJ 07060 (201) 560-0060.





AUDIO Sound Views

Opinion and comment on the changing audio scene

Tape at the Turning Point

A FEW WEEKS AGO, walking by a Sam Goody's record store in Manhattan, I noticed a poster in the window advertising a new album from Donald Fagen (half of Steely Dan, before that duo's recent split). What caught my eye was the bold proclamation that "The Nightfly" is Fagen's "first solo cassette and LP." In the past, most prerecorded cassettes were poorly made, barely promoted (if at all), and priced at a considerable premium over records. Seeing "cassette" precede "LP" in the promotional copy was, therefore, something of a surprise.

But as the poster suggested, and a quick look around the store confirmed, the times are indeed a changin'. Although LPs and the equipment to play them will be around for years to come, the future in home music playback lies elsewhere.

Witness the shift in market acceptance of prerecorded cassettes. Sam Goody's is perhaps the largest record retailing chain in the New York City area, but until lately prerecorded cassettes were not a big part of its trade. Now the company devotes about half of its floor space to them.

The phenomenal popularity of the Compact Cassette was fueled initially by its convenience (especially compared to openreel tape, which it has almost entirely supplanted). Cassettes are easier to carry and store than LPs, more durable, and completely free of the ignoble tendency to accumulate ticks and pops. Even so, the superior sound quality available from records enabled them to retain their pride of place until very recently. When people wanted cassette copies, they simply dubbed them from discs, which was usually no more costly than buying prerecordeds and could invariably yield better sounding tapes.

In the process, however, a lot of people wound up owning home cassette decks. From there it's just a short step to car cassette players, personal portables, and other carry-it-with-you sound systems. With the cassette medium already well accepted and firmly anchored, the portable-music boom was almost inevitable. And there, the LP is locked out: too bulky, too fragile, and unplayable except on a stable surface. On the go, the cassette reigns supreme.

As a result, people have come more and more to depend on cassettes as their primary source of recorded music. And

because of the scarcity, expense, and relatively low quality of the prerecorded variety, they have tended to roll their own, from records bought, borrowed, or broadcast. The record industry's initial response was to complain bitterly about home taping, on which it pinned some of the blame for the slump in record sales over the last couple of years. (There seems to me to be a strong element of scapegoating in this attitude, especially in light of evidence that most people tape their own records and that many buy discs for the purpose of taping thembut that's another story.) Its second, more constructive response has been to issue more and better prerecorded cassettes (us-

Cassettes are fast becoming the primary music delivery medium.

ing higher quality tape and, increasingly, the Dolby HX Professional headroomextension system for improved high-frequency response) at lower prices. From that has come a surge in sales, to the extent that prerecorded cassettes are now outselling discs.

If cassettes were the only challenger, the LP would emerge from the fray battered and weakened, but still alive. Garden-variety discs still have the edge over typical prerecorded cassettes in sound quality, partly because of the high-speed duplication techniques used for making the cassettes. More serious, however, are the frequent discrepancies between recording and playback azimuth, which can cause severe treble attenuation and a consequent dulling of the sound. Recording azimuth is not consistent among the various brands of prerecorded cassettes, or even within a single brand, in many cases. And as our test reports have been documenting for years, the playback azimuths of home cassette decks vary substantially-seldom a problem when tapes are played back on the same machine used to record them, since then the recording azimuth is usually well matched to the playback azimuth, but otherwise a potential source of difficulty, even if the record companies were to maintain a consistent recording azimuth. For the highest possible sound quality, people will still want something better than prerecorded

by Michael Riggs

cassettes are ever likely to be.

But cassettes have eroded the LP's position enough from below to make it vulnerable from above. The death blow will be served by the Compact Disc, which offers better sound, higher durability, and greater convenience than either LPs or cassettes. As prices for players and discs come down, LPs will gradually lose their reason for existing and disappear from the scene replaced at the high end by CDs and the low end by cassettes.

The emergence of the Compact Disc will also affect the cassette market, since it, too, can be used in cars. This will reduce or eliminate one of the prime incentives for making or buying cassettes. CDs will not, however, find their way into personal portables, which will remain the province of cassettes. And cassettes will become the sole source of prerecorded music for people who don't buy high fidelity component systems, as tape decks replace phonographs in low-price compact systems.

It might seem at this point that the next logical step is digital recording on standard compact cassettes, but I think not. The recorders would necessarily be expensive compared to most analog cassette decks, and they cannot be made small enough (within the foreseeable future) to serve the public's growing taste for portable sound. And though they would offer some gain in sound quality and consistency, that in itself is probably not enough to dislodge a wellentrenched, broad-based medium that at its best is capable of very good reproductiona good description of the analog cassette. Add to that the playing-time limitations imposed by PCM recording on such a narrow tape (presently about twenty to thirty minutes per cassette, as compared to ninety minutes for an analog cassette or seventy minutes for a Compact Disc), and I think you have a formula for a flop.

Those who want the last word in home recording will turn instead to digital adapters, such as the Sony PCM-F1 (see "On Location With a Digital Deck," August 1982), used in conjunction with a video cassette recorder. Such devices make possible playing times of more than two hours and perhaps as long as eight with Sansui's PC-X1 Tricode PCM processor (see "High Fidelity News," January). These digital systems also provide higher fidelity than is obtainable with any analog tape recorder, cassette or open-reel. In fact, there eventually won't be much reason for anyone except audiophiles who need or want to physically edit tape to buy open-reel record-HF ers any more.

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Preparation supervised by Michael Riggs, Peter Dobbin, Robert Long, and Edward J. Foster. Laboratory data (unless otherwise noted) supplied by Diversified Science Laboratories.



Revox's Pro-Am Cassette Deck

Revox B-710 Mk. II cassette deck, with Dolby B and C noise reduction. Dimensions: 1734 by 534 inches (front), 13 inches deep plus clearance for controls and cassette holder. Price: \$1,995; optional B-710 remote control, \$200. Warranty: "limited," two years parts and labor. Manufacturer: Studer Revox GmbH, West Germany; U.S. distributor: Studer Revox America, inc., 1425 Elm Hill Pike, Nashville, Tenn. 37210.

PLAYBACK RESPONSE (BASF test tape; -20 dB DIN)

DB	
0	
-5	
0-710 Mb. 8 (1)	
HZ 20 50 100 200	500 1K 2K 5K 10K 20K
L ch	+21/2, -11/2 dB, 315 Hz to 18
	kHz
Rich	+313⁄4 dB, 315 Hz to 18 kHz
RECORD/PLAY RESPO	DNSE, TYPE 2 TAPE (-20 dB)
DB	
0	Company of the Party of the Par
-5	T-3
-5	

8-719 88. 8 (2)	
HZ 20 50 100 200	500 1K 2K 5K 10K 20K
Lch	+3/4, -2 dB, 23 Hz to 20 kHz
R ch	+1/2, -3 dB, 22 Hz to 20 kHz
with Dolby B noise reduc	tion
R ch	+11/2, -3 dB, 22 Hz to 20 kHz
with Dolby C noise reduc	tion
— R ch	+11/4, -3 dB, 33 Hz to 15 kHz
DB	NSE, TYPE 4 TAPE (-20 dB)
-5	
	500 1K 2K 5K 10K 20K
	+13/4, -2 dB, 24 Hz to >20 kHz
	+21/2, -2 dB, 24 Hz to >20 kHz
with Dolby B noise reduc	
Rich	±2 dB, 24 Hz to >20 kHz

---- R ch +3, -2 dB, 24 Hz to >20 kHz

with Dolby C noise reduction

IT HAS BEEN A LONG TIME COMING. Revox always said that it would not offer a cassette deck until it could match-within the limitations of the format-the standards on which it has built its Revox division's reputation in domestic open-reel recorders (to say nothing of its Studer professional equipment). So it wasn't until 1981 that the B-710 first appeared, to be followed almost immediately by the Mk. II version with Dolby C, which we're reviewing here. A glance at the faceplate immediately proclaims it a Revox; a look under the hood, so to speak, shows why extra gestation time was required. It certainly is not a typical machine.

Revox has lavished particular attention on the drive and head-mounting systems. The former has four motors: two induction models for spooling, plus a pair of Hall-effect capstan motors synchronized by a common quartz reference. No belts. pulleys, friction clutches, or mechanical brakes are used in the design. The dual capstans (with microscopically different diameters, to control tape tension across the heads) are driven directly by their respective motors. Revox uses a frame made of die-cast aluminum (instead of the usual stamped metal) to keep the tape path aligned as precisely as possible, despite the moving headblock required by the cassette format. And the headblock's three-point positioning is designed to avoid the play that induces skew in conventional cassette transports.

The capstans and heads-erase head

to the left, with the separate recording and playback heads (whose azimuths are individually adjusted at the factory) sharing the cassette's center opening-are easily reachable at the bottom of the cassette well on the front panel. A removable clear plastic cover can be placed over a cassette while it's in use, offering exceptional visibility while keeping the dust out. When time comes to clean or demagnetize the heads, you press the timer-programming CLEAR button (which is also labeled "lift") and the entire block pops up into working position for accessibility. On other decks, we have used the PLAY for this purpose, but Revox's microprocessor logic is too smart for that: PLAY won't operate if there's no cassette in the holder

The timer controls comprise two sets of buttons: one behind the left end of the narrow door that forms the top front-panel trim, the other next to the fluorescent digital display just below. In the latter group, MODE converts the four-digit display from a counter to a clock and back; RUN-UP steps the display up by one (or one minute in the clock mode) per tap, or continuously, if you hold your finger on the button; ZERO resets the counter. The buttons behind the door set (and clear) the start and stop points for memory stop or repeat (in the counter mode) or for automatic timer recording or playback (in the clock mode). Incidentally, the clock operates as a conventional twelvehour device as delivered, but can be converted to twenty-four-hour operation (in which 1:00 p.m. is 13:00), if you prefer.



HOW CAN SANSUI CLAIM THE WORLD'S ONLY DISTORTION-FREE RECEIVER? SIMPLE.WITH SUPER FEEDFORWARD DC AMP.

Creating technological breakthroughs is nothing new to Sansui. One of our most recent innovations, the unique Super Feedforward DC power amplifier system routs all types of distortion—harmonic, intermodulation, transient intermodulation, switching—you name it.

switching—you name it. And it's the reason we can claim that Sansui's new top-ofthe-line, 120-watt* Z-9000 receiver is truly distortion-free.

Simply stated, the Sansui Super Feedforward circuit is the perfect marriage between negative feedback and feedforward. As a result, you're never bothered by any type of distortion. You hear precisely what's on the records, tapes and broadcasts. Nothing added, nothing lost—just pure music.

7-band graphic equalizer for greater tone control.

Unlike receivers with conventional two or three tone controls, the Z-9000 provides total flexibility with a state-of-



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the-art 7-band graphic equalizer that helps balance the sound in your listening room.



Digital Quartz-PLL tuning is more precise.

While Super Feedforward alone is enough to outperform most receivers, the Z-9000 adds the pinpoint accuracy of drift-free digital Quartz-PLL tuning. To make sure it's as easy to use as it is precise, there's microprocessor-controlled pushbutton pre-selection of eight FM and eight AM stations. Plus automatic scanning to recall each preset station at the previously programmed volume level. Each time you touch the tuning button you can scan or go up and down the FM and ĂM bands, bringing in perfectly tuned stations even when they're a hairline away from each other.

Extras add more pleasure to your listening.

The Z-9000 is loaded with high technology refinements that let you experiment with sound the way no other receiver car.

The built-in reverb unit with its own display can make your finest tapes and recordings sound even more magnificent by adding natural depth, extra brilliance and sound realism. The exclusive quartz/timer clock with three independent memory functions can be programmed to wake you up, full you to sleep, and tape a broadcast in your absence. There are also high and subsoric filters and a preamp that handles both moving magnet and moving coil cartridges.

If the new distortion-free Sansui Z-9000 sounds too good to be true, satisfy yourself with an audition at your audio specialist. Or write today for additional details.



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RECORD/PLAY RESPONSE, TYPE 1 TAPE (-20 dB)

RECORD/PLAY RESP	ONSE, TYPE 1	TAPE (-20 dB)	
DB			
0			
-5		1 miles	
HZ 20 50 100 200	500 1K 2	K 5K 10K 20K	
L ch B ch	+0, -3 dB, 22 +0, -3 dB, 22	Hz to 16 kHz Hz to 16 kHz	
with Dolby B noise redu			
Rich		Hz to 11.5 kHz	
with Dolby C noise redu	uction		
R ch	+0, -3 dB, 22	Hz to 8 kHz	
S/N RATIO (re DIN 0 d	B; R/P; CCIR/A	RM-weighted)	
Type 2 tape without noise reduction	Type 4 tape	Type 1 tape	
55 dB with Dolby B	541/4 dB	511/2 dB	
65 dB	641/2 dB	613⁄4 dB	
with Dolby C 731⁄4 dB	723⁄4 dB	703/4 dB	
INDICATOR READING	S FOR DIN 0 D	B (315 Hz)	
Type 2 tape	+1 dB (with 1.		
Type 4 tape	+2 dB (with 1.		
Type 1 tape	+1 dB (with 0.	39% THD)	
INDICATOR READING FOR 3% DISTORTION (315 Hz) Type 2 tape +4 dB (for +2½ dB DIN) Type 4 tape +5 dB (for +2¼ dB DIN)			
Type 1 tape	+6 dB (for +4		
DISTORTION (third har Type 2 tape Type 4 tape Type 1 tape	$\begin{array}{l} \text{monic; at } -10 \text{ c} \\ \leq 1.3\%, 50 \text{ H} \\ \leq 0.58\%, 50 \\ \leq 0.66\%, 50 \end{array}$	z to 5 kHz Hz to 5 kHz	
ERASURE (100 Hz)			
Type 2 tape Type 4 tape		691/2 dB 503/4 dB	
CHANNEL SEPARATIO	ON (315 Hz)	51 dB	
INDICATOR "BALLISTI	CS"		
Response time		4.4 msec	
Decay time		≈1.4 sec	
Overshoot		0 dB	
SPEED ACCURACY	0.5% fast, 105	-127 VAC	
FLUTTER (ANSI/IEEE	weighted peak;	R/P) ±0.077%	
SENSITIVITY (re DIN () dB; 315 Hz)		
line Input		72 mV	
mike input		0.35 mV	

Another group of buttons behind the right end of the door switches the multiplex filter and chooses the tape matching. For the latter, there are four buttons, marked IEC I, IEC II, IEC IV, and AUTO. The last automatically chooses one of the three foregoing bias/EQ/sensitivity settings on the basis of the keyway notches molded into the cassette body (none for Type 1, one at each end for Type 2, and two more nearer the center for Type 4). The manual buttons can be used for any shells that don't follow the keyway standard (including those of most early production metal cassettes). When the automatic mode (considered normal operation) is in use, an IEC legend lights at the right end of the level indicators; similarly, the Dolby symbol and "MPX" indicate when noise reduction and the filter, respectively, are switched in.

Another nice touch is the automatic switching of the left mike jack to a mono input feeding both channels when there's no plug in the right mike input. And there's a volume control for the headphone output (particularly welcome when you need to monitor during live recording). Back-panel features include recessed jacks (so that the B-710 can be placed flush against the back wall), individual level adjustments for the output jacks, and sockets for an optional remote control and for an interconnect cable that enables the B-710 to turn on a B-780 receiver or B-739 tuner/preamp for timer recording.

One particularly elegant feature is a leader-sensing system that not only stops the tape as soon as the magnetic portion has run out, but can be used to cue up the beginning of the tape as well. If you press FAST FORWARD and, a moment later, REWIND, the deck starts up, reverses back into the leader, and then switches into PLAY until all of the leader is past the heads, leaving you cued up for recording. Very neat.

The meters are calibrated from -30 to +8 dB, with 1-dB steps from -6 up-for fine detail over a much broader range than most cassette decks, including very fancy ones. The owner's manual (which is a model of German thoroughness, though some passages make rather obscure reading) recommends that you drive the indicators to +6 with Type 1 or Type 4 tapes and to +4 with Type 2 tapes. As the measurements from Diversified Science Laboratories show, these figures represent the midrange maximum recording level (for 3% distortion); with the Type 4 tape, the measured maximum is 1 dB lower than the recommendation, but high-frequency headroom is excellent with this tape.

Revox suggested three TDK tapes for DSL's tests: the ferricobalt SA-X for Type 2, MA for Type 4 (metal), and OD (a ferric formulation now retired in favor of the slightly different AD-X) for Type 1. There is a hint of overbias in the slight droop at the high end of the Type 2 response curves, but it certainly is not severe. (With the generic IEC Type II test tape, which is a true chromium dioxide formulation, the droop is more pronounced, and a sensitivity mismatch introduces about 2 dB of shelving into the Dolby response curves.) Response is, predictably, more extended with the Type 4 tape, which has a very slight tendency to peak at the top end but is otherwise quite flat. The Type 1 curves roll off at the top (and are closely approximated by curves







Also behind the door are the multiplex-filter switch and the tapeselector buttons. The latter have positions for IEC types I, II, or IV, or automatic selection based on the keyways in cassette shells.

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MIKE INPUT OVERLOAD (clipping) 37 mV MAX, OUTPUT (from DIN 0 dB) 0.95 V

made with the generic IEC Type I tape). In general, all three tapes in our regular test series behaved well in the B-710. Distortion is in the normal ballpark, though the presence of a second harmonic component makes the THD slightly higher than the third-harmonic distortion figures in our data. The erasure measured for metal tape is a little disappointing, perhaps, but the remaining figures are all above reproach. Beyond the manifest sonic pleasures that such a product can afford its user, there is the pleasure of using a piece of equipment that expresses its quality through its feel and behavior. The B-710 goes beyond elegance to convey a sense of self-confidence through the solidity of its switches and faders and the surefootedness of its logic. The drive system and the "microcomputer" controls certainly contribute to this, as does Revox's characteristic design approach. Circle 99 on Reader-Service Card



A Computer-Age **Cassette Deck** from Sony

Sony TC-FX1010 cassette deck, with Dolby B and C noise reduction, Dimensions: 17 by 41/4 inches (front), 13 inches deep plus clearance for connections. AC convenience outlet: one switched (300 watts max.). Price: \$650; optional RM-50 remote control, \$55; optional RM-65 remote control, \$25; optional RM-80 wireless remote control, \$120. Warranty: "limited," one year parts and labor. Manufacturer: Sony Corp., Japan; U.S. distributor: Sony Corp. of America, Consumer Products Div., Sony Drive, Park Ridge, N.J. 07656.

PLAYBACK RESPONSE (BASF test tape: -20 dB DIN) DB 0 - 5 TC-FX1010 (1) 11 HZ 20 50 100 200 500 1K 2K 5K 10K 20K +0. -3 dB. 315 Hz to 7.5 kHz L ch R ch +0, -3 dB, 315 Hz to 8 kHz RECORD/PLAY RESPONSE, TYPE 2 TAPE (-20 dB) DB 0 - 5



+2, -3 dB, <20 Hz to 17.5 kHz R ch

THE WELLSPRINGS OF INNOVATION seem to flow with exceptional freedom at Sony. All of the Sony components we have tested recently have embodied fresh ideas-with microelectronics as inspiration-and the TC-FX1010 is no exception. Its smooth, multicolored front panel is composed of touchplates that control some functions unavailable elsewhere and accomplish others in unusual ways. Indeed, its elaborate logic can sometimes create behavior suggestive of free will on the part of the recorder (a ghost in the machine, so to speak). But in the end, the purpose of every radical element shines through, allaying any suspicion that it might represent mere show and gimmickry.

For example, you may never have to use the front-panel power switch: Merely touching any key control (we generally began with EJECT) turns on the whole unit. This can be a little unnerving at firstespecially since the whole front panel lights up like a Christmas tree when the power first comes on, while the attenuation indicator bounces around in search of its last setting. But we quickly got used to the glittering display associated with this basically very sensible feature. If you leave the deck in STOP for more than thirty minutes, it will turn itself off. And since the back-panel convenience outlet is governed by the deck. the rest of the stereo system can be switched by the TC-FX1010's automatic on/off

functions (as long as AC demanded by the system is within the outlet's 300-watt rating). Another feature enables you to sync the deck to a Sony TC-PB5 cassette player for dubbing, using the RM-65 remote control. (We tested neither the RM-65 nor the other remote-control units listed at the head of the data column.) Or you can use the TC-FX1010 in conjunction with certain Sony turntables for automatically synchronized disc dubbing.

The heart of the TC-FX1010's multiple logic functions is a Sony integrated circuit, dubbed ASP (for Audio Signal Processor), that acts as a two-way "interpreter" between the microprocessor logic circuitry and the audio circuitry. Signal values, tape values, and most of the front-panel control options fall within the purview of the ASP, which quantifies them for manipulation by the microprocessor. Understanding this process is the key to understanding the deck's behavior and appreciating its underlying "friendliness"-to borrow a bit of computer jargon.

Operation of the ASP is signaled by a beeper (which mercifully is defeatable, though for most intelligent use of the deck we'd suggest you leave it on, particularly while you're recording). Whenever information is processed, the beep informs you that something has happened; you must look at the deck to see exactly what, but the sound tells you to look, and the panel lights

RECORD/PLAY RESPONSE, TYPE 4 TAPE (-20 dB)

RECORD/PLAY RESPO	ONSE, TYPE 4	TAPE (-20 dB)
DB		
0-5		
TC-##1010 (3)		
HZ 20 50 100 200		2K 5K 10K 20
L ch R ch		20 Hz to 15.5 kHz 20 Hz to 16 kHz
with Dolby B noise redu	ction	
R ch		20 Hz to 16 kHz
with Dolby C noise redu 		20 Hz to 16 kHz
in ch	· ····	
RECORD/PLAY RESPO	ONSE, TYPE 1	TAPE (-20 dB)
DB		
0-5		
TC-F31010 (4)		
HZ 20 50 100 200		2K 5K 10K 20
L ch R ch		20 Hz to 18 kHz 20 Hz to 18 kHz
with Dolby B noise redu		
····· Rich		20 Hz to 16.5 kHz
with Dolby C noise redu		20 Hz to 17.5 kHz
	+ v4, -3 ub, <	20 HZ 10 17.5 KHZ
S/N RATIO (re DIN 0 d		
Type 2 tape	Type 4 tape	Type 1 tape
without noise reduction 543/4 dB	531/2 dB	511⁄4 dB
with Dolby B		
641/2 dB	63 dB	61 dB
with Dolby C 721/4 dB	70 dB	671/2 dB
.244 60	10 00	01 12 00
INDICATOR READING		
Type 2 tape Type 4 tape	+2 dB (with 1. +2 dB (with 1.	
Type 1 tape	+2 dB (with 1.	
INDICATOR READING		
Type 2 tape Type 4 tape	+4 dB (for +3 +4 dB (for +2	
Type 1 tape	+6 dB (for +2	
DISTORTION (third har Type 2 tape	≤ 0.97%, 50 l	
Type 4 tape	≤ 0.62%, 50	
Type 1 tape	≤ 0.38%, 50	Hz to 5 kHz
ERASURE (100 Hz)		$\geq 60^{34} dB$
CHANNEL SEPARATIC	ON (315 Hz)	533/4 dB
INDICATOR "BALLISTI	CS	
Response time	05	=2 msec
Decay time		=900 msec
Overshoot		0 dB
SPEED ACCURACY	0.5% fast, 105	-127 VAC
FLUTTER (ANSI/IEEE	weighted peak;	R/P)
		±0.085%
SENSITIVITY (re DIN 0	dB: 315 Hz)	160 mV
MAX. OUTPUT (from D	IN 0 dB)	0.56 V

generally tell you where. Let's say, for example, that you have adjusted the deck for a Type 1 tape, which you then replace with a Type 2 cassette. From the keywells at the back of the cassette, the deck will "know" that you've made the switch and that the tape-matching information no longer is valid. It will therefore extinguish the I/NORM LED, light the II/CrO₂ LED, and sound the beeper to call your attention to the change. If you begin recording immediately, the deck will use its programmed Type 2 settings. If you press the automatic calibration touchplate, followed by the recording interlock key, the deck will measure the tape you've inserted for optimum bias, EQ, and sensitivity and override the presets-until you change tape types once again.

Running the automatic calibration system causes the transport to fast-wind beyond the leader, record a series of tones, and rewind to the head of the leader—all within a few seconds. If the adjustment process fails, either because you have an incorrect tape-type setting or because the tape is sufficiently nonstandard to fall outside the FX1010's adjustment range, the display will show "NG" (meaning "no good"). But in some cases (early chrome cassettes, for example, which are significantly less sensitive than today's typical Type 2 tapes), the resulting calibration may still be close enough for successful recording.

Once you have everything adjusted the way you want, you can store the entire complex of parameters—bias, tape sensitivity compensation, tape type, recording level, recording balance, deck output, noise reduction setting, multiplex filter setting,

"MOL balance" (about which we'll have more to say in a moment), and the presence or absence of the beep tone-in any one of the four "status memory" positions (labeled A through D). And even then, the logic helps prevent errors. For instance, if you choose a status memory that includes information appropriate to a Type 2 tape when the deck is actually loaded with Type 1, the logic will override you and switch to a Type 1 status memory. You can also check what's stored in each memory. If you start out with one memory and then modify its settings, the front panel will light "modify": if you want to go back to the unmodified settings, just press the appropriate status memory button again.

Several features address tape overload characteristics and getting the most out of the tape. A thin line of LEDs at the upper end of the level display shows you approximately where midrange overload begins with your tape type. This line lights solely in response to the tape-type setting (that is, its length is not adjusted according to the measurements made in the automatic calibration process) and is shortest, representing the highest maximum recording level, for Type 4 metals. Thus, it indicates the approximate maximum to which you should let program levels rise with the tape type at hand.

As a backup to this, there's what Sony calls the "self monitor." Although the TC-FX1010 is not a monitoring deck in the usual sense (you can't listen to the output from the playback head while you're recording), it does have separate recording and playback heads. The self monitor continuously compares the signal going to the recording



The central portion of the front panel, with transport controls, recording-level indicators, attenuator readout, auto-calibration and auto-attenuator buttons, status memory keys, and status memory write and check pads. The attenuator readout shows the input attenuator setting relative to wide open. Indicator lights on the auto-cal pad show when auto-calibration is in process, when it has been successfully completed, and when it has failed.

head with the signal coming from the playback head. When the latter is 3 dB weaker than the former, suggesting compression due to tape saturation or possible head contamination, a white LED lights; when the difference reaches 6 dB, a red LED lights and the beeper goes off. Since dropouts will trigger the self monitor even when you're recording at signal levels low enough to rule out tape overload, this feature is partly a check on tape quality

Then there's the MOL (maximum output level) balance feature. It can be set to any of three options, depending on the spectral content of the signals you will be recording: NORMAL for average signals; SHARP for jazz, synthesizer, or other music characterized by an abundance of highs: and SOFT, for signals that are relatively undemanding in the highs (a category into which Sony lumps all classical music, though string orchestra might be a good specific example). When you choose SHARP, the deck backs off slightly on the preselected bias to steal a little more highfrequency headroom (at the expense of the midrange) without seriously altering frequency response; conversely, SOFT increases bias a bit. Most of our tests were made with NORMAL, which probably is the best choice for most recording; the advantages of changing the setting are subtle, as are the disadvantages if you make the wrong choice.

The self monitor's alarm beep helps in optimizing recording level, as does the overload-range indication, though the information they provide must be tempered by canny understanding for best possible results: You must know something about the capabilities of the tape in use if you're to know when to heed and when to overlook a mild warning from either.

Also aiding in optimizing recording levels is the automatic attenuator. It should not be confused with an automatic level control, which can boost or attenuate the signal to the recording head, depending on what the program signal is up to at the moment. The automatic attenuator responds to levels beyond the overload threshold for the tape type in use by reducing recording gain-that is, stepping the attenuator down-a dB at a time. Thus, even when your initial setting is much too high, the attenuator eases the level down into a reasonable working range at the first climax, edging imperceptibly down in response to later peaks that run only a little higher.

The pushbutton recording-level control steps up or down in 1-dB increments in response to finger taps; if you hold your finger against one of its two keys (up or down), however, it takes bigger strides. The similarly stepping balance control has a rather limited adjustment range (+0,-61/4 dB in each channel), though it should correct all but the most outrageous of imbalances. Output level adjustment may be a little coarse if you want to match playback level to the exact source level of your receiver or preamp for making critical A/B comparisons

Some nice touches are apparent in the switching. For instance, though there are separate buttons for timer recording and timer playback, the internal logic makes it impossible to engage both simultaneously. The memory feature normally works like a memory stop; if you want the deck to go straight into playback when the rewind is complete (memory play), you simply press PLAY and REWIND simultaneously. The **RECORDING MUTE automatically lays down** four seconds of silence before going into PAUSE, or you can hold your finger on the button to lay down as long an interselection blank as you want. You can premonitor levels by pressing just the RECORDING INTER-LOCK, but unless you press both it and PLAY simultaneously, it will not begin recording-thus preventing any absent-minded misadventure

Diversified Science Laboratories tested the deck with three of Sony's own tapes: UCX-S as the basic Type 2 ("chrome") tape, Metallic for Type 4, and SHF for Type 1 (ferric). Results with all three are very good. The SHF proved virtually indistinguishable from the lab's generic IEC Type I test tape in this deck. UCX-S is slightly more sensitive than the IEC reference Type II, but, of course, the resulting difference in Dolby tracking performance disappeared when the lab used the automatic calibration system to optimize the deck for each tape individually. Second harmonic distortion is higher than usual, but not high enough to drive total harmonic distortion significantly higher than the third-harmonic figures (at -10 dB) shown in our data. The azimuth assumed by Sony differs from that of the lab's playback response tapes (both the BASF shown here and the TDK it replaces), producing a sharp rolloff at the top end in this test-but not, of course, in record/play response. (Actual playback response depends on the azimuth of the recording head with which each tape was made.) The data are in all other respects typical of good modern decks.

This is admittedly a very complex deck, but don't be led into believing that it is hopelessly complicated. Our feature-byfeature description, though it omits some obvious or commonplace items, inevitably emphasizes the unit's complexity, which seems to evaporate as you become familiar with the design. And the deck breaks new ground in a number of respects. Most important among them, it seems to us, is the help it provides in optimizing recording levels for different tapes and different signal demands. Perhaps yet bolder applications of microprocessing will carry this thrust even further in future models. Meanwhile, the TC-FX1010 is excitingly out of the ordinary and very capable.

Circle 98 on Reader-Service Card

A Quick Guide to Tape Types

Our tape classifications, Type 0 through 4, are based primarily on the International Electrotechnical Commission measurement standards

Type 0 tapes represent "ground zero" in that they follow the original Philips-based DIN spec. They are ferric tapes, called LN (low-noise) by some manufacturers, re quiring minimum (nominal 100%) bias and the original, standard" 120-microsecond playback equalization. Though they include the "garden variety" formulations the best are capable of excellent performance at moderate cost in decks that are well matched to them.

Type 1 (IEC Type I) tapes are ferrics requiring the same 120-microsecond playback FO but somewhat higher bias. They sometimes are styled LH (low-noise, highoutput) formulations or "premium ferrics

Type 2 (IEC Type II) tapes are intended for use with 70-microsecond playback EQ and higher recording bias still (nominal 150%). The first formulations of this sort used chromium dioxide; today they also include chrome-compatible coatings such as the ferricobalts.

Type 3 (IEC Type III) tapes are dual-layered ferrichromes, implying the 70-microsecond ("chrome") play back EQ. Approaches to their biasing and recording EQ vary somewhat from one deck manufacturer to another.

Type 4 (IEC Type IV) are the metal-particle, or "alloy" tapes, requiring the highest bias of all and retaining the 70-microsecond EQ of Type 2.



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The Delco-GM/Bose Music System is available as a factory installed option on Cadillac Seville and Eldorado, Buick Riviera, and Oldsmobile Toronado.

Sound so real it will change how you feel about driving.

AUDIO New Equipment Reports



A Best Buy from Nakamichi

Nakamichi BX-1 cassette deck, Dimensions: 17 by 4 Inches (front panel), 10 inches deep plus clearance for connections. Price: \$300. Warranty: "limited," one year parts and labor. Manufacturer: Nakamichi U.S.A. Corp., Japan; U.S. distributor: Nakamichi U.S.A. Corp., 1101 Colorado Ave., Santa Monica, Calif. 90401.

	E (BASF test tape; -20 dB DIN)
-5	
HZ 20 50 100 200	500 1K 2K 5K 10K 20K +31/2, -0 dB, 315 Hz to 18 kHz
R ch	+3, -0 dB, 315 Hz to 18 kHz
RECORD/PLAY RESPO	DNSE, TYPE 2 TAPE (-20 dB)
0	
-5 ex-1 (2) HZ 20 50 100 200	
HZ 20 50 100 200 L ch	500 1K 2K 5K 10K 20K + 1/4, -11/2 dB, 22 Hz to 20 kHz
with Dolby B noise redu	+0, -11/2 dB, 23 Hz to 20 kHz
R ch	+0, -13/4 dB, 23 Hz to 16 kHz
RECORD/PLAY RESPO	DNSE, TYPE 4 TAPE (-20 dB)
0	
-5 BK-1 (3)	
HZ 20 50 100 200	500 1K 2K 5K 10K 20K +3/4, -1/2 dB, 23 Hz to 20 kHz
R ch	+11/2, -1/2 dB, 25 Hz to 20 kHz
with Dolby B noise redu	uction +1⁄4, −3 dB, 21 Hz to 16.5 kHz
	ONSE, TYPE 1 TAPE (20 dB)
-5	
HZ 20 50 100 200	500 1K 2K 5K 10K 20K
L ch R ch	+1¼, -½ dB, 23 Hz to 20 kHz +1, -½ dB, 25 Hz to 20 kHz
with Dolby B noise redu	ction +1, −3 dB, 21 Hz to 16.5 kHz
S/N BATIO (re DIN 0 d	B; R/P; CCIR/ARM-weighted)
Type 2 tape	Type 4 tape Type 1 tape
without noise reduction 54 dB	523/4 dB 511/2 dB
with Dolby B 641/4 dB	63 dB 613⁄4 dB
INDICATOR READING	S FOR DIN 0 DB (315 Hz)
Type 2 tape Type 4 tape	+3 dB (with 1.4% THD) +3 dB (with 1.0% THD)
Type 1 tape	+3 dB (with 1.1% THD)
INDICATOR READING	S FOR 3% DISTORTION (315 Hz)
Type 2 tape	
	+5 dB (for +2 dB DIN)
Type 4 tape Type 1 tape	+5 dB (for +2 dB DIN) +5 dB (for +3½ dB DIN) +5 dB (for +2¼ dB DIN)

A DECADE HAS GONE BY since Nakamichiwhich had been building cassette equipment for other companies-offered the first deck under its own name. And what a deck it was: At \$1,000, the 1000 cost more than twice as much as any other deck on the market (\$350 was the going rate for a top model) and incorporated a degree of technical sophistication undreamed of by home recordists. Over the intervening years, the top Nakamichis have become even more sophisticated (and expensive), and some much more affordable models have appeared. Our present subject, the BX-1, is Nakamichi's least expensive deck ever (by a small margin) and its best value ever (by a large one).

Imagine that Rolls-Royce, having offered the Bentley as an alternative to Jaguars and Mercedes, were suddenly to introduce a smaller car combining much of the elegance in engineering, performance, and visible detailing of the larger models with a price comparable to that of, say, a VW Sirocco. An exceedingly fine touch would be necessary to pull off such a feat, since it would require paring away every expendable element without compromising the essentials. The analogy may not be exact, but it at least suggests how formidable a task Nakamichi has undertaken.

Inevitably, we begin by looking at what has been left out. The omission we most regret is Dolby C, which would banish the slight residual hiss left by Dolby B. That would yield the most audible improvement we can think of over what the BX-1 actually provides. If you want Dolby C, along with a number of features that are nice to have (but are not, in our opinion, of equal importance), Nakamichi gives you the option of spending about \$150 more on the BX-2. For many users, however-especially those who don't do live recording, who listen primarily to prerecorded tapes, or who want to play their tapes on other decks (especially portable or car units)-the 'stripped-down'' Dolby B model will provide all the necessities and then some. Other features that must be passed up are finetuning adjustments for matching the deck to

a variety of tapes (included on most Nakamichi decks and important to the serious recordist, but often confusing to the neophyte), all random-access indexing functions, a separate playback (monitoring) head, microphone inputs, and two features that are included in the BX-2: recording mute and an output level control.

The list of features Nakamichi has been able to retain is impressive. The drive logic is essentially the same as those in the company's midpriced front-loaders of recent years. The timer options (automatic playback or recording with an appropriate switching device, including Nakamichi's own) are a somewhat unexpected luxury, though not unheard-of at this price. The metering is typically Nakamichi: easilyread quick-rise, slow-decay peak indicators, though the calibration range (-35 to +5 dB) and minimum element spacing (2 dB just above the 0-dB mark) aren't quite as generous as on the more expensive models. Perhaps nicest of all the front-panel features is the use of a single master-level slider in conjunction with a separate balance slider to control recording level. Once balance has been preset, you can make elegant fades without the awkwardness imposed by the unclutched splitelement controls so common in this price class.

And then there's the performance. With the noise reduction off (a sharp multiplex filter switches in automatically with the Dolby circuit), response is flat to beyond 20 kHz—which can be said of mighty few \$300 decks. And distortion, which quantitatively falls right in the ballpark with that of other fine decks, is "classic" in that it consists almost exclusively of the third harmonic—the characteristic distortion mode of the tape medium itself and therefore bespeaks excellent electronics. In no respect is performance less than fine, in fact.

Diversified Science Laboratories tested the BX-1 with Nakamichi tapes: SX as the basic Type 2 ferricobalt, ZX as the Type 4 metal, and EX-II as the Type 1 ferric. Since Nakamichi manufactures no tape of

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.



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DISTORTION (third harmonic; at −10 dB DIN) Type 2 tape ≤ 0.80%, 50 Hz to 5 kHz Type 4 tape ≤ 0.48%, 50 Hz to 5 kHz Type 1 tape ≤ 0.62%, 50 Hz to 5 kHz		
ERASURE (100 Hz)		\geq 66 dB
CHANNEL SEPARATIC	ON (315 Hz)	52 dB
INDICATOR "BALLISTI Response time Decay time Overshoot	CS"	2.8 msec ≈1.2 sec 0 dB
SPEED ACCURACY 0.3% fast, 105-127 VAC		
FLUTTER (ANSI/IEEE	weighted peak.	R/P) ±0.079%
SENSITIVITY (re DIN 0	dB; 315 Hz)	75 mV
OUTPUT (from DIN 0 dB) 0.62 V		0.62 V

its own, we can only guess at their sources. but if you assume the corresponding TDK tapes, you shouldn't be far off the mark; indeed, the corresponding premium products from any of the major Japanese tape houses should be close enough for excellent results. When DSL tried the generic IEC Type I test tape, the results were almost identical to those with EX-II (which, again, is Type 1, not Type 2, despite the numeral). With IEC Type II, however, the deck proved somewhat underbiased and slightly wanting (by about 11/2 dB) in input sensitivity to compensate for the lower tape sensitivity. (The IEC Type II calibration tape is a chrome formulation and therefore tends to be slightly less sensitive than typical commercial Type 2 tapes, which are mostly ferricobalts.) The result is a marked sag in the lower treble with the Dolby circuit turned on: Response at 2 kHz is about 6 dB lower than that at 10 kHz with the IEC tape.

Distortion when midrange signal levels hit the indicators' 0-dB mark (which is 3 dB below DIN 0 dB) is very low, and the nominal overload point of 3% distortion isn't reached with any of the three tapes until signal levels are a little beyond the indicators' highest (+5-dB) element. Highfrequency headroom is excellent with metal tape, so the owner's manual suggests lighting the +5-dB display element on the loudest peaks with ZX, but limiting maximum levels to +3 dB with SX or EX-II. Input signals that make no real demands at high frequencies could be recorded somewhat hotter, but you're probably best advised to follow the manual's recommendation, if for no other reason than that once you've lit the +5 element you can't tell whether signal levels are actually running higher still.

Capping this combination of topdrawer performance, attractive price, and canny control practicality is the very handsome styling. Like all Nakamichi products, it is somewhat nonconformist-particularly in its use of just three rocker panels to control all six transport functions: pause/ recording-interlock, play/stop, and fastforward/rewind. Which of the paired functions you activate depends on which side of the panel you press. (Especially unusual is the recording interlock, which automatically puts the deck into recording-pause and begins monitoring the input signal.) As in the past, we find ourselves in awe of Nakamichi's ingenuity; the refreshing element in this case is the affordability of the result.

Circle 97 on Reader-Service Card



Cassette Deck De Luxman

Luxman KX-101 cassette deck, with Dolby B and C noise reduction. Dimensions: 1734 by 512 inches (front), 14 inches deep plus clearance for connections. Price: \$500; optional AK-1D remote control, \$100. Warranty: "limited," one year parts and labor. Manufacturer: Lux Corp., Japan; U.S. distributor: Luxman Division of Alpine of America, 3102 Kashiwa St., Torrance, Calif. 90505. THE FOLKS AT LUXMAN have a way of catching us off guard. The KX-101 cassette deck's most striking novelty is called Servo-Face, and though it may not have the engineering credentials of, say, the company's vacuum-chuck turntable, it's certainly good for a double-take. The controls protrude from cutouts in the right front panel, which is designed so that when the power is off, the front surfaces of the controls and the panel are flush, forming a smooth, unbroken facade, safe from prying fingers. Turning on the power causes the whole right-hand panel to sink back, exposing the knobs and buttons for easy access.

Once you get over the novelty, you'll find the deck striking in appearance, well finished, capable, and consistent with the design philosophy we found in the first Luxman deck we tested (the 5K50, August 1980). There are refinements, of course including the company's Duo-Beta circuitry and Dolby C noise reduction. And the azimuth beacon and recording-head adjustment have been dropped in favor of a small hole in the cassette-well door that provides

PLAYBACK RESPONSE (BASF test tape; -20 dB DIN)
DB
0
-5
HZ 20 50 100 200 500 1K 2K 5K 10K 20K
L ch +0, -21/4 dB, 315 Hz to 18 kHz +0, -3 dB, 315 Hz to 16 kHz
RECORD/PLAY RESPONSE, TYPE 2 TAPE (-20 dB)
0
KUL-101 (2)
HZ 20 50 100 200 500 1K 2K 5K 10K 20K
L ch + 1½, -3 dB, 24 Hz to 14.5 kHz ————————————————————————————————————
with Dolby B noise reduction
R ch +1, -3 dB, 27 Hz to 12 kHz
with Dolby C noise reduction — — — — — — — — — — — — — — — — — — —
RECORD/PLAY RESPONSE, TYPE 4 TAPE (-20 dB)
DB
0
-5 KE101(0)
HZ 20 50 100 200 500 1K 2K 5K 10K 20K
L ch +11/2, -3 dB, 24 Hz to 20 kHz
with Dolby B noise reduction
+ 11/2, -3 dB, 26 Hz to 20 kHz
with Dolby C noise reduction
R ch +13/4, -3 dB, 26 Hz to 20 kHz
RECORD/PLAY RESPONSE, TYPE 1 TAPE (-20 dB)
DB

10K 100 200 500 1K 24 HZ 20 50 +11/2, -3 dB, 24 Hz to 15 kHz L ch +11/2, -3 dB, 26 Hz to 15 kHz R ch with Dolby B noise reduction +11/2, -3 dB, 26 Hz to 13 kHz R ch with Dolby C noise reduction +13/4 -3 dB. 26 Hz to 12.5 kHz

BIAS ADJUSTMENT RANGE (-20 dB)

R ch

BIAS ADJUSTINE ITT	HIGE (LO GD)		
DB			
0		The second second	
-5			
R.8-101 (6)			
HZ 20 50 100 200	500 1K	2K 5K 10K 20	
Type 2 tape (n	naximum and m	inimum settings)	
Type 1 tape (n	naximum and m	inimum settings)	
S/N RATIO (re DIN 0 d	B: R/P: CCIR/A	ARM-weighted)	
Type 2 tape	Type 4 tape		
without noise reduction			
561/2 dB	55 dB	55 dB	
with Dolby B			
661/2 dB	65 dB	651/4 dB	
with Dolby C	00 00		
743/4 dB	733/4 dB	733/4 dB	
1444 00	1044 00	1044 00	
INDICATOR READING		(315 Hz)	
Type 2 tape	+1 dB (with 1		
Type 4 tape	+1 dB (with 3		
	+1 dB (with 3		
Type 1 tape		.09% [[]])	
INDICATOR READING	FOR 3% DIST	OBTION (315 Hz)	
Type 2 tape	+3 dB (for +1		
Type 4 tape	+1 dB (for -1)		
Type 1 tape	+5 dB (for +3		
Type Ttape	+5 UB (101 +3	0.04 GD Direy	
DISTORTION (third harmonic; at -10 dB DIN)			
Type 2 tape	≤ 0.65%, 50	Hz to 5 kHz	
Type 4 tape	≤ 1.1%, 50 ⊦		
	$\leq 0.44\%$, 50		
Type 1 tape		F12 10 3 KF12	
EDASUBE (400 N-)		≥ 673⁄4 dB	
ERASURE (100 Hz)		= 0744 UD	
CHANNEL SEPARATIO		481/4 dB	
CHANNEL SEPARATIC	JN (315 HZ)	40 94 00	
INDICATOR "BALLIST	000		
	105	2 msec	
Response time			
Decay time		~110 msec	
Overshoot		0 dB	
		407.140	
SPEED ACCURACY	0.4% fast, 105	5-127 VAC	
ELUTTER (ANSI/IEEE weighted peak: P/P)			

FLUTTER (ANSI/IEEE weighted peak; R/P) +0.15%



Servo-Face in action: With power on, the right front panel retracts straight back, as shown here, to expose control buttons and knobs. When the deck is turned off, the panel slides forward till it's face is flush with the faces of the contro's, forming a smooth, unbroken surface.

access to the azimuth adjustment on some of the cassettes Lux manufactures. With other brands, including those we used in our testing, azimuth is not adjustable. (A careless hand can also misadjust azimuth, so this is probably just as well.) The azimuth of the playback head, as documented by Diversified Science Laboratories' measurements, is reasonably close to that of the BASF calibration tape we now use. (Our former test tape, made by TDK, doesn't match the Luxman's azimuth as well and therefore produces more droop in the highfrequency response.)

For record-play measurements, DSL used three TDK formulations: SA ferricobalt as the Type 2 ("chrome"). MA-R for Type 4 (metal), and AD for Type 1 (ferric). The resulting curves are quite flat (particularly with SA) and extended (particularly with MA-R). Level matching-and hence Dolby tracking-is excellent with both MA-R and AD and hardly less good with SA. Midrange headroom with MA-R is not as generous as it usually is, though high frequency compression (particularly with Dolby C) remains minimal. DSL got almost as good results with the generic IEC Type I reference tape as with AD, but the lower sensitivity in the IEC Type II tape (compared to that of SA) caused some Dolby mistracking.

Like many other contemporary decks, as well as the old 5K50, the KX-101 includes a fine bias adjustment. Luxman says the control has an operating range of $\pm 10\%$ relative to the bias obtained with the knob set to its center detent position. DSL used the detent setting for all measurements except those for bias adjustment range, which show the response with maximum bias (lower curves) and minimum bias (upper curves) for the recommended Type 1 and 2 tapes. The purpose of the control is to enable you to alter the treble response slightly, to suit your taste or to compensate for variations between different tape formulations. For example, if one brand of tape tends to introduce an extra brightness or edginess, you can try higher bias settings to bring it back into line. Conversely, you can reduce the bias to brighten a tape with a slightly dull high end.

However, there are no calibration oscillators or other aids to help you adjust for flattest response. And since this is not a monitor-head deck, there is no means for comparing source to tape during recording to check for replication accuracy. As a result, it's easy to misadjust the bias. And there are those who would argue that any response-shaping should be achieved by means of a recording equalization control after bias has been adjusted for the desired distortion and headroom.

The measurements for other parameters are generally very good. A little second harmonic distortion is discernible along with the third harmonic characteristic of tape systems, but total harmonic distortion

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SENSITIVITY (re DIN 0 dB; 315 Hz)	
line input mike input	100 mV 0.36 mV
MIKE INPUT OVERLOAD (clipping)	50 mV
MAX. OUTPUT (from DIN 0 dB)	0.65 V

at -10 dB is, at worst, only a hair higher than the third harmonic alone. Peak flutter, though not severe, is about twice as high as in the very best decks we have tested.

Among the deck's operational features are its cueing and automatic transport options. When you engage the memory button, the deck rewinds to the point where you have set the counter to 000. It will stop the tape there unless you press AUTO PLAY (in the rank of buttons along the bottom of the right-hand panel), which turns the memory-rewind function into memory play. You can convert memory play into a repeat function by pressing AUTO REWIND as well as AUTO PLAY. If you then release the memory button, the full length of the tape will repeat; release AUTO PLAY, and the tape will simply rewind from the end to the beginning and stop there. There are eight possible combinations of these three switches, all of them offering useful options.

Also useful is a rear-panel pin-jack

connection for the Luxman PX-101 turntable. When you're dubbing from a disc and the arm reaches the leadout groove at the end of the record, this interconnection automatically puts the deck into PAUSE. And the wireless remote control of a Luxman RX-103 receiver will govern the deck via another jack, which can also be used for the optional AK-1D remote control unit (not tested).

In addition to providing good performance, Luxman audio components exude a sense of class. Perhaps that was what the company intended to evoke with the motorized front panel. We're more convinced, however, by the large, rectangular transport buttons, which are made of clear plastic with pilot LEDs embedded in them. When the LEDs light, they are reflected within the buttons to create a striking prismatic effect. And behind the handsome face is a capable machine.

Circle 96 on Reader-Service Card



JVC's BEST Cassette Deck

JVC DD-99 cassette deck with BEST automatic tapematching system, ANRS/Doiby B and Doiby C noise reduction. Dimensions: 17/k by 4/s inches (front panel), 12 inches deep plus clearance for connections. Price: \$900; optional R-50E wired remote control, \$26. Warranty: "limited," one year parts and labor. Manufacturer: Victor Company of Japan, Ltd., Japan; U.S. distributor: U.S. JVC Corp., 41 Slate Torke, Elmwood Park, N.J. 07407.

PLAYBACK RESPONSE (BASF test tape; -20 dB DIN)



ALMOST EXACTLY THREE YEARS ago, in December 1979, we reviewed a fascinating, arguably revolutionary cassette deck from JVC. The KD-A8's BEST ("bias, equalization, and sensitivity tuning") system was the first of its kind, using a microprocessor and built-in test oscillators to calibrate the deck's key recording parameters to the individual characteristics of whatever tape you happened to pop into it. A few decks of the time had manual controls that served the same purpose, but even those omitted equalization trimmers (depending on bias tweaking alone to flatten high-frequency response) and were more tedious to set up than JVC's automated unit

The DD-99 continues JVC's BEST tradition (pardon the pun) with an improved circuit that adjusts EQ at two frequencies for flatter treble response than can be consistently obtained by means of a single adjustment. Punching COMPUTER CAL START causes the deck to fast forward past

the tape leader and begin recording a series of 8-kHz tones at various levels, which it uses to determine the correct bias setting. A green display LED blinks throughout the bias calibration, then glows constantly as the light next to it comes on and starts blinking, signifying that the second step has begun. This is what JVC calls middle-frequency equalization, or EQ.M. in which a sequence of 4-kHz tones is recorded together with a set of constant-level 1-kHz reference tones. Various equalization settings are tested until the one that yields most nearly the same level at both frequencies is found. Then comes a series of 1-kHz tones for sensitivity adjustment, followed by 1and 12.5-kHz tones for high-frequency equalization, or EQ.H. When the entire process is complete, all four BEST indicator LEDs remain lit and the settings are stored in the DD-99's memory (individually for each tape type) until the deck is turned off.



*See text



The top of the DD-99's status display shows what noise reduction is in use and whether source or tape is being monitored. The bottom indicates what phase the BEST tape tuning is in, that is has failed, or that a preset is being used.

If the frequency response still is not acceptably flat, the system will go back, shift the bias point to bring the high end into range, and run through the rest of the program again. Then, if the tape is still out of the automatic tuning range, the process ends and a red error indicator begins flashing. This is unlikely to occur unless you have pressed the wrong tape-type selector (Type 1 for Type 2, for example), but JVC suggests that if it does you should press PRE-SET and use the standard settings. The manual indicates not only which tapes should be used with which tape-type settings, but also which tapes will perform best with the DD-99. It also recounts the specific tapes for which the presets are adjusted-something few manufacturers do, even for decks without automatic calibration systems. (In fact, the manual is unusually thorough in all respects, although its trilingual captions and picture labels are sometimes a little hard to follow.)

The DD-99 also uses JVC's X-Cut senalloy heads, which are designed to minimize contour effects, or "head bumps," in the low-frequency response. Separate recording and playback heads are joined back to back in a single housing for permanent azimuth alignment. A quartz-locked directdrive transport is used to minimize flutter, and all of the deck's recording and playback electronics are entirely direct-coupled (DC) circuits.

Although JVC has stopped well short of going overboard with marginally useful gee-whiz features, the DD-99 is by no means Spartan in its operational flexibility. The transport logic, for example, enables you to punch into record directly from play, for easy editing. An auto-rewind function can be used either to rewind the tape from the end to the beginning and stop, or to rewind and go into play. Or the auto-rewind and memory features can be used together with the tape counter to program a continuous repeat between any two points on a tape. With the music scan feature, you can step forward or backward one selection at a time; a RECORDING MUTE enables you to lay down blanks wherever you like for detection by the music scan. And the deck can be set for unattended recording or playback in conjunction with a separate timer.

The DD-99's four-digit fluorescent tape counter can be placed in a timer mode that keeps track of the elapsed playback or recording time. We like this feature very much, as far as it goes, but we wish it operated in the fast-wind modes, as well. The fluorescent recording-level bar meters can be switched for either "peak" or "VU" operation. The latter is rather sluggish, but the peak mode (which has a fast attack and a luxuriously slow decay) is very effective. Generously calibrated, the meters range from -20 to +9 dB, with 1-dB steps from -5 to +5 and 2-dB breaks between -9 and -5 dB and +5 and +9 dB. Unfortunately, DIN 0 dB is at +5 on the meters (+4 in the VU mode for Type 2 tape), and the 3% distortion point is at +7(+5) in the VU mode for Type 1 and 2 tape). This means that you get very little information in the critical region just above the nominal midrange saturation level. We also find the recording-level, output-level, and eject controls a little stiff and the heads more than usually difficult to get at for cleaning, but these are relatively minor considerations.

Diversified Science Laboratories tested the DD-99 with tapes recommended by JVC: TDK SA for the Type 2 ferricobalt, TDK MA for the Type 4 metal, and Maxell UD for the Type 1 ferric. But since the BEST autocalibration system was used before all measurements, you should get results similar to DSL's with any of the tapes recommended by JVC in the manual and at least passable results with nearly any decent formulation. Frequency response is generally flat and smooth and as extended as need be for music reproduction. Dolby tracking is also very good.

Substituting the IEC generic Type 1 test tape for UD yielded essentially identical response up to 10 kHz, with a peak of 2 to 3 dB at about 16 kHz. The difference

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between results with SA and with the IEC Type II test tape is more pronounced, because of the greater variance between the two formulations. But rerunning BEST for the IEC tapes virtually eliminated these discrepancies, confirming the system's effectiveness in preventing the sort of mismatches that can easily occur on conventional decks.

In other respects, the DD-99's performance generally measures from very good to excellent, with erasure and flutter showing up particularly well. As should be clear by now, we like the DD-99 very much, for its high performance, intelligently designed operating features, and handsome styling. And best of all is the excellent automatic tape-matching system, which ensures top performance with virtually any cassette a serious recordist would be likely to use. We only hope it can eventually be made inexpensive enough to be incorporated in JVC's lower-priced recorders, too.

Circle 95 on Reader-Service Card



A Smooth Performer from Denon

Denon DR-M3 cassette deck, with Flat Tuning System, Dolby B and C noise reduction. Dimensions: 17¼ by 4½ inches (front panel), 11 inches deep plus clearance for connections. Price: \$500; optional RC-57 wired remote control, \$50. Warranty: "limited," two years parts and labor. Manufacturer: Nippon Columbia Co., Ltd., Japan; U.S. distributor: Denon America, Inc., 27 Law Drive, Fairfield, N.J. 07006.

PLAYBACK RESPONSE (BASF test tape; -20 dB DIN) DB 0 -5 HZ 20 50 100 200 500 1K 2K 5K 10K L ch +0. -3 dB. 315 Hz to 9 kHz* ----- R ch +0, -3 dB, 315 Hz to 8.5 kHz* RECORD/PLAY RESPONSE, TYPE 2 TAPE (-20 dB) DB 0 -5 - 100 (20) 50 HZ 20 100 200 500 5K 10K 20K 1K 2K +1, -3 dB, 31 Hz to >20 kHz Lch R ch + 1/2, -3 dB, 31 Hz to >20 kHz with Dolby B noise reduction Rch +1, -3 dB, 31 Hz to >20 kHz with Dolby C noise reduction R ch +1, -3 dB, 31 Hz to >20 kHz

ALTHOUGH VERY DIFFERENT in appearance, Denon's new DR-M3 cassette deck is essentially quite similar to the older DR-F7, which we reviewed in August 1982. There are two new features—automatic tape-type selection and a time-remaining display along with better meters and level controls, but otherwise, it's familiar territory.

This is by no means a complaint, however: The F7 was a fine machine with features rarely found in its price class; the M3, for the same money, is even better. Tape matching is simplicity itself. The machine senses the tape type in use from the keyways in the back of the cassette shell and sets its bias and sensitivity to the values stored in the preset memory for that tape type. (The tape type in use is indicated by the tape-select display below the recordinglevel indicators, which shows "NOR-MAL" for Type 1 ferrics, "CrO₂" for Type 2 chromes and ferricobalts, and "METAL" for Type 4 pure-metal tapes.)

You are not, however, limited to the preset values. A touch of the "computer tuning" start button, and the DR-M3 automatically tests the tape you're using and trims its internal bias and sensitivity settings for best possible response with that particular formulation, which are then stored in memory for the appropriate tape type. Remarkably little time is required for this process—just a few seconds. To return to the deck's fixed, centerline values, you just press PRESET. The DR-M3's direct-drive tape transport incorporates a servo mechanism that continuously monitors the tape tension between the recording and playback heads (which share a common housing) and the erase head. Based on that information, it alters the force with which the erase head pushes the tape against the pressure post in the cassette, so as to reduce variations in tape tension and thereby improve tape-tohead contact.

The transport controls are arranged as a column of touch-panels to the right of the cassette holder. PLAY is on top, followed by STOP, REWIND and FAST FORWARD, and RECORD and PAUSE/MUTE. These last are somewhat unusual in their operation. Pressing RECORD automatically puts the deck into PAUSE: then to commence recording, you just press PLAY. The operation of the PAUSE/ MUTE is similarly clever: So long as it's held in, tape will continue to run, but no signal will be recorded; when you release it, the mute function is terminated and the deck goes into PAUSE.

One of the M3's new features is a fluorescent display that can serve as a standard four-digit turns counter or as a remainingtime indicator. In the latter mode, you must select one of three tape-length ranges to enable the on-board microprocessor to calculate the time remaining (based, presumably, on the relative spooling rates of the supply and takeup hubs). The recordinglevel indicators are fluorescent bars gradu-
RECORD/PLAY RESPONSE, TYPE 4 1	ГАРЕ (−20 dB)
0	
-5 09-40 (3)	
	K 5K 10K 20K 1 Hz to >20 kHz
R ch +1/2, -3 dB, 3	1 Hz to >20 kHz
with Dolby B noise reduction R ch +1/2, -3 dB, 3	1 Hz to >20 kHz
with Dolby C noise reduction	
— - — R ch +13√4, −3 dB, :	31 Hz to 17.5 kHz
RECORD/PLAY RESPONSE, TYPE 1	TAPE (-20 dB)
DB	
DIN-685 (4)	K 5K 10K 20K
L ch +11⁄₄, −3 dB,	31 Hz to 18 kHz
	31 Hz to 18 kHz
with Dolby B noise reduction R ch + 13/4, -3 dB,	31 Hz to 16.5 kHz
with Dolby C noise reduction	21 Uz 40 17 IIUz
R ch + 23/4, - 3 dB,	31 Hz to 17 kHz
SIN RATIO (re DIN 0 dB; RIP; CCIR/Al Type 2 tape Type 4 tape	RM-weighted) Type 1 tape
without noise reduction	
54 dB 533/4 dB with Dolby B	511⁄4 dB
641/4 dB 64 dB with Dolby C	611⁄2 dB
	701/2 dB
INDICATOR READING FOR DIN 0 DB	(315 Hz)
Type 2 tape +1 dB (with 1.	
Type 4 tape+ 3 dB (with 2.Type 1 tape+ 2 dB (with 0.	
INDICATOR READING FOR 3% DIST	OBTION (315 Hz)
Type 2 tape +3 dB (for +1	.6 dB DIN)
Type 4 tape +3 dB (for +0 Type 1 tape +5 dB (for +4	.4 dB DIN) 8 dB DIN)
DISTORTION (third harmonic; at -10 c Type 2 tape $\leq 0.57\%$, 50 l	JB DIN) Hz to 5 kHz
Type 4 tape $\leq 1.0\%$, 50 H	z to 5 kHz
Type 1 tape $\leq 0.37\%, 50$	Hz to 5 kHz
ERASURE (100 Hz)	≥ 643⁄4 dB
CHANNEL SEPARATION (315 Hz)	461/2 dB
INDICATOR "BALLISTICS"	
Response time	3.2 msec
Decay time Overshoot	≈400 msec* 0 dB
SPEED ACCURACY 0.3% fast, 105	-127 VAC
FLUTTER (ANSI/IEEE weighted peak;	R/P)
	±0.14%
SENSITIVITY (re DIN 0 dB; 315 Hz)	
line input	88 mV
mike input	0.43 mV
MIKE INPUT OVERLOAD	16 m)/
for 3% THD for 1% THD	16 mV 5.6 mV
	0.77 V
MAX. OUTPUT (from DIN 0 dB)	0.77 V

'See text



Touch-panel section of the DR-M3's front panel, with transport controls (left), tape counter and related switching (top right), noise reduction and monitor switching (bottom right), and controls for the "computer tuning" tape-matching system.

ated from -20 to +8 dB, with 1-dB steps between -3 and +3 dB. The meters have a very fast attack and a leisurely decay time, as well as a peak-hold indicator with a very long 1.3-second decay time, and their calibration with respect to the midrange tapesaturation point seems well chosen. Just below them are displays indicating whether Dolby B or C is engaged, whether source or tape is being monitored, and what tape type is in use. And still further down are the damped input- and output-level sliders.

For its tests, Diversified Science Laboratories used tapes recommended by the manufacturer: TDK SA-X as the Type 2 ferricobalt, Denon DXM as the Type 4 metal, and Denon DX-4 as the Type 1 ferric. The computer tuning system (which makes tape selection relatively noncritical, anyway) was used to set bias and sensitivity before any measurements were taken.

The playback response curves droop quite a bit at the high end, apparently because of an azimuth disagreement between the Denon's playback head and the BASF test tape. Record/play response is not affected, however, since the recording head's azimuth is aligned with that of the playback head. Indeed, DSL's curves show very smooth, flat, and extended response, with just a slight tendency to bump up at about 5.5 kHz. This effect (perhaps resulting from a minor equalization error) is

Report Policy: Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by Diversified Science Laboratories. The choice of equipment to be tested rests with the editors of Higa FIDELITY. Samples normally are supplied on loan from the manufacturer. Manufacturers are not permitted to read exaggerated by the action of the Dolby circuits, but even then is not severe. Substitution of the IEC generic Type I and II test tapes for DX-4 and SA-X, respectively, without recalibration, caused a response rise above 1 kHz with the Type I and severe Dolby mistracking with the Type II (because of its lower sensitivity). Rerunning the computer tuning system for the generic tapes made the Type II curve virtually identical to that obtained with SA-X and halved the Type I's rise. This means that you should be able to get good results with virtually any tape formulation that is reasonably similar to one of the three recommended by Denon.

The other data are generally excellent. Flutter is higher than we're used to seeing, but not enough so to make an audible difference in our use tests. In addition to the features we've already mentioned, there are provisions for an optional wired remote control (not tested) and for unattended recording or timed playback with an optional external timer-welcome finishing touches on what seems to us a well thoughtout package. We especially like the computer tuning system, which is both a convenience and an insurance of top performance. With it, the DR-M3 emerges as a very fine machine, made all the more impressive by its reasonable price. Circle 94 on Reader-Service Card

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Technical editor Michael Riggs sets recording levels before transcribing a digitally mastered disc onto cassette.

How to Make Great Cassette Recordings

A step-by-step guide for getting the most from your cassette deck by Peter Mitchell

HIGH FIDELITY COMPONENTS are, by and large, fairly predictable in their behavior. The record player unfailingly rotates discs at the correct speed; the amplifier is a faithful servant whose controls usually do what their names indicate—at least until something breaks; and though your loudspeakers may not be 100 percent accurate, their colorations probably don't bother you (or you would have chosen a different pair).

Tape recorders are the exception. Cassette decks, in particular, are a frequent cause of puzzlement and disappointment. Of course, a tape deck is wonderfully useful: You can record your favorite hits for your car or portable stereo player, preserve broadcasts of concert performances that are unavailable on disc, play prerecorded material, and even venture into making live,

Peter Mitchell is president of the Boston Audio Society and a frequent contributor to these pages. original recordings. The disappointment is often in the quality and consistency of reproduction. A cassette copy may sound duller, brighter, or noisier than its source. More puzzling, your tapes may be clear when recorded at low levels but muffled when made at high levels, or vice versa. And whatever the deck's characteristic tonal quality seems to be, it may change with the next recording you make.

But there's a reason for this erratic behavior. The tape deck is the most complicated device in a typical stereo system, combining in one chassis the electronic circuitry of a preamplifier with the mechanical hardware of an automatic turntable (motor, bearings, belts, cams, relays). Topping off this brew is the complex interrelationship between electronics, electromagnetic hardware (the record/play heads), and the tape. Although you cannot improve on the inherent quality of your deck, you can take certain steps to ensure that you're getting the best possible results from it. By selecting the right tape for your deck and following a basic procedural checklist before and during the recording process, you can make much of the frustration involved in tape recording disappear.

Matching Tape and Deck

Tape is a very nonlinear medium, so to achieve decent results, the recorder's circuits must precondition the audio signal before it is recorded and then apply further corrections in playback. The preconditioning is provided partly by the bias signal, an inaudible ultrasonic tone (typically at about 100 kHz) that is mixed at a constant level with the audio signal as it is fed to the recording head. A certain amount of selferasure occurs during the recording process, especially at high frequencies. To compensate for this and other losses, the deck equalizes the audio signal before it is recorded, usually applying a steep treble boost and a mild bass boost. Since the deck's magnetic heads have a naturally sloping (rather than level) frequency response, a compensating opposite tilt is applied by playback equalization. With the right amount of bias and equalization, the result should be accurate reproduction of the original sound, with low distortion and flat frequency response.

If bias and equalization were universally standardized-as Philips intended when it launched cassette recording in the mid-sixties-life might be simpler for the home recordist. But the price we pay for the vast sonic improvements made in the medium since then is greater complexity. First, tape formulations were upgraded for improved dynamic range and lower noise. This required an increase in the bias signal in order to minimize distortion. But more bias means more self-erasure of highs, necessitating a change in equalization or a further upgrading of tape formulations to provide a compensating increase in highfrequency sensitivity. Tape manufacturers have responded with an on-going series of improvements, vielding cassettes with better potential performance at the sacrifice of compatibility with existing tape decks. The result is that in recent years the cassette recordist has been faced with an immense variety of recording tapes to choose from, involving two standard playback equalizations and at least five choices of required bias (and associated recording EQ).

To bring some order to this chaos, manufacturers have recently evolved international standards for cassette tapes, numbering them by chronological order of development. This numerical classification scheme—denominated by the IEC as Types I–IV, and basically a more formal version of HF's Types 1–4—helps to match the recorder to the tape: Whenever you put a cassette in your deck, note what type it is and set the recorder's switching accordingly. (For observations on the differences among the four tape types, see "Retsoff's Remedies" in this issue.)

In preparation for this article, I tested an assortment of cassettes on a recently purchased \$300 Japanese recorder to see whether tape manufacturers were complying with the tape-type standards. I was quite pleased to discover that an impressive majority of the low-cost and premium ferric tapes yielded flat response at the deck's Type 1 bias setting. Current-production TDK D ferric cassettes, for instance, emerged as true Type 1 tapes, with performance that nearly matches the best premium-grade ferrics of a few years back.

But if your tape deck is several years old, its internal bias and equalization adjustments probably were trimmed to match then-popular tape formulations, so today's "improved" tapes may not be compatible with your deck. In this case, your best course is to have a competent techni-

Getting Ready for Recording

Find a brand and type of tape that works well in your machine, and stick to it. This will also save you money in the long run, since tape is cheaper when bought by the case.

When unwrapping a new tape, fastwind it all the way through and then rewind back to the beginning. This will free up any sticking that may have developed in the tape pack during storage.

If the recorder has separate microphone and line level controls, turn down the one for the input you're not using to prevent unnecessary noise in recording.

Be sure that the recorder's bias and EQ switching are set to the correct position for the tape in use. If your deck has a bias fine-tuning control, set it to the position that has yielded flattest response in your earlier tests (See "Retsoff's Remedies," page 14.) Also, check the setting of the noise reduction switch; if you are recording with Dolby, be sure that the MPX filter is switched in.

cian recalibrate your recorder. Conversely, blank tapes bought two years ago, particularly those of the nonpremium variety, may yield dull recordings on a brand-new deck. Old recordings will continue to sound okay, since playback standards haven't changed, but attempts to make fresh recordings on old tapes may be disappointing.

A Note on Meters

THE RULE OF THUMB Peter Mitchell gives for setting recording levels, based on the position of the Dolby symbol on the meters, is handy and usually quite serviceable. But on some decks, Dolby level isn't marked on the meters, and on some others, it isn't marked accurately. You can, however, figure out exactly where Dolby level is on the meters of any cassette deck HIGH FIDELITY has tested, regardless of how they are for aren't) marked.

Just look in the test report for the heading "INDICATOR READING FOR DIN 0 DB." DIN 0 is 2 dB above Dolby level, so you should be able to record about 4 dB above DIN 0 on transients and about 2 dB below on relatively steady-state material. To find out what those levels correspond to on the deck's meters, add +4 and -2, respectively, to the meter reading we reported for DIN 0 with the tape type you are using.—M.R.

The process of cassette-tape standardization is by no means complete. Some companies have not vet reformulated their tapes to conform to the new IEC standards, and some may never choose to do so. In any case, as time goes by tape manufacturers will probably continue to change their formulations when they find good reasons for doing so. And beware of bargains: There is still a large population of so-called "lownoise" ferric tapes that fall well below Type I standards in output level and highfrequency sensitivity. (HIGH FIDELITY dubs them Type 0.) If your recorder has bias fine-tuning and recording calibration controls, you can still get pretty good results with these tapes. Only a few cassette decks (notably from Dual and Akai) provide a preset switch for them, but most decks that incorporate automatic tape matching circuitry have enough range for them.

Be a Smart Meter Reader

The meters on a tape deck—be they the moving-needle type, fluorescent displays, or strings of LEDs—are intended to tell you when you are overloading the tape with too much signal. But they are usually too simple to do that job perfectly. You have to supplement the information they give you with the following insights:

1. The human ear's sensitivity to such flaws as distortion depends on the duration of the distorted signal. With sustained tones, you are likely to hear distortion if the recording level is higher than the Dolby reference level (indicated on some cassette decks by the little "double-D" Dolby trademark, typically at about +2 dB on the meter). Technically, this level corresponds to a magnetic flux of 200 nanowebers per meter, at which point distortion is typically about 1%. But you can record brief transients (such as a drum beat) about 6 dB above Dolby level without generating noticeable distortion.

What this means in practice will depend on the type of meters you have and how they are calibrated. If they are fast "peak-reading" LED or fluorescent displays, then you can take the preceding advice literally: Set your recording levels so that short peaks hit +6 or +8 dB, but don't let sustained sounds rise above 0 dB. On the other hand, if your meters are of the slow, "averaging" variety (as are many movingneedle types), they won't respond fast enough to register peaks. In that case, your safest course is to keep all indicated levels at or below 0 dB, recognizing that sharp transients are going onto the tape at levels higher than the meters show.

2. The level at which tape overload occurs is not a fixed number, such as +6 dB. It actually varies with the frequency of the signal, as Fig. 1 shows, mainly because the treble and low bass are boosted by the recording equalization. This means that you have to supplement the meter readings with



Fig. 1: Headroom curves showing the onset of tape overload for a typical cassette deck with ferric and pure-metal tapes. The 0-dB point on the graph is approximately 2 dB below Dolby reference level and thus comes close to the 0-dB calibration point on many meters.



Fig. 2: The spectral energy distribution of music, specifically the final chords of Shostakovitch's Symphony No. 5, as measured during a live performance. Similar curves have been made from rock and big-band jazz recordings.

your own awareness of what type of sound you are recording.

On the average, symphonic and popular music have an energy distribution like that shown in Fig. 2: Maximum sound pressure levels occur in the lower midrange or upper bass, while the treble overtones that seem so obvious to the ear are lower in level. Discounting the prominent peaks centered at 50 and 150 Hz (due to unusually vigorous bass-drum and tympani thwacks), the musical spectrum in Fig. 2 is a fairly good match to the tape headroom curve in Fig. 1. In particular, the music has its highest energy levels in precisely the same frequency range as the deck's maximum headroom. Therefore, you can usually adopt the metering guidelines described above.

But beware of the exceptions—music that has its maximum energy at very low or high frequencies, where the recorder has less headroom. If the program is dominated by high-frequency sounds (harpsichord, cymbals, tinkling bells), then you should use recording levels no higher than +3 on a peak-reading meter or -5 on an averaging meter, to avoid tape saturation. On Tandberg, Dual, B&O, and old Advent recorders, the meters are "equalized" to reflect

Dubbing a Dolby-Encoded Tape

1 Disengage the Dolby circuits on the source and copying decks.

2 Find a segment of music on the source tape that is nearly constant in level and registers close to 0 dB on the meters of the source deck.

3 Temporarily place the source tape in the copying recorder and play it, noting the meter reading of the same segment of music.

4 Transfer the source tape back to the source deck, and make a trial dub.

5 Play the copy tape and observe whether its level matches the playback level noted in step 3. If it differs, readjust the recording level on the copying deck and make test dubs until playback levels read within ± 1 dB of the original.

6 When all copying is completed, don't forget to switch the Dolby circuit back on in both decks for normal recording and playback.

the decreasing headroom at high frequencies, so you don't have to worry about making these adjustments.

The dashed line in Fig. 1 suggests an alternative: When taping music with a lot of high-frequency content, such as a live jazz combo, you can take advantage of a Type 4 metal tape's superior high-frequency head-room. Or when you go shopping for your next deck, look for one that has the Dolby HX Pro circuit for enhanced high-frequency headroom with conventional tapes.

Taping from FM

Because FM stations use signal limiters to prevent overmodulation on high-frequency peaks, their broadcasts have the same reduced high-frequency headroom as cassettes. This removes one potential concern for the recordist. Regulations also limit all FM stations to the same maximum modulation levels, to prevent splatter into adjacent channels. Most FM stations modulate right up to that limit to ensure low-noise reception in portable and car radios. That means that once you have found a satisfactory recording-level setting for one station, it will work for most other stations, as well.

Some tuners are equipped with a calibration tone that may be useful in setting preliminary recording levels. Typically, the tone corresponds to 50% of the maximum legal modulation level, so if you adjust the level so the tone registers -3 dB on your recording meters, you'll be in the right ballpark. There are occasional exceptions to this rule, especially with stations that broadcast classical music and deliberately undermodulate their signals to minimize squashing of peaks by the broadcast limiters. In that case, you'll need a higher recording level. Once you find that level, however, it should work for all of that station's transmissions.

Copying from Another Tape

In principle, dubbing a tape from one deck to another is even simpler than taping from FM. If the original recording is technically satisfactory, then setting your own recording levels shouldn't be too tricky.

The major concern relates to noise reduction. Should you, for instance, leave the noise reduction systems engaged, thus decoding the source tape and then re-encoding the copy? If you are using different noise reduction systems, the answer is definitely "yes." Examples include copying from a Dolby B original onto a recorder with Dolby C, dubbing from a DBX tape to a Dolby B copy, or transcribing a Dolby original to a non-Dolby cassette for use in a personal portable.

You may leave the noise reduction circuits switched off, in both the source and dubbing decks, only when the copy is to be identical to the original, with no additional

Liberating Your Cassette Deck: The Basics of Live Recording

PEOPLE WHO BUY cassette decks solely for the purpose of copying existing recordings are missing out on the challenging, educational. and often rewarding practice of live recording. Of course, when you record outside of your own living room, there are obstacles. Showing up at Symphony Hall with a concert ticket in your hand and a tape deck under your arm is not a good idea-you and your machine will be firmly barred at the door. And field recordings in the literal sense (bird calls or an outdoor folk festival, for instance) require a battery-powered deck or a ludicrously long AC power cord. But don't give up so easily. Capturing your child's recital, making a demo tape for the garage band next door, or recording performances of local musical groups (with the permission of the artists) is fun and simple with a home cassette deck. Moreover, thanks to the development of high-coercivity tapes and advanced noise reduction systems such as Dolby C and DBX, your deck is more amenable than ever to the demands of live recording.

There are two technical challenges: microphone placement and dynamic range. In nearly every LP or broadcast that you hear, sophisticated limiters and compressors have been used to even out the extremes in dynamic range, but that won't be true of the signal coming from your own microphones. To leave enough headroom for transients and climaxes, you'll generally have to use a lower average recording level than at home. With a low recording level, you risk a poorer signalto-noise ratio, however, so you'll probably want to use Type 2, 3, or 4 tapes (because their 70-microsecond equalization reduces tape hiss in playback). You might also want to use true chromium-dioxide tape if your deck is correctly biased and equalized for it, since chrome has the lowest noise of all tape formulations. Or, if the music you are recording is especially rich in highs, the extra headroom of metal tape may be worth paying for

The selection and placement of microphones is too large a subject to cover adequately in this space, but a few hints may be useful, particularly if you want to use inexpensive mikes at first. In the under-\$100 range, electret microphones usually deliver better sound than similarly priced dynamic mikes, and omnidirectional mikes have flatter response with a more natural tonal balance than same-price cardioids. (An excellent choice for novice recordists is a simple electret omni pencil mike such as the Superscope EC-1 or the Radio Shack Model 33-1050, which sell for less than \$20 each. The low impedance of these mikes will enable you to add long extension cables to their short attached cords, so that you can place yourself and your machine in an inconspicuous location when taping live concerts.) As a beginner, you'll be using a basic stereo pair, that is, one microphone per channel plugged directly into the deck's microphone jacks. This arrangement often yields better sound than an elaborate array of mikes fed through a mixer

Microphone placement is an art. (One of the reasons I recommend amateur recording is that it will make you a more informed listener as you learn by trial and error just how much the sound of a recording is affected by modest changes in miking.) To get started, place the omnidirectional microphones six to eight feet apart, about ten feet in front of the first row of musicians, and (ideally) a few feet above their level. The trouble with this last recommendation, especially if the performers are on an elevated stage, is that it requires microphone stands ten to fifteen feet tall, which are costly, heavy, and conspicuous. One alternative is to suspend the mikes from an elevated cord, stretched across the hall. A recently revived technique that can work beautifully in some situations is boundary miking: Place omni mikes directly on the floor (or other large flat surface), thus eliminating any coloration due to out-ofphase reflections from that surface.

If your microphones are directional types (cardioid, hypercardioid, or figureeight), mount them together on a single mike stand—one just above the other, or together on a "stereo bar" adapter—splayed diagonally outward with an angle of 90 degrees between them. A common beginner's error is to use a too-narrow angle (such as 45 degrees) between the mikes, yielding a recording that lacks "air" and a normal stereo spread.—P.W.M.



signal processing (such as equalization or expansion) applied. However, with levelsensitive Dolby noise reduction, the copy must be recorded at the same level as the source to avoid mistracking. Because different decks usually have differently calibrated meters, this can be tricky. The procedure described in "Dubbing a Dolby-Encoded Tape" is designed to help you judge whether the signal level on the copy is the same as the original.

Taping From Disc

Dubbing from direct-to-disc, digitally mastered, or DBX-encoded LPs can be almost as demanding as live recording: In setting recording levels, you must steer a careful course between the Scylla of overload and the Charybdis of tape hiss. If you have Dolby C or DBX noise reduction, you can accommodate the dynamic range of virtually any signal, but with just Dolby B, you will sometimes have to accept either some dulling of high-level transients or the addition of some audible tape hiss to lowlevel passages.

The standard procedure is to engage RECORD and PAUSE to activate the deck's meters. The loudest portion of the LP is then used to set the recording level. No further adjustment of the level controls is usually necessary. But with sources having a very wide dynamic range, you might be better off doing a little discreet gainriding-raising the level of soft passages to keep them above the noise and subtly reducing the level of loud passages to avoid saturating the tape. The key to successful gain-riding is timing and knowing your source material. In other words, don't wait for the music to become soft before you jack up the level; instead, gradually turn up the level during the transition from loud to soft. And don't wait for a loud passage to pin the meters before cutting back the level: Reduce it progressively during the music's crescendos. Gain-riding can be tricky and takes practice. If you'd rather not bother, then install a DBX 118 compressor/expander in the signal path to the recorder and set it for a compression ratio of about 1.2:1. It will provide reliable and completely unobtrusive gain-riding. This is especially useful for making tapes that are going to be heard in a car or on a portable player.

Given the limited dynamic range of many cassette decks, it's important not to waste any of that range on nonmusical signals. Some cassette recorders are easily overloaded by the infrasonic output of a record playing system with a mismatched arm and cartridge, especially when dubbing warped discs. If your preamplifier has an infrasonic filter that affects the signal fed to the tape deck, use it. If not, consider getting an outboard infrasonic filter, such as Ace Audio's Model 4000, or attack the problem at its source by damping the infrasonic resonance of the tonearm.

AUDIO/VIDEO Environments

Bringing technology home by Christine Begole

Getting Organized

FINDING WAYS TO KEEP audio and video cassettes organized and accessible is simple when you have a mere handful of tapes. Once you discover the intoxicating pleasures of home recording, however, chances are your cassette collection will grow to unwieldy proportions. Pulling shoeboxes out of the closet might be a good ad hoc solution, but systems designed for cassette storage usually look better and, more important, make finding the tape you want far easier.

Whatever storage system you choose-and I'll be presenting several in this column-there are certain safeguards that will ensure long life for your cassette collection. First, keep all tapes in a dustfree, temperate environment. Preventing dust contamination is easy; simply make sure that your storage system accommodates the cassette's standard Philips box. Avoid temperature extremes by keeping your cassettes out of direct sunlight and away from radiators and heaters. Second, store tapes away from large household appliances, such as refrigerators, air conditioners, and the like. Their heavy-duty motors create magnetic fields that can wreak havoc with a tape recording. Though estimates vary on what constitutes a safe distance, I've found three feet an acceptable minimum. And third, never rewind an audio or video cassette prior to storage: Normal play-speed winding keeps the tape pack flat and even, thereby minimizing possible deformation of the tape edges.

Prices for mail-order items shown on these pages are approximate. Please write to the company involved for a current catalog containing prices and shipping information before you order.



Wire-basket cassette drawers (\$25) from Wire for Sound are available in red, black, or chrome finishes. Each stackable drawer holds forty-two cassettes. The Esprit Catalog (\$2), 947T Tennessee St., San Francisco, Calif. 94107.



Press one of the oversized buttons on this Italian cassette-storage system and the tape pops out gently. The Model 970 from Biblio is priced at \$20 for two stackable modules. The Crate and Barrel Catalog, 195 Northfield Road, Northfield, 111, 60093.



This teakwood roll-top case accommodates fifteen or thirty cassettes for \$24 or \$43, respectively. The Dunaway Collection Catalog, 1605 John St., Fort Lee, N.J. 07024.



The four-drawer audio cassette cabinet from SoundAids (approximately \$50) stands about 12 inches high and holds sixtyeight cassettes. A pair might be nice to bracket an LP collection. SoundAids, 395 Riverside Drive, New York, N.Y. 10025.



Gusdorf's video library cabinet (\$210) houses 168 VHS or Beta cassettes, and there's room for a VCR on top. Gusdorf products are available in department and electronics stores.



Mounted on a lazy-Susan base, Herrington's solid-oak storage system accommodates forty-eight audio cassettes (\$79). A video storage cabinet (\$99) holds eighteen Beta or VHS tapes. The Herrington Catalog, 7265 Shadowbrook Dr., Kirtland, Ohio 44094.



One HF staffer discovered that wooden wine cases make good audio cassette storage ''systems.'' This two-bottle box holds thirty-eight cassettes.



TDK's three-drawer CP-36 (\$40) accommodates as many as thirty-six audio cassettes and is styled to blend nicely with audio components.

VIDEO TODAY & TOMORROW... VideoFronts

Latest video news and products

Watching Sony's Watchman

We recently had the opportunity to "road test" Sony's latest video wunderkind, the Watchman (Model FD-210, \$350). With a 2-inch black-and-white screen, the set weighs 19 ounces, measures $3\frac{1}{2}$ inches wide by $7\frac{1}{4}$ inches high, and—wonder of wonders—is just $1\frac{1}{4}$ inches deep. Sony was able to achieve these compact dimensions by "folding" the cathode-ray tube so that the electron gun and focusing elements are positioned behind and parallel to the phosphor screen. This gives the FD (flat display) tube a paddle shape with a total thickness of just $\frac{5}{8}$ inch.

Like its Walkman audio cousin, the Watchman is battery operated, and its four-AA-cell complement is the same as that used for many portable tape players. So powered, it will operate for approximately two-and-a-half hours. A 6-volt AC adapter comes as standard equipment, and the set can also be energized by an optional rechargeable battery or a car cigarettelighter adapter. An earphone and suedelike carrying case complete the package.

The Watchman has a minimum of controls. Channel selection is displayed on a



padate-snaped picture tube (center). For tabletop viewing, it rests on its own easel (top).

slide-rule scale and accomplished with a knurled knob. A band selector chooses between VHF and UHF reception, and a three-position slider switches the set on,

either with or without picture. Battery life is increased dramatically with the set in the sound-only mode.

Compared to other "portable" black and white receivers (which earn the sobriquet chiefly from the presence of a carrying handle), the Watchman is unique. But since it was designed from the ground up to be truly portable, there are some inherent limitations. The built-in speaker, for instance, produces only whisper-level output; Sony explains that the set is intended to be used primarily with the earphone and that the speaker is only supplementary. And although there is an external antenna input. for portable use you'll have to rely on the unit's telescoping rod. With it, picture quality was judged by us to range from adequate to very good (particularly outdoors), though several viewers complained of a dim image and below-average contrast.

By any account, the Watchman is a technological feat. Here's a TV receiver that can rest on its own stand anywhere, or fit comfortably in a purse or stadium coat. For sports fans, being able to switch between sound only (for play-by-play descriptions) and video (for instant replays) could become an addictive convenience. *Circle 74 on Reader-Service Card*



With the Japanese committee on "eightmillimeter" video standards still locked in debate, the prospect of a standardized hardware format for quarter-inch recorders seems unlikely in the near future. The possibility of ultraportable camera/VCR combinations that would use the narrow tape was first raised two years ago, when Sony demonstrated its prototype system ["VideoFronts," January 1981]. Within a few months, Matsushita (parent company of both Panasonic and JVC), Hitachi, and sev-



Systems like JVC's Compact VHS (above) may forestall introduction of "8-mm" camera/VCRs such as Matsushita's (left).

eral others displayed their own, incompatible versions. Only Funai Electric's quarterinch VCR ever made it to market {reviewed in these pages in September 1981], but late reports have it that the system, distributed in this country by Technicolor, has been withdrawn.

Quarter-inch video's biggest assets light weight and a one-piece camera/VCR configuration—seem less attractive in light of current efforts to miniaturize "standard" half-inch video formats. JVC's recently introduced Compact VHS recorder uses a miniature half-inch cassette that—with the aid of a special caddy—can be played back in a standard VHS deck. The 4.4-pound recorder and companion 2¾-pound minicamera (see below) can even be linked by a bracket to form one unit. And Sony recently announced plans for a 5½-pound camera/ VCR combo that uses a conventional Betaformat cassette. Dubbed the Beta Movie System, it is slated for introduction this summer.

Meanwhile, the only aspect of video that seems certain is change. JVC, for instance, long committed to the VHD grooveless capacitance video disc, has now announced that the format will not be brought to market.

At $2\frac{1}{2}$ pounds and 4 by 3 by 11 inches, JVC's new GZ-S3 video camera is the essence of miniaturization. The camera uses a $\frac{1}{2}$ -inch Saticon pickup tube for

VIDEO VideoFronts



reduced lag and burn and a fast f/1.2 lens for operation in light levels as low as 30 lux. The lens has a 6:1 zoom ratio (8-48mm) with a macro setting that is said to enable you to focus as close as the surface of the lens itself. Other features include automatic iris and white-balance circuits, a 1-inch electronic viewfinder with eight on-screen mode indicators, horizontal resolution of better than 270 lines, and stereo microphone inputs. Although designed to complement JVC's tiny HC-C3 video recorder. the \$900 camera will operate with any VHS deck.



A dynamic-range enhancer, noise reducer, and stereo synthesizer combine to make RG Dynamics' VC-1 Videosonic Stereo Phasor a triple whammy. Priced at \$200, the unit is said to expand compressed TV audio signals by as much as 15 dB and reduce unwanted noise and hiss by a maximum of 20 dB. The VC-1 accepts signals from a TV set's earphone or audio output jack; dual outputs feed the processed signal from the Phasor to your audio system. *Circle 79 on Reader-Service Card* external speakers, a wireless remote control for both TV and FM, and separate chrome stands for the monitor and speakers. The entire system is priced at \$1,500, or each component can be purchased separately. *Circle 78 on Reader-Service Card*



The pure chromium dioxide formulation used in BASF's new L-750 Beta video cassettes is said to ensure extremely low video noise for greater contrast. brighter colors, and clearer pictures. A very durable binder is claimed to produce an extra-smooth finish for better tape-to-head contact and reduced shedding. The L-750 cassettes are priced at \$30.

Circle 77 on Reader-Service Card



This compact and handsomely styled two-head Beta-format VCR from NEC features four-event, seven-day programmability. The front-loading VC-734E (\$600) also has automatic playback repeat, high-speed picture search, an LED elapsed recordingtime readout, and a full-function wired remote control.

Circle 76 on Reader-Service Card



A high-tech metallic finish adds luster to Teknika's new Silver Edition component TV/stereo-FM system, which includes a cable-ready, 105-channel receiver that can serve as the heart of an integrated home entertainment center. Other elements include a 19-inch color video monitor, two



Here's a way to limit your children's television and video use selectively. The Model 1200 from Censorview Ltd. is designed to block reception on television channels 2– 13. Since VCRs, most cable converters, and video game systems produce an RF signal modulated on Channel 3 or 4, use of these devices can also be blocked. Operation and installation are easy, says the California-based manufacturer. Once activated by your own five-digit code, the unit can be programmed by day, time, and channel as much as one week in advance. Sixteen separate blocking commands can be entered for each day. To ensure accuracy, programming instructions are displayed on the TV screen as you enter them. Should little hands meddle with the device, a security light signals foul play. The Censorview Model 1200 costs \$200. *Circle 81 on Reader-Service Card*



"It's not just another signal-splitting gadget," says Channel Master of its Model 0770 Video Control Center. The company claims that the unit—which enables the user to connect as many as four signal sources to two TV sets and one VCR—was designed to professional standards to eliminate problems common to home splitters: double images, herringboning, and signal leakage. The Video Control Center uses high-isolation broadband circuitry for strong signals and terminates unused lines internally for reduced interference. The Model 0770 is priced at \$50. *Circle 75 on Reader-Service Card*



Taking the trauma out of wiring nightmares, a new "how-to" guide from GC Electronics helps the amateur do a professional job of installing complex home audio-video systems. The GC *Do-It-Yourself Guidebook* uses simple codes keyed to illustrations to show how TV sets, VCRs, home computers, audio components, and cable station selectors can be interconnected. There's a useful section on home video system maintenance, too. The manual is available postpaid for \$2.95 from GC Electronics, 400 S. Wyman St., Rockford, Ill. 61101.

Circle 80 on Reader-Service Card

HANDS-ON REPORT

Toshiba's CA-045 Monitor/ Receiver



A battery-operated portable for home and field

This Hands-On Report was conducted under the supervision of Edward J. Foster, Consulting Technical Editor of HIGH FIDELITY and Director of Diversified Science Laboratories.

MOST ELECTRONIC VIEWFINDERS in video cameras leave much to be desired. Their chief limitations are a small screen and a monochrome picture. The former makes it difficult to tell if you've focused correctly, and the latter forces you to rely for color balance on whatever electronic white-balance indicator may (or may not) be provided. Fortunately, battery-operated color monitors can remedy these problems; some, such as the Toshiba CA-045 (\$500), will even serve double-duty as field monitor and home receiver.

The CA-045's optional battery case (Model BP-045, \$64) holds a set of nine "D" cells to power the monitor for up to two hours. It will also accommodate a rechargeable NiCad battery, which Toshiba says will operate for up to three hours. Dubbed the TBB-45 (\$125), the NiCad takes fifteen hours to charge, drawing line power from the monitor (which cannot be used during the process). The CA-045 can also be powered from a 12-volt negativeground car battery, and a cigarette-lighter adapter is provided with the set.

If \$500 seems a lot to pay for a portable video monitor, don't forget that the CA-045 is a complete portable TV receiver with VHF and UHF tuners built in. Direct audio and video outputs (via standard phono jacks) make it possible to record off the air onto a portable VCR. Audio and video inputs enable you to review your recordings or monitor them from a camera. (The direct video inputs can also be used with a computer that delivers an NTSC-composite signal, but we found the small screen and its resolution less than adequate for computer display applications.)

The choice between broadcast TV reception and monitor mode is made by a slide switch on the right side of the set. Also



In the field, the CA-045 serves as a highquality portable color monitor.

located here are most of the standard color controls-brightness, contrast, tint, and color-as well as the AC and DC power connectors, an earphone jack, the tuning knob, and an AFT (automatic fine tuning) switch. A slide-rule tuning indicator is on the front panel, along with the power switch, a VHF/UHF selector, and a slidertype volume control. Tuning to a broadcast frequency is aided by a system reminiscent of a type used in some audio receivers: As the tuner approaches and then locks onto a station, a pair of flashing red bars bracketing the channel number changes to a single green bar. This is particularly helpful, since the channel markings are rather crowded (especially on the UHF and upper VHF scales) and none too accurate.

The rear panel contains two sets of standard 300-ohm twin-lead terminals for external VHF and UHF antennas, a slide switch to select between an external VHF antenna and the top-mounted 44-inch telescoping rod, a vertical-hold control, and a pushbutton that activates degaussing circuitry. Degaussing (accomplished automatically in home sets) removes any magnetism that the picture tube may have picked up from external fields, thereby restoring color accuracy.

The screen provides 11 square inches of viewing area (about $4\frac{3}{4}$ inches on the diagonal), which is quite sufficient for monitoring. For field use, there is a sliding sunshade (in the top surface of the cabinet) that can be pulled out to reduce glare. A snap-on plastic filter is also provided to increase apparent contrast—a helpful feature, since the CRT does not appear to be the "black matrix" type that is typically used in large-screen models.

As a standard TV receiver, the CA-045 is reasonably sensitive. Using just the telescoping rod antenna, I was able to log stations thirty to forty miles away with good picture and sound quality. Even stations sixty miles distant were receivable, albeit with some snow. Of course, the quality was much better with an external antenna.

I also used the CA-045 to videotape sports events, and the built-in tuner provided a handy reference for setting color. First, I would tune in a local station and adjust the set's color and tint controls for best flesh tone. (Without the broadcast reference, there is no guarantee that the set's color balance is properly adjusted.) Then I would use the CA-045 to check the color balance of the camera. And I found the capacity to review what I'd taped—in full color rather than in black and white—very valuable.

The CA-045 is small (about 5 by $8\frac{1}{4}$ by $10\frac{3}{4}$ inches) and easy to tote by a bar handle that pivots down to serve as a tiltstand. It weighs less than $7\frac{1}{4}$ pounds; the battery pack, which mounts at the bottom via a pair of clips and two screws, adds $3\frac{1}{4}$ to $4\frac{1}{2}$ pounds, depending upon whether you're using dry cells or the rechargeable pack. Any perfectionist videographer ought to consider adding a monitor to his portable video setup. I have grown particularly fond of this one, which adds full broadcast reception capability to its basic monitor configuration.

VIDEO **TubeFood**

New video programming: cassette, disc, pay and basic cable by Susan Elliott

Video Cassettes

FEATURE FILMS

CBS/Fox Video: Rocky 3; Six Pack; 1 Ought To Be in Pictures; Barbarosa, **MCA Videocassette:** The Best Little Whorehouse in Texas.

Media Home Entertainment: Across the Great Divide; The Prize Fighter. Paramount Home Video; Reds.

Video Corporation of America: The Wedding Party.

Warner Home Video: Superman 2: A Midsummer Night's Sex Comedy.

MUSIC

CBS/Fox Video: Kenny Loggins Alive: Teddy Pendergrass Live in London. **Thorn EMI Video:** That'll Be the Day (Ringo Starr, Keith Moon).

HOBBIES/HOW TO

3055 Corp.: How To Enjoy Your Video Recorder.

Video Corporation of America: The World's Greatest Photography Course.

CHILDREN'S PROGRAMMING MCA Videocassette: Puss in Boots. Media Home Entertainment: Wildow

Media Home Entertainment: Wilderness Family, Part 2, 9

Video Discs

CBS/Fox Video (laser): The Boys from Brazil: Capricorn One: For Your Eyes Only; Charly; Coming Home; Dr. No;



Your video questions answered

Q. We own a new 25-inch color TV set and a portable VCR. When the two are connected, we have reception difficulties—poor color, fuzzy picture. Also, hues shift from red to green when we tape from the set. We use the SLP speed. Can anything be done about these problems?—Jeff Holloway, Monroe, Wis.

A. Probably. First, let me clear up a misconception: You don't tape from the TV set. The video signal travels from the antenna to the VCR and from there to the receiver. I assume that the reception is fine when the antenna is connected directly to the TV set. (If not, the problem is likely to be with the antenna, the lead-in wire, or the receiver itself.) If my assumption is cor-

From Russia with Love; Goldfinger; The Great Train Robbery; History of the World, Part 1; Last Tango in Paris; M*A*S*H*; The Pink Panther; Quest for Fire; Raging Bull; Rocky; Rocky 2; The Rose; Semi-Tough; Some Like It Hot; Straw Dogs; Young Frankenstein.

Paramount Home Video (laser): A Place in the Sun: Days of Heaven: Downhill Racer; Escape from Alcatraz: The Great Gatsby: Harold & Maude; Lady Sings the Blues: The Odd Couple: Orca, the Killer Whale: Paper Moon: Pretty Baby; Reds: Romeo & Juliet: Save the Tiger: Serpico: Shogun; The Shootist: Star Trek 2: The Ten Commandments; True Grit.

RCA SelectaVision (CED): Jaws; Animal House; The Sting; American Graffiti: Smokey and the Bandit: The Jerk: Airport; Coal Miner's Daughter; The Four Seasons; The Blues Brothers; The Deer Hunter; The Electric Horseman; Frankenstein; Dracula; Psycho: Duck Soup; The Birds; Animal Crackers; Never Give a Sucker an Even Break; My Little Chickadee. Vestron Video (laser): Tribute.

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MUSIC

Pioneer Artists (laser): Stevie Nicks in Concert; The Manhattan Transfer in Concert; Billy Squier in Concert. Embassy Home Entertainment (laser): Rod Stewart in Concert,

HOBBIES/HOW TO

Vidmax (laser): *Murder*, *Anyone*? (MysteryDisc series; Vol. 1, No. 1; interactive).

Xerox Publishing (laser): Gardening at Home.

CHILDREN'S PROGRAMMING

CBS/Fox (laser): The Great Muppet Caper.

Walt Disney Home Video (laser): Tron.

Pay Service Premieres

(Check local listings for availability and schedules.)

Cinemax: Human Feelings; Harold & Maude: Man of La Mancha; Pride of the Yankees; The Seal Pup: The Story of Gilbert & Sullivan: You Light Up My Life; The Predators.

Home Box Office: Making Love; Sharky's Machine: Dragonslayer: Cannery Row; The Seduction; The Groove Tube.

Showtime: Star Wars: Sharky's Machine: Dragonslayer; Diner; The Seduction: My Bloody Valentine; Swamp Thing; The Life of Brian; Ticket to Heaven; Faerie Tale Theatre: Jack and the Beanstalk; Adventures of the Wilderness Family, Part 2; Mark Twain Theatre: On the River; Broadway on Showtime: Shaft of Love; Hot Ticket: The Doobie Bros, Farewell.

The Movie Channel: Star Wars: Sharky's Machine: Diner: Dragonslayer; Making Love; Cannery Row; A Stranger Is Watching: Swamp Thing: Malachi's Cove: Find the Lady; Silent Movie: Challenge To Be Free: Wilderness Family, Part 2; National Lampoon's Animal House; Pretty Baby; Barbarella: Garde à Vue.

by Edward J. Foster

rect, then the signal is getting lost traveling through the VCR.

Check the connections between the lead-in wire and the VCR and between the VCR and the TV set. If these are okay, look in your VCR owner's manual to see if the antenna automatically switches over to the TV set when the VCR is turned off. On some decks, you have to make the change manually, using the TV/VCR button. If you don't switch the antenna to TV when the deck is turned off, the antenna remains connected to the VCR, and the receiver gets only whatever signal leaks through.

Remember that the VCR's tuner is actually receiving the signal when the TV/ VCR switch is in the latter position. The deck then sends the signal to the TV set over Channel 3 or 4 (whichever you've selected on the VCR). If you use your *set's* channel selector instead of your VCR's, you may get a picture, but it will be very weak. On the other hand, when the TV/VCR switch is in the TV position, the signal from the antenna is fed to *both* the deck and the TV set. If your picture is okay with the switch at TV, but not at VCR, then I suspect that either your deck is defective or your TV receiver is not tuned to Channel 3 or 4.

Your problem with color in the SLP mode may be due to poor tape or a defect in the VCR. If the problem occurs when you use quality tape, take the deck in for service. Although the reception and hue difficulties might be related, I suspect not, so describe them both to the service technician.



Kremer and Goldsmith on Schnittke (and eac

Soviet violinist Gidon Kremer, now resident in Switzerland, recently recorded the Beethoven violin concerto, with cadenzas supplied by Soviet composer Alfred Schnittke (Philips 6514 075), Harris Goldsmith's review in our July 1982 issue took particular exception to the cadenzas and elicited the following response from Kremer in the form of a personal letter. Goldsmith has responded in his turn, and we here reprint the exchange with the permission of both correspondents.—Ed.

Deur Mr. Goldsmith,

I'm always sorry when communication between people—especially between artists—falters or breaks down altogether. What sets me to thinking about this now is your review of my recent recording of the Beethoven violin concerto (or more specifically, Alfred Schnittke's cadenzas to it).

Of course, it would be a waste of time simply to try to justify my own performance, which one may find convincing or not, strange or haphazard, superficial or substantial. Any judgment or criticism will always depend on the taste, experience, and knowledge of the listener. Yet an honest and straightforward exchange of opinions can benefit any artist (including myself), whatever his fame or position. Being absolutely open to other ways of thinking, I really appreciate the kind of criticism that deals with the subject and remains unclouded by emotional inhibitions. That is why I have decided to comment on a few points specifically related to music.

1. Schnittke, as one of the most interesting modern composers, deserves at least to be taken seriously. His decision to add a kind of historical perspective in the cadenzas to a famous concerto could fairly be called controversial. But that attempt, done with no intention of destroying or rewriting a masterpiece, was not in the least intended as a joke. Any attempt to make fun of it is unfair.

2. / II the themes Schnittke used in his "collage-cadenza" to the concerto's first movement are related to Beethoven's music in both melodic line and rhythmic structure. The collage affords an overview of the best violin concertos since Beethoven (such as those by Brahms, Bartók, Shostakovich, and Berg). While this "improvisation"



hother)

3. There have always been composers who incorporate varied styles into their musical language. This "polystylistic" method, still very much alive, has been used by Ives, Shostakovich, and Stravinsky, to name only a few of the best-known masters.

4. Historically, composers of concertos left space for cadenzas, a sort of communication between themselves and performers. This provision, inviting fantasy and improvisation, showed their trust in the performers. That trust was probably destroyed by virtuoso players bent on showing their own skills rather than amplifying musical ideas. No wonder, then, that, toward the end of the nineteenth century, Tchaikovsky, Elgar, Sibelius, Bartók, and Berg decided to write the cadenzas themselves. Perhaps they were spurred by the performances of Reinecke, Joachim, and Kreisler, whose cadenzas do not, after all. belong to the musical world of Mozart or Beethoven, but-mere imitations of style-show their time. Why should we, on the other hand, depend on the stylistic interventions (sincere though they may be) of the nineteenth century when there are no original cadenzas?

5. "Modern" cadenzas are nothing new—Beethoven wrote them to Mozart, Brahms to Beethoven, Britten to Mozart(!) —and were never governed by stylistic congruity. The practice was not considered a *crime*, except by very conservative critics. Far more criminal, in my view, are the virtuoso displays of the nineteenth and twentieth centuries.

6. Beethoven himself wrote a cadenza to the piano version of the violin concerto that includes a solo theme played by timpani, and themes not used in the concerto itself. This cadenza is twice as long as the "usual" ones (Joachim, Kreisler)—and much more substantial. (This example, in particular, seems to have inspired Schnittke in his attempt to "reconstruct" a Beethovenian way of musical thinking.)

7. The second-movement cadenza (which you almost ascribe to P.D.Q. Bach) is in essence Beethoven's own, as it appears in the piano version.

8. By mentioning my recent New York performances of Vivaldi's Four Seasons, as well as by devoting so much attention to the cadenzas, you rather slight the main subject—Beethoven's violin concerto. Still, if you are looking for surprises, I recommend that you listen to the Seasons recording by Nikolaus Harnoncourt and his Concentus Musicus. One of the most exciting performances of that piece, it shows a real understanding of baroque tempo and character. (By the way, he uses the same edition of the second movement of Winter I do, an old and very explicit one.)

I wish we could talk before you spread your confusion, leading some readers to form rough opinions and snap judgments. Thank God we are living in a time—and in countries—where, for the most part, different ways of understanding are accepted. Therefore, I wish you would not try to set your subjective opinion up as law. I hope you just had a bad evening (as we all have sometimes).

Sincerely yours, Gidon Kremer

Dear Mr. Kremer,

Thanks for a thought-provoking, passionate, and well-expressed letter. Artists particularly successful ones—traditionally consider it bad form, or beneath their dignity, to answer an unfavorable critique directly. Your departure from "tradition" here is as courageous and refreshing as it usually is in your violin playing.

I happen to regard you as one of the most valuable and interesting performers before the public today. Your artistry impressed and stimulated me at your first New York recital at Avery Fisher Hall, where you began with a moving work, *Praeludium in memoriam Dmitri Shostakovich*, by Alfred Schnittke, a Soviet composer whose work I had not previously encountered. That short piece for violin solo and taped violin left a very good impression of both your work and his: Obviously Kremer and Schnittke were to be taken very seriously indeed.

Your argument on behalf of Schnittke's cadenzas to the Beethoven violin concerto has a familiar ring: Artur Schnabel used the same rationale to defend *his* equally inadmissible additions to Mozart's Piano Concerto, K. 491. On a purely intellectual level, the reasoning makes sense, but music, after all, is to be heard first and discussed second. *Aesthetically*, these cadenzas are so anachronistic that they actually constitute an act of artistic dis-

respect.

Beethoven's cadenzas to Mozart's Concerto, K. 466, are indeed Beethovenian, not Mozartean. Still, their idiom is close enough to Mozart's original music to produce an interesting commentary rather than a jolting anachronism. After all, Mozart's D minor Concerto is itself highly dramatic—"pre-Beethovenian," perhaps—and Beethoven, however far he traveled stylistically, remained in essence a classical composer whose language shared much with Mozart's.

Beethoven's cadenzas to his own C major and B flat Piano Concertos, incidentally, were written much later in his life; the one for the B flat, in particular, reflects the *Hammerklavier* Sonata's style. Again, the contrast is stimulating, not clashing.

But not all of Beethoven's cadenzas work: There is the alternative one to the G major Concerto (played by Gieseking, Pollini, Moravec, Brendel, and a few others) that sounds oddly manic and does abrupt violence to the work's lyrical mood. As for the piano arrangement of the violin concerto, I must confess that I have never been overly fond of that enterprise (undertaken, in all probability, simply because Clementi's publishing firm offered Beethoven some easy money). The added bass material transforms quintessential violin music into unpianistic music-box tinkling, and the cadenzas are so wild and inappropriate that I am tempted to write them off as a monumental put-on. I should have recognized the Eingang in the second movement as having come from this arrangement and am frankly surprised that I didn't.

With the passage of time, it became harder for composers to recapture the classical style in their cadenzas: Brahms's additions to Mozart's K. 491 Concerto are already sufficiently removed stylistically to present severe problems. For that reason, they are rarely performed. And when a Schnabel inflicts a Schoenbergian flight of fancy (a rigorous flight!) on poor K. 491, or when a Schnittke goes berserk-quoting Brahms, Bartók, Shostakovich, Berg, et al., in the context of Beethoven's violin concerto, the results are (in all seriousness) laughable. Call the attempt anything you like-"collage," "polystylistic," "historical"-these quotations have no rightful place in Beethoven's concerto. They introduce a kind of insolent Soviet "bad boy" style, familiar from such pieces as Shostakovich's Golden Age Polka, Prokofiev's Chout, and Shchedrin's spoof on Bizet's Carmen, and this introduction of satire into a decidedly unsatiric-and essentially lyrical-piece invites scorn. While a sevencourse dinner, to be sure, ultimately mixes together in one's stomach, a hot-fudge topping on pot roast is not a valid culinary option.

Your insistence that these cadenzas be treated seriously reminds me of Andy War-

hol's claim of "social significance" (or whatever) for his gigantic poster of a Campbell's soup can. I say: "Mmm-mmm Bad!"

But why such contempt for the "criminal" Kreisler and Joachim? Aside from a few sentimental touches and a bit of artful cleverness in Kreisler's first-movement cadenza (as when he combines the two themes), his contribution is quite innocuous if hardly definitive. Certainly it has far greater purpose and direction than Schnittke's specious and incoherent nitpicking.

The two points I am making are that: 1) A cadenza has to be stylistically apt, and

You and other performers have to keep the moustaches off the Mona Lisas.

2) it has to go somewhere musically and dramatically. Many disagree with me as to the stylistic aptness of the aforementioned Beethoven cadenzas to Mozart's K. 466 and to his own first two concertos; perhaps they would be played and accepted in any case, because they are great music. Schnittke's contributions are not purposeful or well written, but even if they had been a lot stronger than they are, they still wouldn't have worked, because their idiom is too alien.

You note that Tchaikovsky, Elgar, Sibelius, and Berg decided to write their own cadenzas. (Have you forgotten Mendelssohn?) Actually, apart from the world of violin concertos. Beethoven wrote his own cadenzas to his last piano concerto. and eliminated cadenzas altogether in his Triple Concerto. He had probably had enough of the frivolity of alien cadenzas and sought to put an end to them once and for all. In the main, though, I doubt that Bach, Mozart, and Beethoven spent too many sleepless nights worrying about the performance of their music anno 1982, and it is therefore your responsibility, and that of other modern performers, to keep the moustaches off the Mona Lisas.

The crux of the matter is that a cadenza is just that: a "cadence"—a filling-out between the implied dominant of the six/ four chord and its inevitable tonic resolution. That harmonic fact of life ought never to be obscured by excessive length, contrivance, or modulation—and certainly the cadenza should never become the most salient feature of a concerto. If Schnittke genuinely wants to explore styles of past masters, he has several options open to him: He can devise a work on the order of Stravinsky's *Pulcinella* (after Pergolesi) and *Baiser de la fée* (after Tchaikovsky). Respighi's *Ancient Airs and Dances*, or Stockhausen's *Ludwig Van*. Or he can follow those American masters of collage, Druckman and Rochberg. Or he can compose a piece such as Ravel's *Le Tombeau de Couperin*, Stravinsky's neoclassical *Duo concertante*, or Grieg's *Holberg* Suite that pays homage to a bygone epoch without actual use or quotation of borrowed material. But a cadenza is no proper forum for such a ''tribute.''

For my part, I agree that a review of Beethoven's violin concerto is no proper forum for an attack on your performance of Vivaldi's *Four Seasons*; please understand that I simply took unfair advantage of the opportunity because I was genuinely concerned and distressed at signs that a violinist whose playing I respect so much might be turning toward sensationalism and eccentricity. I wanted to register my opinion emphatically that—in contrast to what so many jaded critics and listeners evidently think—these are *not* valid alternatives to the faceless conventionality that mars so much contemporary music-making.

But I am happy to note that, in your Seasons recording, your views are more moderate and convincing than they were in concert. Although some of the playing remains a bit brashly energetic, the extreme wildness has been considerably tamed. I still find it difficult to reconcile your rapid, extroverted account of *Winter*'s second movement with either Vivaldi's tempo marking (Largo) or his poetry, "Passar al foco i di quieti e contenti/Mentre la pioggio fuor bagna ben cento'' (To spend quiet, contented days by the fire/While the rain outside drenches everyone).

The Seasons recording that I consider a paragon is Szymon Goldberg's with the Netherlands Chamber Orchestra. I mean it as a high compliment when I say that your playing often reminds me of Goldberg's in its patrician purity of sound, keen intelligence, and refreshing individuality. But the older musician adds the qualities of perspective and temperance: It is quite possible to be stimulating without being either chained to "tradition" or violently iconoclastic.

I certainly understand your delight in being able to live in a society that encourages diversity of opinion. You are quite mistaken in believing that I set up my opinions as "law." Nevertheless, I intend to go on expressing them as articulately—and persuasively—as I can. I suspect that, gifted musician that you are, you relish your role of *enfant terrible* (or devil's advocate?); secretly, you surely know that there is a distinction to be made between "different" ideas and wise ones. Sincerely,

Harris Goldsmith

Messiah: Further Reduplication

A Handel maven concludes his trek through the editions and the recordings. Reviewed by Teri Noel Towe

This completes a review and discographic survey begun last month.—Ed.

AS MESSIAH ENTERED the twentieth century bedecked in classical and Victorian raiment, seeds of the return to Handel's original were being sown. In 1902, two important scholarly editions appeared. The first, prepared by Friedrich Chrysander after a careful, though not exhaustive, collation of primary and early secondary sources, is an "Urtext" rendering-the forerunner of such modern editions as the Schering-Soldan, the Coopersmith, the Watkins Shaw, and the Tobin. The other, produced by Ebenezer Prout, professor of music at the University of Dublin, is an uneasy compromise between a pure, accurate text and the practical need for a performing edition that could gain wide acceptance in Edwardian England.

Besides codifying the standard Victorian form of *Messiah*, Prout confirmed the customary cuts by relegating to an appendix numbers "always omitted in performance"—the three separating the choruses "Lift up your heads" and "The Lord gave the word," and the four between "The trumpet shall sound" (whose central section and dal segno reprise were excised) and the final chorus, "Worthy is the Lamb." Prout did, however, correctly assign the Guadagni version of "But who may abide" to the alto.

Although he considered his edition "an honest effort to reproduce as nearly as possible both the letter and the spirit of Handel's greatest oratorio," Prout had to admit that, "while Handel's text has been scrupulously respected, no attempt has been made to preserve his orchestral coloring." Though he restored most of Handel's original tromba parts-but not his oboe parts, except in three choruses in Part II-Prout based his accompaniments on Mozart's, striking out those he found "un-Handelian" and retaining those he considered "strictly pertinent to Handel's subject matter." In essence, he removed almost all the color from Mozart's arrangement; his own accompaniments, careful and competent yet discreet and nondescript, frequently do little more than muddy the texture with unison doublings. The resultant opacity, of course, is exactly the opposite of the shimmering transparency of Handel's original. Chicken consommé is turned into *crème de volaille*.

It's not surprising, therefore, that no recording uses Prout's accompaniments exactly as he wrote them. The one closest to "pure" Prout is the first of three made by Thomas Beecham. Dating from 1927, it fills eighteen twelve-inch 78s and is the first true attempt at a "complete" Messiah. In addition to the standard cuts, Beecham made further excisions: the Pifa (which he had recorded previously on a single twelveinch 78, Columbia 7198M); the central section and da capo of "He was despised"; "The Lord gave the word"; "Their sound is gone out"; and—believe it or not—the concluding "Amen," which means the recording ends in the dominant! (A 78 collector did not have to be left hanging, however; he needed only acquire Malcolm Sargent's single twelve-inch 78 containing the "Amen," Victor 9125.)

Beecham's outspoken aversion to the harpsichord notwithstanding, his first Messiah did much to hasten a return to the spirit of Handel's original. As alto soloist Muriel Brunskill recalled, "His tempi for this work, which now are taken for granted, were revolutionary; he entirely revitalized it, the old slow progress was gone forever, Messiah was reborn." Though myriad early recordings of excerpts suggest that prevailing tempos may not have been all that lugubrious, Brunskill does not exaggerate the importance of this exciting and virile recording; it deserves reissue, particularly since the single LP of excerpts, HMV Treasury HLM 7053, is no longer available.

For his second *Messiah*, recorded in 1947, Beecham used many of the Mozart or Prout accompaniments, frequently altered, and supplanted others entirely, substituting his own reorchestrations; these he also provided for numbers neither Mozart nor Prout had rescored. Beecham's handiwork is less academic and much more colorful than Prout's; unlike the professor, who held Handel's brass and string parts sacrosanct, Beecham avoids opacity and, paradoxically, manages to preserve the glittering clarity of the original by changing Handel's instrumentation rather than merely doubling lines.



Roubiliac's monument, Westminster Abbey

Beecham II is the first complete and uncut Messiah recording, originally released on twenty-one twelve-inch 78s and reissued in the mid '50s on four LPs. The engineer who made the LP transfer did not know the score, for in addition to perpetrating some god-awful side breaks, he carried over an unintentional gaffe from the 78 set: Nos. 35 and 36 were inserted between Nos. 52 and 53. Furthermore, as often happened in the 78 era, da capo reprises were not separately recorded; following the aria's central section, one simply turned the 78 back over to create the da capo repeat. (Ironically, this quirk makes Beecham II the first Messiah to feature an alternative versionthe early full da capo form of "The trumpet shall sound.") The LP transfer did not incorporate the da capo reprises.

These faults and some scrappy moments aside, Beecham II, though less frenetic than Beecham I, is every bit as inspired and thrilling, and remains one of the handful of truly stellar *Messiah* recordings, against which others must be compared. The soloists were among the finest British oratorio singers of the period, and Beecham adjusted the size of his choir to fit the character of individual choruses.

In 1959, Beecham recorded his third *Messiah*, a stereo spectacular controversial since the moment of its release. Once again, he opted for a reorchestration. Attributed to Eugene Goossens, whom Beecham had commissioned for the task out of fury and compassion because his friend had been pilloried for his penchant for pornography, the arrangement is largely Beecham's own. According to Ward Botsford of Arabesque Records, who worked with

Beecham for several years, Goossens' orchestration was delivered about four weeks before sessions were due to begin. Beecham didn't like it and redid it himself.

Here, too, he bases his arrangement on those of Mozart and Prout, reorchestrating the latter's additions to give them the color their creator had so scrupulously avoided. Beecham calls for an enormous orchestra, including piccolos, cymbals, triangle, harps, and a full battery of brass. The orchestration is Klangfarben-esque in its kaleidoscopic, ever changing instrumental colors-especially in the solos-and once again Beecham succeeds in preserving the shimmering transparency of Handel's original by doubling at the upper octave rather than clogging things up with somber unison doublings. Met on its own terms without puristic prejudice, Beecham III proves a thrilling experience.

The format of the original issue is curious. Beecham made the standard cuts but relegated the deletions—except for the central sections of the two da capo arias—to an appendix on the last side of the set. At present, only about half of this unique interpretation is available, in a two-disc set; the entire performance ought to be republished, with the eight numbers in the appendix restored to their proper places.

One would think that, with three Messiah recordings to his credit, Beecham would hold the record. No fear. His rival, "Flash Harry" Sargent, recorded the oratorio no fewer than four times between 1946 and 1964. He augmented Prout's accompaniments and restored some of Mozart's. All four recordings-the first is the best-epitomize Messiah as it was known and loved in the provinces during the decades between the wars. The standard cuts are made, a large chorus is used, and the soloists declaim with Imperial vigor and reverence. In short, these Messiahs exude what HF's C.G. Burke called "the consecrated stolidity of a national British habit to regard it as a usufruct and monument of empire like the Nelson column." Both Sargent III and IV are still in the catalog, the clear choices for those to whom authenticity is anathema and Prout-albeit tampered with-is preferable.

Two other *Messiahs* use Prout's accompaniments, but only selectively and with harpsichord continuo added in some numbers. The earlier, recorded in Canada in the early '50s under the baton of Ernest MacMillan, has become something of a cult item among collectors. Why is beyond me. Apart from Lois Marshall's exquisite singing, it is somnolent and muddy in the extreme. In addition to the standard cuts, MacMillan omits "And He shall purify." This recording apparently marked Jon Vickers' disc debut; I'm sure that he, for one, is delighted at its scarcity.

A few years ago, the noted English choral conductor John Alldis recorded the

Prout *Messiah*—a good but not great account, in which some of the Dublin academic's accompaniments are discreetly dropped.

In March 1954, the first "authentic" Messiah was released in this country by Westminster-Scherchen I, billed as the "original Dublin version (1742)." In fact, it contains the standard Victorian choices from among the various alternatives, except that, for the first time on records, the Guadagni version of "But who may abide" appears in its original form for alto. Hermann Scherchen directs a tiny orchestra and chorus, using Handel's original instrumentation. Although it sounds dated todayespecially since there's hardly any ornamentation of vocal or instrumental linesthis interpretation, with its typically Scherchenian iconoclastic tempo extremes, was a revelation at the time. After its release there was no turning back; Messiah as Handel wrote it had been recalled from exile.

Less than a year later, London issued Adrian Boult's first recording, which reflects traditional British notions of how *Messiah* ought to go, although with the original instrumentation restored. A worthy interpretation on all counts, some sluggish tempos excepted, this recording—still available in fake stereo—merits consideration by anyone seeking a budget version.

Both Scherchen and Boult rerecorded Messiah in stereo. Scherchen II, a technical shambles replete with such inanities as a side break between the central section and the dal segno reprise in "The trumpet shall sound," is a carbon copy of Scherchen I as to edition, tempos, and interpretation, but the performance simply does not jell. Chorus and orchestra are substantially larger than in Scherchen I. Leopold Simoneau provides the recording's only redeeming social value, handling the tenor part exquisitely.

While Boult's second effort is also, for all practical purposes, a copy of his first, he benefits from improved sound and an even better solo quartet. Released in 1961, the performance is mildly compromised by an artificial balance of the otherwise natural and rich sonics, affording the instruments an unrealistic clarity in the choruses. Aside from David Ward's tendency toward mannerism and pretension, the soloists sing especially well. Just one seizes the opportunity to ornament-Joan Sutherland, who embellishes her solos thoughtfully and elegantly if in an anachronistic, early-nineteenth-century bel canto style. Her notoriously murky diction intrudes only in "Thy rebuke" and "Behold, and see," which she sings, as Handel's soprano soloists often did, in addition to her "standard" solos. (How magnificent she would have been in one of the soprano versions of "But who may abide.") Boult's tempos tend to be slow, although not unreasonable except in some of the choruses. "Hallelujah," unfor-

Messiah Books

As ONE WOULD EXPECT, much has been written about *Messiah*; several books published in the last thirty-five years prove particularly rewarding.

Jens Peter Larsen's Handel's "Messiah" (W.W. Norton, 1957) thoroughly traces the work's vicissitudes during Handel's lifetime and examines it in the context of the rest of his vocal output as well as in light of the development of English choral music in the late-seventeenth and eighteenth centuries.

Watkins Shaw and John Tobin-both of whom have produced Urtext editions of Messiah-have written two books apiece on the oratorio. Designed as a pendant to his edition. Shaw's A Textual Companion to Handel's "Messiah" (Novello, 1965) contains an exhaustive discussion of the score and its changing versions. a carefully reasoned reconstruction of the details of Handel's own performances, and-in an appendix-all but one of the alternative versions not found in his edition. Tobin's Handel's "Messiah" (St. Martin's Press, 1969) offers not only an analysis of source materials, printed editions, and the score and its changing versions that is even more exhaustive than Shaw's, but also an extended, careful, and well-documented discussion of Handel's performance practice. This volume was distilled and translated into German as the "Kritische Berichte" accompanying Tobin's Hallische Händel Ausgabe Urtext.

In addition to these invaluable scholarly tomes, both Shaw and Tobin have written short

books on *Messiah*. In his fascinating *Handel at Work* (St. Martin's Press, 1964), Tobin—using photographic reproductions of passages from the composing score—shows how Handel reworked and improved the thoughts he scribbled down in the white heat of creation. Shaw's *The Story of Handel's ''Messiah''* (Novello, 1963) is a short, accurate, excellently written, and easily readable history beginning with the oratorio's composition and ending with an account of the gargantuan performances at the 1784 Westminster Abbey Handel commemoration; it is the definite choice for the layman.

Although it is out of print and does not reflect scholarly discoveries made since its publication, Robert Manson Myers' Handel's "Messiah": A Touchstone of Taste (Macmillan, 1948) contains much valuable information on the development of Messiah's international popularity in the nineteenth century and is well worth searching out. Those interested in the history of the Mozart arrangement should refer to the "Kritische Berichte" Andreas Holschneider wrote to accompany his Neue Mozart Ausgabe Uttext (Bärenreiter, 1962).

To be avoided at all costs, however, is Peter Jacobi's recent *The "Messiah" Book: The Life and Times of G.F. Handel's Greatest Hit* (St. Martin's Press, 1982). A sloppy job on all counts, revealing no trace of independent research, this offensive, badly written little volume reeks of the hasty "cut and paste" job and is littered with blatant errors, misleading halftruths, jejune misconceptions, and half-baked "analysis."—T.N.T. tunately, is sluggish; "The Lord gave the word" and the "Amen" are extremely ponderous.

Boult II has recently reappeared in an abridged version on two discs; the cuts will not please Sutherland fans, for three of her solos are among the casualties. Yet since the abridged version of Beecham III features his reorchestration, the shortened form of Boult II is the only option for those who, for whatever perverse reason, insist on a two-disc Messiah in the original orchestration. It is also preferable to either Eugene Ormandy's or Leonard Bernstein's two-record versions, the others currently available. Besides making extensiveoften seemingly mindless-cuts, both conductors use accompaniments derived more or less from Prout. Bernstein, moreover, shuffles numbers from Part II into Parts I and III, reorganizing the oratorio into a Christmas and an Easter section. Neither Handel nor librettist Charles Jennens would have been amused.

Sutherland has also recorded Messiah twice—the second time in a 1970 release conducted by her husband, Richard Bonynge. With its plethora of ornaments and embellishments, elaborate continuo realizations, effusive cadenzas (including one for the trumpeter in "The trumpet shall sound"), and use of five soloists (a boy soprano sings in some of the Nativity recitatives), the interpretation is extroverted, exciting, and theatrically gaudy. In places, it's just a little "too"—Handel with a frosting of Bellini—but it's a wonderful, treasurable recording.

Basically. Bonynge follows the standard score, but he opts for the short form of the Pifa and the Guadagni versions of "But who may abide" and "Thou art gone up." Once again, Sutherland sings "Thy rebuke" and "Behold and see." All the soloists—including Huguette Tourangeau, whose tone is veiled and sexy and whose diction often sounds smothered in onions sing magnificently. The fiorituras and embellishments trip off of their tongues with the greatest of ease, yet their primary goal always seems to be to convey the meaning of the texts. The same is true of conductor, chorus, and orchestra.

1966-67, a pivotal season for Messiah on records, witnessed release of two of the most important versions yet made, those by Colin Davis and Charles Mackerras. Davis uses the standard Victorian sequence but original instrumentation; while the vocal and instrumental embellishments now seem a little tame, the recording came as a revelation at a time when an "authentic" Messiah was still a curiosity. Featuring an especially fine solo quartet, it has stood the test of time and remains the clear choice for those who want an authentic account of the standard score. The only fly in the ointment is Davis' decision to turn "He was despised" into a dal segno aria.

Prout's Messiah

- Part I
- 1. Sinfonia
- 2. Comfort ye My people (tenor recit.)
- 3. Ev'ry valley (tenor aria)
- 4. And the glory of the Lord (chorus)
- 5. Thus saith the Lord (bass recit.)
- 6. But who may abide (alto aria)
- 7. And He shall purify (chorus)
- Behold, a virgin shall conceive (alto recit.)
 O thou that tellest good tidings (alto aria and chorus)
- 10. For, behold, darkness (bass recit.)
- 11. The people that walked in darkness (bass aria)
- 12. For unto us a Child is born (chorus)
- 13. Pifa (long version)
- 14. There were shepherds; And lo! the angel of the Lord
 - (sop. recit.)
- 15. And the angel said unto them (sop. recit.)
- 16. And suddenly (sop. recit.)
- 17. Glory to God (chorus)
- 18. Rejoice greatly (sop. aria) (4/4 version)
- 19. Then shall the eyes of the blind (alto recit.)
- 20. He shall feed His flock (alto, sop. aria)
- 21. His yoke is easy (chorus)

Part II

- 22. Behold the Lamb of God (chorus)
- 23. He was despised (alto aria)
- 24. Surely He hath borne our griefs (chorus)
- 25. And with His stripes (chorus)
- 26. All we like sheep (chorus)
- 27. All they that see Him (tenor recit.)
- 28. He trusted in God (chorus)
- 29. Thy rebuke hath broken His heart (tenor recit.)
- 30. Behold, and see (tenor aria)
- 31. He was cut off (tenor recit.)
- 32. But Thou did'st not leave (tenor aria)
- 33. Lift up your heads (chorus)
- 34. Unto which of the angels (tenor recit.) 35. Let all the angels of God (chorus)
- 35. Let all the angels of God (chorus)
- 36. Thou art gone up on high (bass aria)
- 37. The Lord gave the word (chorus)
- 38. How beautiful are the feet (sop. aria) (revised version)
- 39. Their sound is gone out (chorus)
- 40. Why do the nations (bass aria) (long version)
- 41. Let us break their bonds asunder (chorus)
- 42. He that dwelleth in heaven (tenor recit.)
- 43. Thou shalt break them (tenor aria)
- 44. Hallelujah! (chorus)

Part III

- 45. I know that my Redeemer liveth (sop. aria)
- 46. Since by man came death (chorus)
- 47. Behold, I tell you a mystery (bass recit.)
- 48. The trumpet shall sound (bass aria)
- 49. Then shall be brought to pass (alto recit.)
 - 50. O death, where is thy sting? (alto, tenor duet) (short version)
 - 51. But thanks be to God (chorus)
 - 52. If God be for us (sop. aria)
 - 53. Worthy is the Lamb (chorus)

Although Karl Richter opted for the tenor arioso form of "Their sound is gone out" (preceding it incorrectly with the soprano form of "How beautiful are the feet" in both his fine but abridged Germanlanguage recording and his uncut but uneven English-language account), Mackerras I was the first to offer a substantial number of alternative versions. His recording, using an edition by Basil Lam as yet unpublished, includes the shortened 12/8 form of "Rejoice greatly," the Guadagni forms of "But who may abide" and "Thou are gone up," the alto duet and chorus version of "How beautiful are the feet" (superbly sung by Janet Baker and Paul Esswood), and the tenor arioso form of "Their sound is gone out." Subsequent theories of baroque performance practice have made this recording, too, sound a bit dated. The "rules" often seem overapplied—the use of overdotting in both "Hallelujah" and "Worthy is the Lamb," for instance—yet this detracts not one whit from the enjoyment of what was, and is, a wonderful *Messiah*.

No recording has done more than Mackerras' to show that *Messiah* was not graven on stone, and ever since its release, recordings have fallen into two categories: those that follow the familiar Victorian sequence and those that do not.

The former category, both pre- and post-Mackerras, includes Otto Klemperer's grandiose and moving account using the original instrumentation (with "Then shall the eyes" and "He shall feed His flock" sung by soprano); Raymond Leppard's solid, middle-of-the-road "authentic" Messiah; David Willcocks' English "collegiate" account, in which the soprano solos are sung by massed trebles, thus limiting its interest primarily to boy-choir buffs; Johannes Somary's bland if stylish performance; Frederick Jackson's less bland but less stylish reading; and Walter Susskind's undistinguished account. Although I have heard only single discs of selections (and Koch's complete Heliodor recording, 89 578/80, features different singers), Karl Forster's and Helmut Koch's accounts appear to follow the standard Victorian sequence; in both of these earnest, crisp, yet fervent German-language performances, the Schering-Soldan edition-one of the earliest Urtext scores-is used, as it is in both Richter recordings.

In addition to Mackerras I and the recordings discussed last month, there are six in which alternative versions figure significantly. For his recording with the Handel and Haydn Society of Boston, Thomas Dunn used the performing edition prepared by Alfred Mann, who selected the elevenbar form of the Pifa and the shorter version of "Why do the nations," with the recitative ending. In addition to opting for the Guadagni forms of "But who may abide" and "Thou art gone up," Mann assigned the four solos beginning with "Thy rebuke" to soprano soloists. (Dunn divides the solos between two sopranos.)

Although Dunn uses modern instruments and a mixed choir, his is a particularly stylish account—the only one in which the soloists sing the choruses, as they did for Handel. The instrumental complement—except for the missing horns—conforms closely to that documented by the Foundling Hospital ledgers for the 1754 and 1758 performances. Dunn also scrupulously follows the solo and ripieno indications Handel entered into his conducting score for his 1749 performance. Though lacking that intangible emotional clout that makes the adrenaline flow, this is one of the better "authentic" Messiahs—without doubt the best available at less than full price.

James Weaver's is the second *Messiah* to feature period instruments. Once again, the size of the ensemble was determined on the basis of the hospital ledgers; while horns are used, the soloists do not sing the choruses. Weaver selects the short form of the Pifa, the Guadagni versions of "But who may abide" and "Thou art gone up," the alto duet and chorus form of "How beautiful are the feet," the original forty-one-bar form of "O Death, where is thy sting?," and the alto transposition of "If God be for us."

Despite its many virtues, not least the exquisite singing of countertenor Jeffrey Gall in thrilling performances of "But who

HANDEL: Messiah.

Judith Blegen, soprano; Katherine Ciesinski, alto; John Aler, tenor; John Cheek, bass; Musica Sacra Chorus and Orchestra. Richard Westenburg, cond. [John Pfeiffer, prod.] RCA RED SEAL ARC 3-4352, \$38.94 (digital recording; three discs, manual sequence). Tape: ARE 3-4352, \$38.94 (three cassettes).

Yvonne Kenny, soprano; Paul Esswood, countertenor; Martyn Hill, tenor: Magnus Lindén, bass; Stockholm Bach Choir, Swedish Radio Symphony Orchestra. Anders Öhrwall, cond. [Jacob Boëthius, prod.] PROPRUS PROP 7871/3, \$50.94 (three discs, manual sequence) [recorded in performance, February 1982] (distributed by AudioSource, 1185 Chess Dr., Foster City, Calif. 94404).

HANDEL: Messiah (excerpts).

[Nos. 1–7, 12–17. 19–21] Emma Kirkby, soprano; René Jacobs, countertenor; Marius van Altena, tenor; Max van Egmond, bass: University of Michigan Early Music Ensemble Chorus and Ars Musica, Edward Parmentier, dir. [Michael Lynn, prod.] SCHOOL OF MUSIC RECORD-INGS SM (0017, \$7.95 (includes shipping: University of Michigan, School of Music, Ann Arbor, Mich. 481(09).

[Nos. 1, 4, 12, 13, 17, 22, 24–26, 44, 53] Elmer Iseler singers, Elmer Iseler, cond.; Synthescope Digital Synthesizer Ensemble. [Anton Kwiatkowski and Julian Rice, prod.] MMG 113, \$10.98 (digital recording). Tape: CMG 113, \$10.98 (cassette).

Other Recordings

- Beecham I; Labbette, Brunskill, Eisdell, Williams; BBC Chorus. London Symphony Orchestra. COLUMBIA 78s (36 sides) [6*, 23†, 48†; omits 13, 34–37, 39, 49–52, 53 (Amen)].
- Beecham H; Suddaby, Thomas, Nash, Antony; Luton Choral Society, Royal Philharmonic Orchestra. RCA (4), OP [6*].
- Beecham III; Vyvyan, Sinclair, Vickers, Tozzi; Royal Philharmonic Chorus and Orchestra, RCA (4), OP [6*, 23⁺, 48⁺] (excerpts currently available on RCA CRL 2-0192).
- Sargent I; Baillie, Ripley, Johnston, Walker; Huddersfield Choral Society, Liverpool Philharmonic Orchestra. COLUMBIA (3), OP [6*, 23⁺, 48⁺; omits 34–36, 49–52].
- Sargent II; Morison, Thomas, Lewis, Walker;' Huddersfield Choral Society, Liverpool Phil-

may abide" and "If God be for us," Weaver's *Messiah* leaves much to be desired. In addition to a pussyfooting "Hallelujah," the harpsichord continuo realizations are often annoyingly foursquare, and a certain tentativeness pervades the enterprise, contributing significantly to its lack of charisma.

There is nothing tentative, however, about John Tobin's recording. In fact, I regard this *Messiah* so highly that—caveat lector—I have played a part in as yet unsuccessful efforts to secure its U.S. release. Editor of the Hallische Händel Ausgabe score and author of two books on the oratorio, Tobin devoted thirty years of study to the work, researching the details of Handel's performances and putting his conclu-

harmonic Orchestra. ANGEL (3), OP [6*, 23†, 48†; omits 34-36, 49-52].

- Sargent HI; Morison, Thomas, Lewis, Milligan: Huddersfield Choral Society, Liverpool Philharmonic Orchestra. SERAPHIM S 6056 (3) [6*, 23⁺, 48⁺: omits 34–36, 49–52].
- Sargent IV; Harwood, Procter, Young, Shirley-Quirk; Royal Choral Society, Royal Philharmonic Orchestra. QUINTESSENCE P3C 2701 (3) [6*, 23⁺, 48⁺; omits 34–36, 49–52].
- MacMillan; Marshall, Palmateer, Vickers, Milligan; Toronto Mendelssohn Choir, Toronto Symphony Orchestra. RCA (3). OP [6*, 48†; omits 7, 34–36, 49–52].
- Alldis; Lott, Hodgson, Langridge, Cold; London Philharmonic Choir and Orchestra. BIRD-WING BWR 2011 (4) [6*, 23⁺, 48⁺; omits 34–37].
- Scherchen I; Ritchie, Shacklock, Herbert, Standen; London Philharmonic Choir, London Symphony Orchestra. WESTMINSTER (3), OP.
- Boult I; Vyvyan, Procter, Maran, Brannigan; London Philharmonic Choir and Orchestra. Vox SVBX 5203 (3) [6*].
- Scherchen II; Alarie, Merriman, Simoneau, Standen; Vienna Academy Chorus, Vienna State Opera Orchestra, WESTMINSTER (3), OP.
- Boult H; Sutherland, Bumbry, McKellar, Ward; London Symphony Chorus and Orchestra. LONDON (3). OP [6*]. Newly reissued, LON-DON JUBILEE JL 42007 (2) [23⁺, 48⁺; omits 29–32, 34–36, 49–52].
- Ormandy; Farrell, Lipton, Cunningham, Warfield; Mormon Tabernacle Choir, Philadelphia Orchestra. CBS M2S 607 (2) [6*, 23⁺; abridges 20, 48; omits 27–32, 34–39, 41, 49–521.
- Bernstein; Addison. Oberlin, Lloyd, Warfield; Westminster Choir. New York Philharmonic. CBS M2S 603 (2) [6*, 23[†], 48[†]; omits 10, 11, 21, 24, 32, 34–39, 49–52].
- Bonynge; Sutherland, Tourangeau, Coleman, Krenn, Krause; Ambrosian Singers, English Chamber Orchestra, LONDON OSA 1396 (3).
- Davis; Harper, Watts, Wakefield, Shirley-Quirk; London Symphony Chorus and Orchestra. PHILIPS SC 71 AX 300 (3).
- Richter I; Janowitz, Höffgen, Häfliger, Crass; Munich Bach Choir and Orchestra. DG (3), OP [omits 41, 50-52].
- Richter II; Donath, Reynolds, Burrows, McIntyre; John Alldis Choir, London Philharmonic Orchestra. DG 2709 045 (3) [6*].

sions into practice. The result, the culmination of years of annual London performances, is a dramatic, operatically paced interpretation with an unsurpassed grandeur and emotional conviction that may well come closer to the spirit of the elderly Handel's own performances than any other recording.

The reading does have its eccentricities, however; one can't help but feel that Tobin occasionally bends the results of his researches to fit preconceived notions rooted in Victorian tradition—of how the work ought to go. A case in point is the *Grave* of the Sinfonia: Not overdotted, it builds gradually in volume from an almost inaudible pianissimo. Thrilling and con-(*Continued on page 78*)

- Mackerras I: Harwood, Baker, Esswood, Tear, Herinex; Ambrosian Singers, English Chamber Orchestra. ANGEL SC 3705 (3).
- Klemperer; Schwarzkopf, Hoffman, Gedda, Hines; Philharmonia Chorus and Orchestra. ANGEL S 3657 (3) [6*; omits 34–36, 49– 52].
- Leppard; Palmer, Watts, Davis, Shirley-Quirk; English Chamber Orchestra and Chorus. RCA CRL 3-1426 (3); MUSICAL HERITAGE MHS 3273/5 (3).
- Willcocks; Bowman, Tear, Luxon: King's College Choir (Cambridge), St. Martin's Academy. ARABESQUE 8030-3L (3).
- Somary; M. Price, Minton, Young, Diaz; Amor Artis Chorale, English Chamber Orchestra. VANGUARD CARDINAL VCS 10090/2 (3) [6*].
- Jackson; Harper, Watts, Robertson, Stalman; London Philharmonic Choir and Orchestra. ROULETTE (3), OP [6*].
- Susskind; Cantelo, Watts. Brown, Stalman; London Philharmonic Choir and Orchestra. MUSICAL HERITAGE MHS 582/4 (3) [6*: omits 34–37, 39, 49–52].
- Forster; Bjoner, Töpper, Traxel, Engen; St. Hedwig's Cathedral Choir, Berlin Symphony Orchestra. EURODISC 70 405 (3) (unavailable U.S.).
- Koch; Werner, Riess, Schreier, Adam; Berlin Radio Chorus and Orchestra. ETERNA 8 26 617 [2–4, 11–13, 20, 40–45, 47, 48, 53 (Amen)].
- Dunn; Hoagland, Wallace, Gore, Livings. Evitts; Handel and Haydn Society Chorus and Orchestra. SINE QUA NON SA 2015 (3).
- Weaver; Bogard, Green, Gall, Bressler, Guinn; American Boychoir, Norman Scribner Chorus, Smithsonian Chamber Players. SMITH-SONIAN N 1025 (3).
- Tobim; Woodland, Procter, Esswood, Tatnell, Johnston, Roberts; London Choral Society, English Symphony Orchestra, GFH 1/4 (4).
- Belling: One Experience Choir, Revelation Philharmonic Orchestra. ColUMBIA, OP [4, 12, 17, 24, 26, 28, 44, 45, 46, 48⁺].
- Jones; Pro Musica Antiqua Chorus and Chamber Orchestra. CMS/SUMMIT SUM 1014 [2, 3, 9, 12, 28, 38, 40, 44, 45, 48⁺, 53 (Amen)].
- Bob and Carol and Ted and Alice (soundtrack). BELL, OP [44, 45].

Bracketed numbers refer to Prout edition.

*Guadagni version sung by bass.

†Central section and reprise omitted.

Going Walkabout

Our tape expert discovers the most intensely personal of all the infinite varieties of musical experience. Reviewed by R.D. Darrell

SO OFTEN IT'S THE LAST one onto the bandwagon who outyells all the other cheering partisans. For there's no evangelist more fervent than the belated convert to a cause earlier disdained. Nothing else can explain my own tardy discovery and ecstatic relish of an audio vogue first popularized by punk street kids—a perhaps ephemeral craze that seemingly involves seriously compromising lifelong connoisseur standards, certainly demands radical changes of habit, and quite possibly makes one appear eccentric, if not ridiculous, in public.

In short, this musical veteran is confessing that, much to his own astonishment, he has joined the teenage generation in the novel custom of peripatetic listening, walking around—wearing lightweight headphones and a dazed beatific expression totally absorbed in recorded music heard via a pocket-sized battery-driven cassette player. Paraphrasing the Japanese inventor's proprietory name and remembering Australian aborigines' favorite escapist habit, I call this "Going Walkabout," and my blissful surrender to it is as unqualified as it was unexpected.

Actually, I had been more a doubting Thomas than an obdurate heretic, since earlier hasty sampling of a friend's "personal" stereo had whetted my appetite—if not strongly enough to make me dig up the cost of a set of my own. But then along came DBX—having developed an NRX circuit chip that enables even portable players to decode DBX-encoded musicassettes—with an offer to loan me the means required for proper road-test reviews of the latest DBX tape releases.

Once I had received that equipment (a prototype of the pioneering "DBX Way" Panasonic RO-J20X, list-priced at \$150), 1 was all set for blast-off, since I already had ideal testing grounds: a dirt town road shared with only one neighbor, up and down which (some one-and-a-half miles round trip) I've long been accustomed to trudge-my only exercise regimen-four times a day, whatever the season or weather. And for apt road-test materials I had not only some brand-new and older DBXencoded tapes, but also several standard musicassettes specifically designed for "stereo-to-go" listening-not to mention a well-nigh inexhaustible supply of promising new and favorite old programs of all varieties.

It was in the very first moments of Going Walkabout, crossing the yard and passing through the front gate, that my carefully laid plans for objective technical and musical evaluations were explosively aborted. I completely forgot all professional obligations in the euphoric transport of aural revelations as irresistibly intoxicating and exhilarating as any I've ever known. And those run from my first symphony concert (when I played hooky from high school and joined the Friday-afternoon rush line to hear the Bostonians under Monteux) through initial encounters with electrical rather than acoustical recordings; truly wide-range home sound systems (as early as 1931!); ffrr 78s and LPs; open-reel stereo tapes; and fully discrete four-channel quadriphony

My latest sonic revelations are comparably revolutionary and no less impossible to describe verbally to anyone who hasn't experienced them for himself. Even home listening via standard headphones is no preparation, especially if one uses the heavy circumambient type that fully cover one's ears and-almost entirely shutting off the outside world-provide a private domain of "silence with music in it." Absorbing as that kind of closed-in listening can be, it always entails a double unnaturalness: both a sense of complete personal isolation and the anomaly of absolute isolation of the left and right stereo-channel signals that normally mix in the air on their way from loudspeakers to ears. That anomaly can be tempered by the use of an electric-mixing circuit, like the one devised by the late Ben Bauer, but even with my homebuilt version of that corrective, I resolved long ago never to risk publishing a review based on headphone trial alone.

Today's feather-light "open-air" headphones obviously also maintain strict separation of the two stereo channels each "feeding" a single ear. But outside air and noises are only partially screened out, and channel differentiations no longer seem so unnaturally absolute. Again, though, I

AN HAND .

Contre B

doubt that reliable tonal judgments can be made on the sole basis of walkabout listening, for here there are near supernatural sonic enhancements. Now the music seems not only luminously airborne and spaciously panoramic around and above the back of one's head, but more intimately close and kaleidoscopically vivid than it ever can be in live performance, always more distant. It seems more limpidly pellucid than in even the most crystalline speaker reproduction. Good digital recordings in particular provide more gleamingly precise differentiation of channel and tone quality, more sharply pinpointed location of sound source, than one is ever likely to encounter elsewhere. In fact, a very real problem (1 can scarcely call it a disadvantage, except to a professional critic) is that in this highly idiosyncratic mode of audition almost every first-class recording-analog as well as digital-seems to sound markedly better than under any more conventional listening conditions.

There are, inevitably, other catches and even outright dangers. The music's immediacy can be so spellbinding that even at moderate playback levels, which with lightweight "hear-through" headphones don't entirely block outside noises, one is likely to "tune out" the extraneous sounds. Worse, during dramatic climaxes or throughout at higher volume levels, one can become completely oblivious to the external world-a very real danger if one is walking, roller-skating, or riding in traffic. Equally clear and ever present is the risk of actual physical damage to one's eardrums and auditory nerves (to say nothing of one's aural sensibilities!) from excessively loud sounds; a problem with reproduction of any kind, it is especially acute with headphones.

The inability of noncircumambient headphones to reproduce extreme low frequencies is of course mitigated to a considerable extent by the human ear's ability to identify low pitches from their higher harmonics alone. As with pre-high-fidelity phonographs and radios, one *thinks* one is hearing the actual fundamental, not only its phantom. But the spectrum imbalance that results from the absence of true fundamentals tends to sharpen or thin out the extreme highs, often making them sound much "squealier" than in live performance or first-rate wide-range speaker reproduction.

There are a couple of causes for lesser misgivings. One is economic, the considerable power drain of extended walkabout listening, which all too quickly gobbles up even the best alkaline batteries. (Some sets use two AAs, others three or four.) In any case, it makes good sense to invest in rechargeable nickel-cadmium batteries and a suitable home charger. Another reasonably expected problem—fluctuation of tape-speed and, consequently, pitch, resulting from the peripatetic listener's walking or jogging motion—generally doesn't arise, at least with good equipment. My own habit of carrying the player in a back hip pocket must subject it to a fair bit of motional stress, but there's no apparent effect even on sustained piano tones. Another very minor annoyance that can be avoided by prior timing and planning, the lengths of musicassette programs and of walkabout sessions don't always jibe—the latter winding up in silence or, worse, just as a coda is fully under way.

It's the difficulty of making sound aural judgments, however, that worries me most, both in rehearing recorded performances known previously via speakers and in subjecting new programs to immediate walkabout/speaker comparisons. Take, for example, the DBX digital/chrome musicassette that augments Digitech's Vivaldi Four Seasons with three "Digital Hits of 1740"

VIVALDI: The Four Seasons, Op. 8, Nos. 1-4.** (With works by Albinoni[†], Bach[‡], Pachelbel[†].)

Emanuel Borok, violin*; Cambridge Chamber Orchestra, Rolf Smedvig, cond.[†]; Empire Brass Quintet[‡]. [Michael Kellman, prod.] DBX EC 7026, \$14.95 (encoded tape version of DIGITECH DIGI 107, 1981, with excerpts from DIGI 101, 1980; digital recording, chromium cassette).

HOLST: The Planets, Op. 32.

Scottish National Orchestra, Alexander Gibson, cond. [Robert Matthew Walker. prod.] DBX EC 7025, \$14.95 (encoded tape version of CHANDOS ABRD 1010, 1980; digital recording, chromium cassette).

DON GILLIS: Unexplored Territory.

Canadian Brass, Don Gillis Quartet, Don Gillis, piano and cond. [Paul Mills, prod.] DBX EC 7019, \$14.95 (encoded tape version of MMG 1119, 1980; digital recording, chromium cassette).

Works by Bach, Handel, Melrose-Rappolo-Gilbert, Satie, et al. (Gillis arr.).

BACH: Various Works.

Various performers. DEUTSCHE GRAMMO-PHON 3584 002, \$6.98 (double-time cassette) [from various DG originals].

STRAUSS, J. II: Various Waltzes (6), Polkas (4), Overtures (2); Perpetuum mobile, Op. 257.

Vienna Philharmonic Orchestra, Karl Böhm, cond.; Berlin Philharmonic Orchestra, Herbert von Karajan, cond.; Berlin Radio Symphony Orchestra, Kurt Gaebel, cond. DEUTSCHE GRAMMOPHON 3584 012, \$6.98 (double-time cassette) [from various DG originals].

MOZART: Symphonies, Vol. 1.

Academy of Ancient Music, Jaap Schröder, violin and dir.; Christopher Hogwood, harpsichord and dir. [Peter Wadland and Morten Winding, prod.] OISEAU-LYRE K 167K33, \$29.94 (three cassettes). Disc: D 167D3, \$29.94 (three discs).

Symphonies: No. 1, in E flat, K. 16; No. 4, in D, K. 19; No. 5, in B flat, K. 22; No. 10, in G, K. 74; No. 11, in D, K. 84; No. 13, in F, K. 112; in D, K. 32; in D, K. 81; in D, K. 87; in D, K. 95; in C, K. 96; in D, K. 97; in D, K. 120; in F, K. Anh. 223. from the same source, all briefly cited in the January 1982 "Tape Deck." These tonally and stylistically anachronistic readings, obviously unchanged, go against my puristic grain as much as ever. Yet the expert playing of the Cambridge Chamber Orchestra (mostly Boston Symphony members) seems even more admirable when heard in the preternaturally enhanced lucidity and warm intimacy of the new listening mode. And greatly impressed as I had been (February 1981 HF) with Chandos' digital recording of Holst's Planets, its remarkably authentic sound and ambience now assume heightened dramatic realism, even though Alexander Gibson's reading of this familiar display piece still strikes me as falling just short of the very best ones.

A third DBX tape just received is brand-new to me: Don Gillis' ebullient ragging of the classics, "Unexplored Territory," with the Canadian Brass, recorded by CBC for Moss Music Group. Its technological excellence will show through clearly on any playback system. Yet the full wit and virtuosity of both the arrangements and the playing strike home most keenly when the ringing, vibrant timbres (not least those of the tuba in *Amazing Grace*) are buoyantly airborne in and around a peripatetic listener's head.

As far as DBX-ing itself is concerned, the portable player's miniature chip circuitry eliminates all surface noise as thoroughly as the Model 21 decoder 1 use in my home sound system. And if I've never been convinced that such draconian silencing is as vital for tapes as it indisputedly is for even the best-pressed discs, DBX-ing proves its worth no less arrestingly here in significantly expanding the effective dynamic range. Impressive enough in home listening, it somehow seems even more electrifying (regardless of ambient noise) in alfresco listening via open-air headphones. Long before 1 saw any pertinent technical specs (the Panasonic RQ-J20X in its DBX mode claims a dynamic range of more than 97 dB at 1 kHz, and a signal-to-noise ratio of 81 dB), I was jolted into an awareness of how much more I seemed to be hearing, as well as how much better everything seemed to sound.

This walkabout double enhancement holds good when I return to some of the earlier DBX digital/chrome musicassettes 1 first wrote about in the August 1981 "Tape Deck"-notably, the Varèse Sarabande demo spectacular "Beyond the Sound Barrier" (EC 7001), the RealTime program of French favorites, Chabrier, Debussy, and Dukas, with Zoltán Rozsnyai leading the Philharmonia Hungarica (EC 7012), and the Crystal Clear program of capriccios. Rimsky-Korsakov and Tchaikovsky, with Arthur Fiedler and the Boston Pops (EC 7011). Only the last is outstanding musically as well as technically, but even in the others' pretentious moments the sheerly sonic enchantments seem to be all that real-(Continued on page 77)



Glenn Gould: An Appraisal by Harris Goldsmith

THESIS BEGETS ANTITHESIS, the saying goes, but Glenn Gould modified that formula: His thesis was antithesis. It is the rare artist who undertakes to change our collective way of thinking and the even rarer one who succeeds. Let it be said for Gould that, despite some misses spectacularly wide of the mark, he challenged "tradition" and sometimes triumphed.

Until he voluntarily withdrew from the concert circuit (thus conveniently enabling detractors to label him a "recluse" and an "eccentric"), many members of the musical community considered him a threat to their well-being. Among insecure and suspicious "pedagogues"-and there are those, even in our most prestigious conservatories-a musician of Gould's curiosity. articulateness, charisma, and ability posed a special menace: a Pied Piper who would lead their "children" astray (or worse, to a different teacher). And some great musicians of an older generation were simply too conditioned by their heritage not to feel threatened by, and resentful of, Gould's challenge to their orthodoxy. ("That nut's a genius," remarked George Szell, speaking for many.)

In fairness to the traditionalists, Gould's flippancy *could* be infuriating, especially when his manner was supercil-

In addition to the Gould-related material we've offered over the past two months, we promised last December to reprint excerpts from his HF writings. The good news is that we've come upon so much new material, from those eager to discuss the Gould phenomenon and from Gould himself; the bad news is that we've run out of space. Moreover, our own rereading of past articles has only shown the futility of trying to capture their flavor in brief excerpts. So regretfully, we'll have to fall back on a hope-that all of Gould's HF articles will be reprinted in some format in the near future; negotiations are currently under way. We'll keep you posted.-Ed.

iously, even arrogantly, patronizing. Many enjoyed his prickly iconoclasm and his ability to laugh at himself while laughing at tradition; his numerous interviews (even the outlandish ones) provided a heady mixture of airy humor and appealing human warmth, yet it was indeed sometimes difficult to tell whether he was being seriously controversial or merely flippant.

Gould was certainly an original, with many unconventional views and an intense sense of privacy. Yet surely there was something of the facetious in his more outrageous performances and public statements. When he ventured the view that Mozart had died too late, not too soon and attempted to prove the point in his playing—he lost the respect of many relatively open-minded music lovers. As with Picasso, Stravinsky, and other such eminences, Gould was suspected of putting us on, and many hated him for it.

David Hamilton's tribute last month aptly characterized Gould as "a child of his time-which may seem a truism until you reflect upon how many pianists of his generation have their roots somewhere like a century ago." My own sincere admiration for much of Gould's artistry would be trivialized were I to deny that some of his bizarre interpretations seemed "rootless" in their rethinking; there is a crucial difference between, for example, a Toscanini who would occasionally lose all perspective about a composition just to prove a point (e.g., that the Menuetto of Haydn's Surprise Symphony was marked Allegro molto) and a Gould who, by his own admission, frivolously decided to make his recording of Beethoven's Emperor Concerto either the slowest or fastest extant. One acted out of mistaken conviction, the other out of sheer perversity-not the desire to clarify. but to shock. In a way, Gould was driven to these extremes by his very "rootlessness." Like Wagner's Flying Dutchman, he seemed to be on a perpetual journey-in his case, suspended animation between nineteenth-century runination and twentiethcentury bustle. It was not only a matter of slow and fast, but also of sentiment and antisentiment; early on, I noted that his playing ranged "from ecclesiastical austerity to swooning sensuality," a perplexing amalgam that remained pretty much constant through the years. Precisely this unstable dichotomy gave so many of his performances their disorienting "crawling vine" character. Could his vehement disdain for tradition have been, at least in part, born of insecurity about his stylistic origins?

If Gould sprang from no particular "school," some credit him with forming one of his own. I wholeheartedly concur and feel that he will take his place in the twentieth-century pianistic pantheon alongside Schnabel, Rachmaninoff, and Horowitz. This has nothing whatever to do with fame and expertise; Rubinstein, for instance, merely did what many other players have done-albeit supremely well-and left no lasting mark on future generations. But Gould, like Schnabel, Rachmaninoff, and Horowitz, wrought a recognizable influence on his descendants, who attempted-without success-to duplicate his superbly enlivened articulation, his ecstatic, lapidarian elegance, his abrasive bumptiousness and rock-solid rhythmic sense. (Not to mention his low-slung posture, or his chortling-which, when queried about it, he disarmingly admitted was a nuisance.)

With his constant jolts to our credibility, Gould eventually did make some of his notions stick. He made us realize that provincialism is not a thing of the past, and that we, too, are as shackled by ingrown customs as the Pachmanns and Paderewskis who mauled phrases and played one hand shamelessly before the other (a practice, incidentally, that Gould himself sometimes employed—if for very different reasons). At the risk of revealing my own bias, I admit that the only Gould performances I can wholeheartedly endorse are those of Bach, Byrd, Scarlatti, Gibbons, and Handel—music that is either unspecific in its interpretive directions to begin with or less barnacled by the encrustations of previous generations. Which is not to deny that he could be brilliantly illuminating as well in Beethoven. Brahms, Hindemith, and Schoenberg. (Even in Bizet, Prokofiev, and Scriabin, where he not only rewarded and illuminated, but amazed us as well by successfully challenging Horowitz on his own turf!)

Despite his reiterated antipathy toward "piano playing," Gould nevertheless rejoiced in his chosen instrument's capabilities. Though veering ever closer toward sobriety, even a certain neutrality, his sonority had its own deeply personal kind of nuance and color—and in its peculiar way, warmth as well. No artist before him was anywhere near so successful in approximating the harpsichord's linear clarity, but this was achieved by modifying—not sacrificing—pianistic attributes. (Ironically, in his one harpsichord recording, he spent much of his time trying to approximate the sound of the lute.) His playing, then, was the best possible rebuke to all those doctrinaire musicologists and original-instrument cultists who would deny Bach "his future" (and Mozart, Beethoven, Schubert, and even Chopin theirs).

Gould seemed of late to be entering a new phase. His rerecording of Bach's *Goldberg* Variations bespoke a serenity and maturity foreign to the (still exhilarating) earlier version. A recent interview, in which he discussed the two performances, was utterly fascinating: The tongue-incheek impudence and brashness of yore were significantly transcended by a deeper introspection and quiet authority. And there were other signs that Gould was at peace with himself and the world: Those who collaborated with him found their association both inspiring and enjoyable, and several younger musicians have attested to Gould's responsive, thoughtful, and warmly supportive assessment of their work. Thesis and antithesis had, finally, spawned synthesis.

In reviewing Gould's early recording of the last three Beethoven sonatas. HIGH FIDELITY's astute C.G. Burke likened the "effrontery" of those performances to the "intolerable impudence in the professional manner of Mr. Groucho Marx, [which] stings the onlooker with a foreboding, fascinated horror crossed with admiration." C.G.B. prophesied that "when in two or three years the Marx is gone from the Gould we may expect to admire a Beethoven uncrossed." Gould's passing, just when we were belatedly to harvest the true fruit of his extraordinary talent, is thus all the more HF poignant.

Recording Gould: A Retake Here, a Splice There, a Myth Everywhere

WE ALL KNOW how Glenn Gould's recordings were pieced together, measure by measure—or do we? Half-truths and blatant misconceptions—some at least partially of his own instigation—have dogged Gould's recording career and persist to this day. In an attempt to set the record straight, we invited those in the best position to know his CBS producers (with only Joseph Scianni not represented)—to describe just how his recordings were made.

Howard H. Scott is now manager of the performance department of G. Schirmer, Inc. Thomas Frost and Andrew Kazdin are independent audio producers. Paul Myers is manager of classical production for Decca International. Samuel H. Carter remains with CBS Masterworks as a producer.

Special thanks to Susan Koscis, director of press information for Masterworks, who suggested this project and helped see it through.—Ed.

Howard H. Scott: On that hot, humid June day in 1955, the first of many times he was to come to Columbia Records' 30th Street Studio (where I would work with him for the next six years), he ambled in the door wearing a winter overcoat over his Harris tweed jacket and sweater, a Shetland wool scarf, and a cap pulled down over long, straggly blond hair. He carried a folding bridge chair with the maple leaf of Canada as its back in one gloved hand and a small handbag, which contained a plethora of pill vials and the music of the *Goldherg* Variations, in the other. That was before Glenn



The young Glenn Gould, soaking his hands in hot water prior to a recording session

Gould stopped carrying things because of the strain on his shoulders. Eventually he would stop shaking hands or letting anyone touch his arms or shoulders. He was as maniacally protective of all of those muscles used in piano playing as Ty Cobb was of his eye muscles. There was method behind every mannerism that he affected and turned into show biz. I asked him one season what he had added to his act, and with that mischievous smile he produced the rug to go under his feet.

David Oppenheim joined me at that

first session to welcome Gould to the house of Columbia and to see that he was comfortably settled in and acclimated to my recording routine. Oppenheim had heard his New York recital in Town Hall, so he knew what to expect. I had no idea.

We assisted in the special ritual for which I became the major domo and which we all would come to know so well: fiddling with the chair screws to make the legs longer or shorter; the trip to the basement, where Gould would soak his hands in hot water for ten minutes (not unlike a whirlpool, this constituted his warmup); adjusting the thermostats to get the studio tropically warm and humid; and finally the trip to Gristede's to get the ever present Poland Spring water.

A word about that chair, which allowed Gould to get low enough to the keyboard for his forearms and wrists to supply the leverage and power and balance he desired: Each leg had a screw in it that could be extended or withdrawn, thus allowing him to raise or lower the chair as little as one-eighth of an inch or even allow for the slightest difference in the pitch of the floor so that he could always remain perfectly even with the keyboard. This "fine tuning" later led to a deliciously notorious confrontation with George Szell at Gould's first rehearsal with that prestigious maestro and his Cleveland Orchestra in Severance Hall, which I was also privileged to witness.

But with all the preliminaries and maneuverings out of the way, when he commenced playing, the results were awesome. His playing was perfect. He had total recall and the uncanny ability—which set him in a league of his own—to listen to himself play, as well as to know exactly what he was trying to achieve. There were no unplanned adventures, no picky use of bits and pieces of different takes, no accusations against producer, engineer, or microphones. Nothing escaped his ear, and not even the smallest detail took him by surprise. He was, of course, totally aware of his singing.

Recording, as we know so well in this age of tape, digital recording, and other methods, can be done in bits and pieces, to cover a multitude of sins, or in complete takes. Gould wanted no interruptions whatsoever. I explained that I had to make announcements for my editing references. He found this difficult to understand, for weeks later he remembered that he had played Var. 3 three times and that the third take was a shade faster in the middle section and the bass line a bit too heavy in one bar. That incredible memory was unfailingly and frighteningly accurate. He could have been a world-champion chess or bridge player, had he been so inclined.

We did the *Goldbergs* over a period of mornings (four, I believe) in one week. Gould took to recording like a retriever to hunting. He was like a child with a new switch on his electric train when he realized you could overdub a track on tape if your inner clock and brain knew how to stay on track, and he turned that to good use some years later in a Wagner transcription recording. [See below.—Ed.] But he never took advantage of the "fix a note here, patch up a muddle there" style of recording.

Everything he played was complete, because his concept of a work or a movement was complete. Recording was an aid, not a crutch, and so he could experiment with changes of the subtlest order in dynamics, rhythm, color, or tempo and hear what suited him best. He executed nothing haphazardly or by guess—but for shock effect, yes. The plan of his playing was as carefully and lucidly thought out as Ted Williams' stride and swing at a baseball or Picasso's brush stroke.

It was not by chance or by splice that the 1955 *Goldberg* Variations made record history.

To listen to a Gould recording is to know Gould. It is a mirror of his being, for he brought a special kind of insight and devotion—and yes, magic—to his recording. Some day another pianist will come along whom the pundits will call a second Gould. That will not make him a second Gould. There will never be another like him.

Thomas Frost: Many misconceptions have surrounded the recorded performances of Glenn Gould. It pains me to see them reit-

In a Gould recording, every note was chosen with utmost deliberation.

erated and amplified now that he is dead. Having known him and his work for twenty years, first as producer of three of his records and later as director of CBS Masterworks, I can attest to the following: Gould considered recording a separate art form that can offer performer and listener distinct musical advantages over live concerts-the creation of an ideal musical performance. Live concerts seldom if ever represent an artist's best interpretation, since the many conditions that affect a performance are seldom all favorable at a given time. He therefore set out to play and record music in what he considered to be the most favorable conditions-using only his own piano, never recording unless he really felt like playing (concerto recordings were, of course, exceptions), and performing for his own enjoyment, not for that of an audience

He would record several versions of a complete piece or a whole movement, each with distinct spontaneity of the moment. When he was satisfied that there was enough raw material for editing, he would personally take charge of the editing process, which he enjoyed just as much as performing and considered equally creative. This entailed listening to all versions of a piece or movement, formulating in his mind how an ideal performance could be created section by section, and then having an engineer cut the tapes accordingly.

To the very end, Gould had a stupendous, versatile, and reliable technique that made error correction virtually unnecessary; splicing was used for musical reasons, and it was the only technological tool used on the records I produced with him (Beethoven's Op. 10 Sonatas; Schoenberg's Songs, Vols. 1 and 2, coproduced with Andrew Kazdin). On subsequent recordings, as far as I know, none of the editing tricks sometimes used for recordings were employed. Notions that Gould recorded in bits and pieces or manufactured by use of technological trickery performances that he could not actually play are sheer nonsense. Every Gould recording offers the listener a very special performance, every note of which was personally chosen by the artist with utmost deliberation, care, and love. That is more than we can say for most recordings on the market today.

Paul Myers: I always felt that Glenn Gould in the recording studio started at a point most pianists seldom achieve. Of course, he never regarded himself as a pianist. He usually described himself as a composer/musician who chose to express himself via the keyboard and disliked such words as "virtuosity" and "pianism." He had always intended to rerecord Bach's Fifth Partita, for example, because he felt that his recording, following a concert tour, was too "pianistic."

Despite such feelings and, surprisingly, with very little practicing, Gould possessed a phenomenal keyboard technique, which was an essential to his recording methods. In the studio, he liked to approach a work with few preconceptions, and each new take became an experiment in interpretation. When he recorded Book I of The Well-Tempered Clavier, he would make ten or fifteen takes of a particular prelude or fugue. Nearly every one of them would be note-perfect, but each was completely different, not only in tempo or dynamics but also in "registration," voicing of musical lines, and emotional content. It was extraordinary to hear each version emerge as he considered it anew. Following this there were often lengthy playback periods, during which he would compare each interpretation, also matching fugue to prelude in the process. Sometimes, as the final notes of the take were dying away, he would signal with a triumphant smile that he had found what he was searching for.

I should digress to observe that most recording musicians regard splicing together of various takes as a method of making technical corrections. Gould seldom needed these, but he became increasingly fascinated with the idea of what might be called "creative splicing," where, by the juxtaposition of one take with another, he would achieve the overall effect he wanted. In a television interview he explained how, in *The Well-Tempered Clavier*, he had been struggling with a particular piece until he found that a "pompous" performance contrasted beautifully with a somewhat "capri-(*Continued on page 80*)

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BELLINI: Songs (15).

Veronika Kincses. soprano; Loránt Szücs, piano. [László Matz, prod.] HUNGAROTON SLPX 12423, \$9.98.

La Farfalletta; Quando incise su quel marmo; Sogno d'infanzia; L'Abbandono; L'allegro marinaro; Torna, vezzosa Fillide. Tre Ariette: Il fervido desiderio: Dolente immagine di Fille mia; Vaga luna, che inargenti. Sei Ariette: Malinconia, Ninfa gentile; Vanne, o rosa fortunata; Bella Nice, che d'amore; Almen se non poss'io; Per pietà, bell'idol mio; Ma rendi pur contento.

This disc is almost self-recommending. presenting as it does the complete contents of the Ricordi Bellini volume in their published order, in generally sweet-voiced and unpretentious performances. Not that the repertory contains many revelations; the best numbers—"Dolente immagine," "Vaga luna," "Malinconia, Ninfa gentile," "Bella Nice" --- are reasonably familiar. But all this material is at least gracious or poignant, and well worth having. Kincses' even-keeled disposition is a refreshing antidote to the blustering overemphasis often inflicted on this repertory. and her bright, rounded tone suits the music well, apart from tendencies toward matronly heaviness in the lower regions and occasional Slavic (well, Magyar) mini-wobble farther up.

The brief but intelligent notes on each song are translated into English, but the texts are printed in Italian and Hungarian only. K.F.

FRANCK: Symphony in D minor.

Bavarian Radio Symphony Orchestra, Kiril Kondrashin, cond. PHILIPS 6514 119, \$12.98 (digital recording). Tape: 7337 119, \$12.98 (cassette). [Recorded in performance, February 8, 1980.]

Liège Philharmonic Orchestra, Pierre Bartholomée, cond. [Ruth Simons and Jerome Lejeune, prod.] RICERCAR RIC 009, \$11.98 (distributed by AudioSource, 1185 Chess Dr., Foster City, Calif. 94404).

Chicago Symphony Orchestra. Pierre Monteux, cond. [Richard Mohr, prod.; John Pfeiffer. reissue prod.] RCA RED SEAL ATL 1-4156, \$15.98 (half-speed remastering). Tape: ATK 1-4156, \$15.98 (cassette). [From LSC 2514, 1961].

COMPARISON: Cantelli/NBC Syni.

RCA AGL 1-4083

All three of these performances join the ranks of the Franck symphony's distinguished interpretations. The most controversial of the three is Kiril Kondrashin's, showing some of the liabilities as well as the assets of live recording. The latter include added adrenaline and a decided feeling of communicative organic growth. This is, above all, an *exciting* perforCarlos Kleiber's Tristan-See page 63. mance-a much worthier memorial to the late Soviet-expatriate conductor than Philips' recent Tchaikovsky First Piano Concerto with Martha Argerich (6514 118, December 1982). On the other hand, some who prize the spiritual, Gothic-cathedral aspects of this work may find the performance wo exciting, with tempos always pushed to the brink and the orchestral playing sometimes a bit beyond. There are also sundry audience noises and some orchestral tuning, which do not bother me in the least. (In fact, they add pleasantly to the recording's real sense of occasion.) Philips' processing is excellent, though the sound of the Bavarian Radio tape is rather run-of-themill and distant.

That the work of the two Pierres is virtually interchangeable speaks well indeed for the lesser-known Bartholomée; Monteux's interpretation of this maligned masterpiece has rightfully come to be considered a classic. Yet Bartholomée, taking the same sort of free-wheeling, proportioned, orthodox approach, matches the late *maître*'s account. Not only that, he has the Liège Philharmonic sounding like a major ensemble, its strings full of vibrant warmth, its winds contributing the sort of reedy baroque-organ asceticism called for by Franck's spiritual writing, and its brasses

Reviewed by: John Canarina Scott Cantrell Kenneth Cooper R. D. Darrell Peter G. Davis Kenneth Furie Harris Goldsmith Matthew Gurewitsch David Hamilton Dale S. Harris R. Detrick Henry Joseph Horowitz

Nicholas Kenyon Allan Kozinn Paul Henry Lang Irving Lowens Karen Monson Robert P. Morgan James R. Oestreich Conrad L. Osborne Andrew Porter Patrick J. Smith Paul A. Snook Susan T. Sommer

providing firm support and, when appropriate, a cutting incisiveness to the potentially murky textures. The full-bodied, spaciously majestic Ricercar engineering handsomely frames a most distinguished release.

When Monteux's Chicago recording was released in 1962, I found a certain blasting distortion in some of the climaxes. particularly in the stereo edition. (The mono counterpart was a bit less problematical.) This, happily, has been marvelously cleaned up in the new half-speed remastering supervised by John Pfeiffer. On the other hand, some systems may now show the strings a bit strident and etched in acid in the high register, and the tremolandos perhaps a bit more prominent than the conductor wanted them. Master tapes of the period tended to overaccentuate detail to compensate for its loss in disc transfer. Now, with transfer techniques strikingly improved, the excessive brightness and edginess come through all too clearly. But don't be deterred; the performance is wonderful, and the impactful resonance of Chicago's Orchestra Hall much better conveyed than formerly. The remastering certainly gives the reading a new lease on life.

Those who find the price of these audiophile discs too steep should look to the superb Cantelli reading, now budgetpriced. The 1954 stereo sound is astonishingly sleek, and the interpretation, with its combination of organic coherency, massive gravity, and rhythmic and textural clarity, may well be the best of the lot. H.G.

GRANADOS: Danzas españolas (12).

Alicia de Larrocha, piano. [James Walker, prod] LONDON CS 7209, \$10.98. Tape: CS5 7209, \$10.98 (cassette).

This is one of the jewels of Alicia de Larrocha's discography. Her performances of these attractive cameos present, to nobody's surprise, a marvelous blend of conversational flexibility, generous nuance, and bracing rhythmic profile. Without becoming languid, on the one hand, or tightly oversymmetrical, on the other, the distinguished spiritual heir of the composer



FEBRUARY 1983

Critics' Choice

The most noteworthy releases reviewed recently

BACH: Goldberg Variations. Gould. CBS IM 37779, Jan.

BARTÓK: Orchestral Works. Budapest Philharmonic, Budapest Symphony, Joó. SEFEL SEFD 5005/9 (5), Sept.

BERLIOZ: Béatrice et Bénédict. Minton, Domingo, Barenboim. DG 2707 130 (2), Nov. BERNSTEIN: Dybbuk Suites Nos. 1–2. New York Philharmonic, Bernstein. DG 2531 348, Jan. BRAHMS: Cello Sonatas (2). Perényi, Kocsis. HUNGAROTON SLPX 12123, Nov.

BRAHMS: String Sextet No. 1. Les Musiciens. HARMONIA MUNDI FRANCE 1073, Jan.

CHERUBINI: Requiem in C minor. Ambrosian Singers, Philharmonia, Muti. ANGEL DS 37789, Nov.

DOWLAND: Songbooks (4). Consort of Mu-

shapes the material with grand and gracious authority, aided to the hilt by some of the most full-bodied yet bitingly plangent piano reproduction to be found on records. A detailed examination of each dance or of the many interpretive felicities of these virtually definitive performances is unnecessary; all connoisseurs of patrician pianism will want this in their collections. H.G.

HANDEL: Messiah—See page 48.

HAYDN: Die Schöpfung.

Gabriel	Norma Burrowes (s)
Eva	Sylvia Greenberg (s)
Uriel	Rüdiger Wohlers (t)
Adam	Siegmund Nimsgern (b)
Raphael	James Morris (bs-b)
David Schrader	, harpsichord; Chicago
Symphony Chorus and	d Orchestra, Georg Solti,
cond. [Paul Myers, pro	od.] LONDON LDR 72011,
\$25.96 (digital record	ding; two discs, manual
	5 72011, \$25.96 (two cas-
settes).	

COMPARISONS:	
Karajan/Berlin Phil.	DG 2707 044
Frühbeck/Philharmonia	Ang. SB 3859
Dorati/Royal Phil.	Lon. OSA 12108
Marriner/St. Martin's Acad.	Phi. 6769 047

Music-making seems to have become such an onerous affair for Solti that it's good to hear him, and consequently the musicians in his charge, having fun. Not that they find anything in The Creation that most everyone else hasn't already found. But the exuberance with which they convey it all is hard to resist, especially in the heavenshaking early days of Part I. Check out the orchestral sunburst that accompanies the chorus' "Und es ward Licht" in the introduction, or the glorious orchestral crescendo in No. 12 following Uriel's announcement of the separation of day and night. The orchestra sounds simply luscious, whether producing massive outpourings or delicately textured fabrics (note the woodwind desicke, Rooley. OISEAU-LYRE DSLO 508/9 (2), 528/9 (2), 531/2 (2), 585/6 (2), Aug.

FAURÉ: Pénélope. Norman, Vanzo, Dutoit. ERATO STU 71386 (3), Dec.

GILLES: Requiem. Ghent Collegium Vocale, Cologne Musica Antiqua, Herreweghe. ARCHIV 2533 461, Sept.

HAYDN: Paris Symphonies (6). Berlin Philharmonic, Karajan. DG 2741 005 (3), Oct.

HAYDN: Piano Sonatas (6). Gould. CBS 12M 36947 (2), Nov.

HAYDN: Symphonies, Vols. 1, 2. L'Estro Armonico, Solomons. SAGA HAYDN 1 (3), 2 (3), Oct.

JANÁČEK: Cunning Little Vixen. Popp, Jedlička, Mackerras. LONIXON LDR 72010 (2), Nov.

MACDOWELL: First Modern Suite; Piano Sonata No. 4. Fierro. NONESUCH H 71399, Nov.

MAHLER: Das Lied von der Erde. Norman, Vickers, C. Davis. PHILIPS 6514 112, Jan. MENDELSSOHN: Violin Concerto. BRUCH:

tail accompanying Uriel's "Nun schwanden vor dem heiligen Stunde," No. 2).

If other conductors, notably Karajan and Frühbeck de Burgos, have viewed the score more introspectively, and productively so in the more intimate later sections. Solti's approach certainly makes sense for a score so steeped in affirmation. As concerns repeated listening, two reservations might be noted. First, unlike Bernstein in his similarly extroverted though less beautifully played recording (Columbia, deleted), Solti sometimes lets his exuberance get out of hand, as in "Die Himmel erzählen" (No. 13), where the chorus' diffuse mode of attack coupled with the breathless clip blurs the polyphonic sense of the music. Second, the soloists, while reasonably able, aren't strong enough to take control of their music.

Norma Burrowes comes closest as Gabriel, producing a quite attractive, rounded tone with some strength on top, but she sounds passive alongside the vivacious Lucia Popp (with Dorati), or the uncharacteristically communicative Edith Mathis (with Marriner) and Helen Donath (with Frühbeck, and also with Gönnenwein, Vox QSVBX 5214), both of whom sing Eva as well. Solti's Eva, Sylvia Greenberg, seems to have a more projecting voice than Burrowes but leaves even less artistic profile.

Both James Morris (Raphael) and Siegmund Nimsgern (Adam) sing reasonably well, but both voices are inhibited by tendencies to pitch unsteadiness. You really haven't heard Raphael's music until you've heard Dorati's Kurt Moll grab hold of it with his full, vibrant bass, reaching securely down to F. His account of the creation of land creatures in Part II (Nos. 20–22) is one of the more exciting pieces of singing on records. Unfortunately he gives way to the humdrum Benjamin Luxon as Adam. Frühbeck's José van Dam sings both roles without Moll's bottom reach or animation Concerto No. 1. Mutter; Berlin Philharmonic, Karajan. DG 2532 016, Dec.

MONTEVERDI: Combattimento di Tancredi e Clorinda. Kwella, Rogers, Thomas; Cologne Musica Antiqua. ARCHIV 2533 460, Jan.

MOZART: Apollo et Hyacinthus. Mathis, Wulkopf, Hager. DG 2707 129 (2), Dec.

MOZART: String Quartets Nos. 17, 21. Panocha Quartet. DENON OX 7004-ND, Nov.

SHOSTAKOVICH: Symphony No. 10. Berlin Philharmonic, Karajan. DG 2532 030, Nov. TCHAIKOVSKY: Piano Concerto No. 1, Cli-

burn, Kondrashin. RCA ATL 1-4099, Dec.

TCHAIKOVSKY: Piano Concerto No. 2. Cherkassky, Susskind. Vox CUM LAUDE VCL 9011, Jan.

BERLIN PHILHARMONIC: 100 YEARS. EMI ELECTROLA IC 137-54095/9 (5), Dec. BERLIN PHILHARMONIC: 100 YEARS, VOL. 2. Furtwängler. DG 2740 260 (6), Dec. HEINRICH STROBEL: Verehrter Meister, lieber Freund. Southwest German Radio, SCHWANN/DG 0629 027/31 (5), Oct.

(the conductor's reflective approach is sometimes too easygoing for a singer who benefits from prodding), but with that remarkable, velvety bass-baritone and its easy *upward* reach.

Uriel is for the most part so considerately written that a number of limited-range tenors like Dorati's Werner Hollweg and Frühbeck's Robert Tear have made quite an impressive effect, except in the grueling recitative in Part III (No. 29) that introduces the first Eva-and-Adam duet. For so drawnout a piece of writing you almost have to have a more substantial voice, and it's a pity that this wasn't among the approximately half of the role that Fritz Wunderlich lived to record-sumptuously-with Karajan. The closest approximation is Waldemar Kmentt, with Jochum (Philips, deleted). Solti's Rüdiger Wohlers, whom I enjoyed as Jaquino in the Masur/Eurodisc Fidelio (300 712, August 1982), here sounds too light-toned to fill out phrases.

All in all, this *Creation* should be of continuing interest for the joyful noise it makes. For other aspects of the piece, there's a rich assortment of recordings. Both Dorati and Marriner are strikingly more successful here than in the far trickier *Seasons*. Dorati's *Creation*, while not the world's most imaginative, is almost essential for the work of his soloists in Parts I–II (listen to the stunning trio nestled inside "*Die Himmel erzählen*"); Marriner's is one of the most successful on records in terms of overall balance and flow, and Aldo Baldin and Dietrich Fischer-Dieskau sing well enough alongside Mathis.

Correction

Editor, edit thyself. In last month's "Behind the Scenes," I of course meant to describe Herbert von Karajan's remark as *ingenuous*, not *dis*-. Apologies to Karajan and to the reader.—J.R.O.

Karajan's is perhaps the most beautiful Creation in terms of solo, choral, and orchestral work, while Frühbeck goes even further exploring the piece's lyric dimension. I have a special fondness for Jochum's recording, so earthily played and sung by his Bavarian Radio forces, and for that matter for the lusty Bernstein and majestic Münchinger/London recordings as well. You really can't go too far wrong, though you might want to exercise caution in approaching the English-language versions currently listed; between them, I'd go with the Musica Aeterna version (MCA 2-K.F. 10001).

OFFENBACH: La Périchole.

CAST:

Pierrette Delange (s) Guadalena/Manuelita Berginella/Frasquinella Michèle Command (s) La Périchole Teresa Berganza (ms) Sonia Nigoghossian (ms) Mastrilla José Carreras (t) Piquillo Michel Sénéchal (t) Don Pedro Hugues Brambilla (t) First Notary Henry Amiel (t) Second Notary Gabriel Bacquier (b) Don Andrés (Viceroy) Count of the Panatellas Michel Trempont (b) Marquis of Tarapote/Warden/Old Prisoner

André Batisse (spkr) Orchestra and Chorus of the Théâtre du ole (Toulouse), Michel Plasson, cond

Capitole (Toulouse), Michel Plasson, cond. [Eric Macleod, prod.] ANGEL DSBX 3923, \$25.96 (digital recording; two discs, manual sequence). Tape: 4X2S 3923, \$19.96 (two cassettes).

Offenbach's La Périchole (1868, revised 1874) has always been one of his more popular operettas, because of its charm, its wacky plot, set in Peru (but actually in a French never-never land), and the popularity of two of its songs-the Letter Song and "Je t'adore, brigand." The present recording, while it has much to recommend it, is a mite short on the kind of champagne verve associated with the Offenbach genre. This derives in part from conductor Michel Plasson, who, though not heavy-handed, takes a weighty approach to the score, and in part from the two principals. Teresa Berganza relies on charm and on teasing the vocal line rather than on the usual bright ingenue flirtatiousness, and her current vocal maturity and shadowed mezzo give the role of Périchole an operatic rather than an operetta amplitude. "Je t'adore" is well enough sung, but never as infectiously sexy as, for instance, Régine Crespin performs it. José Carreras' tenor is definitely of operatic caliber and sounds more comfortable in the lyric portions, since the voice lacks quickness and sparkle. I like the fact that both principals sing a Spanish-accented French, since this sets them off from the Viceroy and his rascals. These latter characters-Michel Trempont, Michel Sénéchal, and Gabriel Bacquier, especially-are a constant joy, for they have the Offenbach style in their bones. For those who understand French, their dialogue is a model of French operetta wit.

The operetta, like all of Offenbach, is of course subject to the whims of conductors and directors as to which numbers are performed or rearranged. Until the Almeida Belwin-Mills edition of the operetta (slated for this spring) appears, I can only say that Plasson seems to have followed the 1874 revision in three acts, but without the entr'actes.

The recording is okay, in a dead-air acoustic with the forward placing of the soloists favored in France. (It was recorded in the Halle aux Grains in Toulouse.) The accompanying booklet, however, is a shoddy job unworthy of Angel. The unsigned article on the composer and operetta contains a garbled sentence suggesting that Offenbach heard a performance of *Les Contes d'Hoffmann* (from the grave?), and two portions of the text—one of dialogue and one of the concerted number *"En avant, soldats!"*—are missing. P.J.S.

PROKOFIEV: Romeo and Juliet: Suites Nos. 1–2.

Philadelphia Orchestra, Riccardo Muti, cond. [John Mordler, prod.] ANGEL DS 37776. \$12.98 (digital recording). Tape: 4XS 37776, \$9.98 (cassette).

During 1935–36. Prokofiev extracted two suites from *Romeo and Juliet*, with some movements taken directly from the ballet,

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others rewritten to combine passages from different sections. Most recordings of extended excerpts from *Romeo* consist of the individual conductor's own selection and ordering of movements, not only from the two suites, but from a third the composer fashioned later (rarely heard on its own) or from the ballet itself. My favorite such compilations have been those of Dimitri Mitropoulos with the New York Philharmonic (Odyssey 32 16 0038) and Charles Munch with the Boston Symphony (RCA, deleted).

Riccardo Muti and the Philadelphia Orchestra offer the first two suites as such; the only prior recording of both was Stanislaw Skrowaczewski's with the Minneapolis Symphony (Mercury, deleted). This new version is truly splendid in its orchestral virtuosity and solo playing, a bit dry-eyed in its projection of the work's emotional content. When one takes into consideration the beautifully transparent recording, the scales definitely tip in its favor.

I can't say how appropriate some of Muti's tempos would be for a ballet performance, but since these *are* concert suites, perhaps such considerations are irrelevant. In any case, "The Death of Tybalt" sets me on the edge of my chair, especially when Muti begins pressing the tempo in the *Presto* section, launching a veritable rollercoaster ride in which the Philadelphia string playing is absolutely phenomenal. But I

THIS MONTH'S SPECIALS

TECHNICS Direct Drive Turntable (list \$150) ONKYO TA-2010 3-Head Accu-bias Cassette Deck (list \$470) SONY 12" Color TV (list \$500) HITACHI Straight Tonearm Semi-Automatic Turntable (list \$100) TDK SA90 Audio Tape (list \$5.00). CERWIN VEGA 12" 3 way Loudspeakers (list \$280 ea.) FAMOUS BRAND Video Tape	\$219.00 \$279.00 \$59.00 \$\$2.29 ea.\$139.00
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FINEST IN STEREO AND VIDEO EQUIPMENT American Internat Audio Video	RITE OR YOUR REE ROCHURE FODAY.

would like a more expansive tempo for the horn and cello theme following the fifteen timpani beats; the marking is *Adagio dramatico*, and while it is decidedly dramatic here, adagio it is not.

The extensive sections relating specifically to the lovers are treated with tenderness; enough innocence is projected to remind us that Romeo and Juliet are, in fact, teenagers, and young ones at that.

Also successful is "The Montagues and the Capulets," the first movement of Suite No. 2, with its opening dissonances and pianissimo string chords and the ominous character of its great leaping theme all perfectly realized. "Juliet—the Little Girl" is delightful in its trippingly scurrying passages, beautifully poignant in its lyrical sections. The various dance movements of Suite No. 1 are distinguished by their rhythmic vitality. As noted, the solo playing is splendid, but the sensitivity of the many flute solos by Murray Panitz merits a special word of praise.

And now it's quibble time: Only five of the seven sections of Suite No. 2 are included. Presumably the work's length had something to do with this, yet the entire suite was accommodated on one side in Skrowaczewski's second recording with the (renamed) Minnesota Orchestra (Candide CE 31108-Suite No. 2 only, coupled with The Rite of Spring!). The liner notes observe that the two omitted numbers are 'the only ones in the Second Suite to have no connection with Shakespeare's play." Be that as it may, they have a connection with Prokofiev's score, and of the two, it seems perverse to to have omitted one of the work's most delightful and familiar numbers, entitled simply "Dance." Most of Suite No. 2 consists of slow music, and another lively bit wouldn't have hurt. Better to have omitted dull "Friar Laurence." dropped by Skrowaczewski in his first version, no matter its connection with the play.

Prokofiev wrote of *Romeo and Juliet*: "I have taken special pains to achieve a simplicity which will, I hope, reach the hearts of all listeners. If people find no melody and no emotion in this work of mine I shall feel very sorry; but I feel sure that they will sooner or later." He can rest assured. J.C.

ROSSINI: II Turco in Italia.

CAST:	
Fiorilla	Montserrat Caballé (s)
Zaida	Jane Berbié (ms)
Don Narciso	Ernesto Palacio (t)
Albazar	Paolo Barbacini (t)
Prosdocimo (The Poet)	Leo Nucci (b)
Don Geronio	Enzo Dara (bs-b)
Selim	Samuel Ramey (bs)
John Fisher, har	psichord; Ambrosian
Opera Chorus, National F	hilharmonic Orchestra,
Riccardo Chailly, cond.	

CBS MASTERWORKS 13M 37859 (digital recording; three discs, manual sequence). Tape: 13T 37859 (three cassettes). [Price at dealer's option.]

COMPARISON: Callas, R.-Lemeni, Gavazzeni Sera. IB 6095

In need of a comic-drama plot, the poet Prosdocimo pounces on some gifts from beneficent providence: a wandering band of gypsies and a visiting Turkish pasha who become enmeshed, with some help from the Poet, in the woes of three friends of his the elderly Don Geronio, his flirtatious young wife Fiorilla, and her still-moonstruck former suitor Don Narciso. Fiorilla and Selim (the Turk in Italy) attempt to strike up an affair, to the delight of the Poet and the discomfiture of everyone else— Geronio, Narciso, and the grieving gypsy Zaida, whose grief by miraculous chance traces back to none other than Selim.

If this sounds like promising or at least workable comic-opera material, the twenty-two-year-old Rossini, trying to cash in on the recent triumph of L'Italiana in Algeri, doesn't seem to have found it so, not even bothering to compose a fair amount of it. Annotator Philip Gossett explains that another hand, identity unknown, is responsible for Geronio's entrance aria, the Act II aria for Zaida's confidant Albazar, the Act II finale, and all the secco recitativo. "This was not," Gossett notes, "the only time Rossini leaned on the assistance of a friend in the preparation of an opera. . . . With Il Turco in Italia, however, he did not later rewrite the numbers prepared by another composer, nor is it possible to perform the opera without them."

To me, the tired, going-through-themotions quality of the music Rossini did write suggests that he simply didn't consider the opera worth any further effort. It's mostly pleasant enough stuff, but the occasional appearance of a genuinely striking musical idea-like the jaunty trumpet tune in the overture or the tripping refrain of Fiorilla's original entrance aria, "Non si dà follia maggiore"----------only underscores the laboriousness of the rest. The melodic content is pretty meager. Even such moderately interesting numbers as the opening sections of Selim's Act II duets with Geronio ("D'un bell'uso di Turchia") and Fiorilla ("Credete alle femmine") are mostly notable for rhythmic determination.

Whether or not we agree with Gossett's suggestion that *Turco*'s limited circulation has been caused by inadequate texts, it's obviously desirable to have an up-todate and textually reliable alternative to the 1955 La Scala recording. The new one, "licensed exclusively to CBS Masterworks by Fonit Cetra," is based on Margaret Bent's new edition for the Rossini Foundation. It features a cast that on paper looks pretty hard to beat, and adds more than half an hour of music.

Most of the "new" music is in Act II. In Act I, apart from the restoration of much recitative, the principal addition is an alternative entrance aria for Fiorilla, "*Presto amiche a spasso*," presented as an appendix. It's a showy, not very gripping piece that Beverly Sills used for her 1978 New York City Opera performances; I find it less interesting than "Non si dà follia maggiore," at least as Callas sang "Non si dà" (more about Caballé in a moment). In Act II, again along with much additional recitative, we get to hear an aria for Narciso, Albazar's aria, and an aria for the newly repentant Fiorilla.

This sounds more bountiful than it plays. Much of the restored recitative concerns the Poet's entanglement in the plot, which seems like a good idea, but so little actually happens in it that one understands the earlier impulse to chop it out. (Remember that Rossini didn't write the recitative.) Narciso's aria was added originally to give the tenor something to do, which it does, but it doesn't make the character any less extraneous. Albazar's aria (again not by Rossini) doesn't add much either, and is preposterously difficult (high Ds?) for a small comprimario role. This leaves Fiorilla's aria, and again it seems like a good idea to show her in such a changed condition, but the aria doesn't plug very securely into that condition.

The most entertaining performance is Samuel Ramey's rich-toned and rhythmically alert Selim, but his rhythmic alertness doesn't, as suggested above, carry him through the continuation of the Act II duets. It happens that Nicola Rossi-Lemeni also sang the role extremely well—perhaps tonally less centered, but perhaps also more commanding in phrasing—in the old recording, where he had the advantage of playing opposite Callas. She may not have found for Fiorilla anything like the life she found for Rosina, but hearing Caballé flounder in the role prompts considerable respect for what Callas did manage to find. Caballé alternates between an eerily disembodied piano and a sort of truck-driver forte, in the process making the admittedly problematic Fiorilla thoroughly dislikable.

The other lower male voices are reasonably good, although there is a problem on records of tonal overlap between Ramey and Enzo Dara (Geronio) and between Dara and Leo Nucci (the Poet), especially in recitative. Dara, the outstanding Bartolo of DG's last Barbiere (2709 041), sings uncommonly well for a basso buffo and finds some moments of interest in Geronio. He and Ramey team up convivially in "D'un bell'uso di Turchia," as did Franco Calabrese and Rossi-Lemeni in the old recording. Nucci's Poet only occasionally, and momentarily, achieves the clarity of vocal focus of his Amonasro in the new Abbado/DG Aida (2741 014), but he dispatches this disappointing role competently enough.

Narciso and Zaida might be described as principal roles that aren't, and neither Ernesto Palacio nor Jane Berbié makes seri-

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ous inroads. Palacio sings quite prettily. Berbié sounds pretty rocky in the opening numbers but recovers somewhat later on. In those opening numbers Paolo Barbacini is no match for Seraphim's Piero de Palma, but he does get through the Act II aria.

Since Riccardo Chailly has impressed me a good deal in his Werther and William Tell recordings, I'm inclined to attribute the matter-of-factness of his work here to the score itself. (The estimable Gavazzeni didn't do much better.) It's no coincidence that the Turco Overture hasn't established itself in the repertory any more than the opera itself.

Except for the possibility that close miking has emphasized Caballé's tonal peculiarities, the clear and plausibly balanced sound is okay, if hardly worth the digital premium. CBS has once again given us a singing translation of the libretto. This time out, though, French-speaking customers get a very good literal translation. K.F.

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Sviatoslav Richter, piano. [Tomoo Nojima, prod.] VOX CUM LAUDE D-VCL 9027, \$10.98 (digital recording). Tape: D-VCS 9027. \$10.98 (cassette). [Recorded in performance, 1979.]

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CLASSICAL Reviews

I have a Richter performance of D. 960 taped off the air from a 1961 Aldeburgh Festival concert; not one of my favorites, it is denatured, literal-minded, and cadaverously slow.

Such is the danger of Richter's approach to Schubert; paradoxicallywhen moved by the inspiration of the moment-such is also its towering strength: In this 1972 Salzburg recording, D. 960 gets very much the same sort of interpretation, yet miraculously, the effect is one of hypnotic grandeur, not tedium. The added bloom and resonance in the sound give the piano a more seductive tone, but this would be to no avail without subtle differences in the performance itself. The lyricism is more muted; the tempo modifications, while infrequent, nevertheless alleviate the martial procession of downbeats sufficiently to evoke magical subjectivity, even poetry. And there are dramatic touches; as usual, Richter is chary of crescendos, preferring instead subito fortes (e.g., first movement, measure 47).

In his fanatical literalism, Richter exceeds even Claudio Arrau in his recent recording (Philips 9500 928). Whereas Arrau retains a traditional sound for this music (i.e., a traditional German soundmassive oil colors instead of Richter's prismatic light rays), Richter is an objectivist. And whereas Arrau's fondness for the German Romanticism of Furtwängler and Fischer prompts him to fuss with tempo, phrasing, and accents. Richter blithely and tenaciously maintains the utmost strictness and sobriety. What is amazing is his remarkable mastery of long-range phrasing, even when the pace is too slow for most ordinary mortals to perceive its pulse. Nor can the pianistic perfection be ignored. The trills that ominously pervade the first movement have never sounded more inhumanly

even. The voicing in the Andante sostenuto has nary a hitch; the gradations and nuances are gauged with uncanny smoothness. For once, the Scherzo is not only "Allegro vivace," but "con delicatezza" as well. And the last movement is rendered with technical comfort to spare. (It's downright embarrassing to compare Richter's rocksteady dotted chords with Schnabel's flustered fakery!)

For some, Richter's extremely slow first movement (running almost twenty-five minutes) will prove an insurmountable deterrent, and his observance of the repeat only adds to the problem. Yet the performance has constant momentum and direction—even if, like a stroboscope on a turntable, it sometimes (e.g., in the imperturbably played triplets in measures 34 and 35) gives the illusion of moving *backward*. One could become hypnotized by listening intently to this performance.

The two shorter sonatas were recorded live in Tokyo in 1979. Again, the sound is rich and sleek, the performances are deliberate and intense. (A few coughs reassured me that the Japanese concertgoer, like his New York counterpart, does not fall on his sword when he feels a tickle in his throat.) Of the two performances, the A minor is the more compelling-granitic and turbulent. The A major is a bit lackluster alongside Richter's 1963 studio version (Angel RL 32078). To be sure, the two are very similar in all specifics: the steady, monumental tempos; the observance of repeats, even that of the first movement's second half (which Arrau also gave us; Philips 9500 641). But the older piano tone seems a bit more compellingly plangent, and the performance has an indefinable cumulative tautness somehow missing here. Perhaps it's my concentration, rather than Richter's, that's at fault.

The good news is that more digitally recorded Richter is on the way—which at least partially makes amends for his long absence from our concert halls. H.G.

VERDI: Aida.

CAST:	
Aida	Katia Ricciarelli (s)
Amneris	Elena Obraztsova (ms)
Priestess	Lucia Valentini-Terrani (ms)
Radamès	Placido Domingo (t)
Messenger	Piero de Palma (t)
Amonasro	Leo Nucci (b)
Ramfis	Nicolai Ghiaurov (bs)
The King	Ruggero Raimondi (bs)

La Scala Chorus and Orchestra, Claudio Abbado, cond. [Rainer Brock, prod.] DEUTSCHE GRAMMOPHON 2741 014, \$38.94 (digital recording; three discs, manual sequence). Tape: 3382 014, \$38.94 (three cassettes).

COMPARISONS:	
Price, Vickers, Solti	Lon. OSA 393
Nilsson, Corelli, Mehta	Ang. SCL 3716
Callas, Tucker. Serafin	Ang. CL 3525
Caniglia, Gigli, Serafin	Sera. IC 6016

There's no Aida recording that can be recommended with confidence for all tastes, but nearly all the current listings will satisfy certain tastes. This new one should attract a fairly broad audience, with special appeal for newcomers to the opera. The four most important roles are intelligently cast; the performance has been prepared with Abbado's customary care, and in a number of scenes even includes a sense of dramatic movement unexpected in his recordings; the engineering is unobtrusively first-rate.

This Aida is the most enjoyable performance I've heard from Ricciarelli. The role is actually easier to cast lightly than most of Verdi's middle-period heroines, and Ricciarelli—apart from her inability to sustain loud top notes—sounds fresh and sensuous, with no evidence of the unpleasant edge that has dogged her on records. Her vocal weight makes for an unusually strik-

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Round Shank UniRadial ing contrast with Amneris, sung by Obraztsova with a certain amount of tonal unsteadiness (even wildness on top) but also with a great deal of power, lower-range security, and intensity.

Although Domingo still seems unwilling to really cut loose, he does sing Radamès awfully well (especially well in more excitable music, which doesn't demand much in the way of sustained reposeful legato), and this recording seems more involved than his earlier ones. The surprise of the set for me is Nucci, who despite some bottom-range dropout displays a focus of timbre and continuity of phrasing that I haven't heard either from his other recordings (and one live encounter) or from the recent run of recorded Amonasros.

These aren't the kind of performers likely to dazzle us with either vocal éclat or dramatic insight. Not surprisingly, then, given Abbado's dependence on the letter of the text, the performance is most persuasive in those places where the text leaves least to the imagination-most obviously in the Triumphal and Nile Scenes, but also in the opening-scene trio and the Act II Amneris/ Aida and Act IV Amneris/Radamès scenes. In these scenes the singers, in particular Obraztsova, assert themselves more than has been the case in previous Abbado recordings, a healthy development that is also reflected in the physical momentum of the dances, whose absence bothered me in the Ballo (2740 251, January 1982).

For me the performance lets down most notably in those scenes that are treated ceremonially: the opening Ramfis/Radamès dialogue (no sense at all of a conversation in this stately rendering), the choral gathering for the Messenger's report (which itself is teased into a sort of Victorian oratorio tableau), the Temple Scene invocation. It may be coincidence that these episodes all involve the weakest cast members, neither Ghiaurov nor Raimondi at this point commanding more than a few dependable notes in the vicinity of G; another possibility is that Abbado's ritualistic approach doesn't require more versatile basses.

De Palma's much-recorded Messenger has similarly grown rather threadbare by now. In the Priestess' music, shrewdly written not to require a major voice, Valentini-Terrani sings very nicely. The choral and orchestral work are extremely impressive.

My own Aida taste runs more toward the dynamism of the recordings conducted by Solti and Mehta, both featuring strong overall casts. (Not featuring a strong overall cast, but more excitingly as well as more subtly conducted, is the 1949 Toscanini broadcast, Victrola VICS 6113, rechanneled.) Solti's Aida/Amneris pairing of Price and Gorr is still tough to beat, and Vickers' Radamès, croon-prone though it is, is interesting in both detail and vocal

scale. Of course in the matter of vocal scale Mehta's Nilsson and Corelli are in a category of their own.

For a different sort of antidote to Aidaas-ritual (a view, incidentally, that is still most imaginatively expounded by the first Karajan recording, with Tebaldi, Bergonzi, and MacNeil, London OSA 1313), there are the two conversationally shaped Serafin recordings. The 1955 one has the more obvious attractions of Callas et al. (though Barbieri's booming Amneris is heard more securely sung in the RCA recording made the month before, Victrola VIC 6119, with the lightweight but masterful Radamès of Bjoerling), but I also love the rather disreputable 1946 one with Caniglia, Stignani, and Gigli, plus the massive Amonasro of Bechi and the still unequaled Ramfis of K.F. Pasero.

WAGNER: Tristan und Isolde.

CAST:	
Isolde	Margaret Price (s)
Brangäne	Brigitte Fassbaender (ms)
Tristan	René Kollo (t)
Melot	Werner Götz (t)
Shepherd	Anton Dermota (t)
Young Sailor	Eberhard Büchner (t)
Kurwenal	Dietrich Fischer-Dieskau (b)
Helmsman	Wolfgang Hellmich (b)
König Marke	Kurt Moll (bs)
	D II OL D L. Cauto

Leipzig Radio Chorus, Dresden State Orchestra, Carlos Kleiber, cond. [Werner Mayer and Hans Hirsch, prod.] DEUTSCHE GRAMMO-



CLASSICAL Reviews

PHON 2741 006, \$59.90 (digital recording; five discs, manual sequence). Tape: 3382 006, \$59.90 (five cassettes).

Flagstad, Suthaus, FurtwänglerAng. 3588Nilsson, Uhl. SoltiLon. OSA 1502Nilsson, Windgassen, BöhmDG 2713 001Dernesch, Vickers, KarajanAng. S 3777Gray, Mitchinson, GoodallLon. LDR 75001

The second entry in the digital *Tristan* sweepstakes (see HF, July 1982) is now at hand, with the third, taped for Philips during 1981 under Leonard Bernstein's direction, still pending. Whereas the earlier Goodall set was an essentially traditional interpretation, Carlos Kleiber gives us something new and different, fascinating but also problematic.

Probably the most immediately conspicuous feature of this new Tristan is the relatively fast-flowing tempos, which however avoid the sheer aggressiveness of Solti and the less objectionable but sometimes unseemly hastiness of Böhm. These tempos don't feel driven, though the firmness of Kleiber's control is often tangible in the facility with which he can inflect the tempo. the steadiness with which it rebounds from the inflection. I don't believe any other recorded Tristan so consistently responds to Wagner's tempo indications, both large and small (and to the additional markings of Felix Mottl in the Peters edition), while also abjuring any conspicuous supplementary

modifications.

A similar rigor is evident in details of dynamics and texture. One feels that every note in the score, every progression and transition, every orchestral fabric, has been reexamined for function and meaning, and that Kleiber believes passionately that making everything in the score sound must inevitably enhance its power and significance. The result, as realized by the magnificent Dresden orchestra, is surely an extraordinary achievement, and every hearing has taught me more about Wagner's opera.

In point of fact, Kleiber has studied more than the printed score. He has gone behind it, to Wagner's manuscript, turning up several significant discrepancies, including a high B flat (instead of a G) for Isolde at the climax of her lament over the dead Tristan. It may be arguable whether this and other variants between manuscript and printed editions are accidental engraver's errors or intentional revisions by Wagner during the publication process—but they are not, in this performance, the casual "wrong" notes that they might seem upon first hearing.

(One Kleiber change, in Isolde's phrase "Wie siegprangend heil und hehr" in her first-act narration, is not substantiated in either manuscript orchestral score or first edition, but since another Isolde sang it the same way in the conductor's 1976 Bay-

reuth performances, it is not accidental. An orchestral alteration, the trumpet doubling the "*Todgeweihtes Haupt*" motive at "*Des Todes Werk*" in Isolde's hymn to Frau Minne, isn't in any of the sources I consulted, nor was it used by Kleiber in 1976.)

As remarkable as Kleiber's mastery of local detail is his control of long spans. In a recording of remarkable dynamic range, there is never any doubt about the relationship among the climaxes; at the intermediate peaks (Isolde's curse, the extinguishing of the torch). something is always held in reserve for the bigger ones still to come.

The combination of this control and Kleiber's tempos makes for some striking alterations of relative weight among the various episodes. Brangane's soothing song, after Isolde's curse, is traditionally a lush lyrical oasis among the tensions of the first act, but at Kleiber's rapid tempoarguably commensurate with Wagner's Sempre con molto moto-it is quickly over and makes little lasting impression. In fact, that is true of Brangane's entire role; despite Brigitte Fassbaender's forceful and firmly spoken performance, all the lyricism has been drained from the character, and she registers primarily as something of a kvetch. And although the fast tempos simplify the phrasing, they also force the singer to skate over some of the notes, with occasional deleterious effect on her intonation



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CLASSICAL Reviews

Another fine singer, Kurt Moll, survives more successfully the effect of Kleiber's tempos. At the beginning of his second-act monologue, he is close to parlando, but soon fills out the tone and sings with a wonderful balance of words on legato line. He doesn't ever sound rushed or clumsy, and the scene hangs together very well—but this is a Marke who grieves less cosmically, less profoundly, than the ruminative ones of more traditional performances.

A character who surely benefits from Kleiber's approach is Kurwenal, though it must be said in sadness that Dietrich Fischer-Dieskau, at this stage in his career, can only give something of a caricature of his fresh and vivid performance in the Furtwängler recording of three decades ago; all the upper-range writing is wobbly and uncontrolled, rough and hollow in tone. But the orchestral aspects of Kurwenal-the nautical swing of his announcement of imminent landing in Act I, the jubilation at Tristan's awakening in Act III, the ferocity of his attack on Melot and Marke's menare all realized with marvelous accuracy and vividness, and this makes an effect despite the vocal deficiencies.

But these are peripheral matters, in a significant sense. What of Tristan and Isolde? Here the matter becomes more complex, for in René Kollo and Margaret Price we have two voices of rather less than dramatic caliber. The tenor, in particular, has studied his role carefully, and delivers the lines with intensity and conviction. In his voice are none of the baritonal colors we associate with many past Tristans, and his clear bright monochrome can become whiny, as well as wobbling alarmingly when under pressure above the staff. He hasn't a consistent legato: When introducing the "Liebestod" theme during the love duet ("So stürben wir ..."), he swells and withdraws the tone on each single syllable. negating line and obscuring shape.

By contrast with his performance for Daniel Barenboim last summer in Bayreuth. Kollo is here very accurate and controlled, expressing Tristan's third-act hysteria strictly through Wagner's musical means. For his consistent accuracy and obvious sincerity, we may be grateful, but the most expressive part of this character, as with Kurwenal, is found in Kleiber's orchestra. When Tristan tries to explain to Kurwenal where his mind has voyaged during his coma ("Wo ich erwacht"), Kollo's parlando lacks the weight, weariness, and pain that a Melchior or a Windgassen provided; there's no tension in his tone-it's all in the orchestra's harmonies and colors, and so is the release of tension at the end of the phrase "göttlich ew'ges Urvergessen!'

That Margaret Price may come closer to matching the sheerly vocal requirements of her role than Kollo does to his is not particularly relevant here, for the engineers have kept them both consistently audible over the orchestra and perfectly matched when duetting. But she too lacks the resources of a dramatic singer, and it shows in other matters than volume. Her voice has none of the requisite weight in the lower register; hear it fill out as she ascends through the important early phrase, "Mir erkoren, mir verloren." Her very straight tone production apparently precludes much spontaneity or urgency; her cautious and ungenerous delivery of the apostrophe to Frau Minne is typical, and throughout the opening scene of Act II the reluctant Brangane, rather than the impatient Isolde, consistently registers as the more positive, urgent presence. Perhaps because of limited

Kleiber's Tristan gives us something new and different, fascinating but also problematic.

experience with the music, Price occasionally fails to tune tricky passages as accurately as one might wish, given her very pointed, vibrato-free sound. She can sing a true legato, but doesn't always, falling like Kollo into a picky concentration on one note at a time.

Some of the scornful and angry bits in Act I are well characterized, but Isolde too is here a figure most of whose individuality and specificity lives in the orchestra though even there not on the Valkyrie-like scale of tradition: Kleiber holds Isolde's curse to strict tempo, with none of the usual fermatas on the high notes. What eomes off best is the lament over Tristan, which seems to fit this voice comfortably and which benefits from Kleiber's no-schmoozing tempo. The "*Liebestod*," in this interpretation, is clearly an epilogue rather than a fulfillment, retrospective rather than climactic.

What most emphatically does not work well in this recording, however, is the love music, though it is full of many beauties of detail: Some of the intimate passages ("Barg im Busen uns sich die Sonne," for example) are very lovely indeed, like vocal-instrumental chamber music. In part, the problem has to do with the singers' deficiencies in resources and temperament already mentioned. With two weightier if by no means flawless singers (Catarina Ligendza and Spas Wenkoff). Kleiber in 1976 achieved a more involved, involving performance of this aspect of the opera.

It may be, too, that the necessary balance between precision and spontaneity in the orchestral execution had not yet been consistently achieved throughout the score. And I find myself wondering whether the utter transparency of orchestral sound, especially in the lower middle register, isn't sometimes counterproductive expressively. For whatever reasons, the end of the first act and most of the second act, in this performance, flow and surge only fitfully, and that is a grievous flaw in a *Tristan*.

The recorded sound may color one's impression as well. Originally intended for release a season ago and then withheld because the conductor wasn't satisfied with the tests, this recording is in what I am now beginning to think of as "early digital" sound, very accurate timbrally in most respects but somewhat steely of string tone. I've mentioned the wide dynamic range, but must add that it requires a higher level setting than usual to make some of the soft passages comfortably audible, and even then the climaxes are not as loud as in the Goodall recording at the same setting; fortunately, the surfaces of DG's test pressing proved impeccable. The aural perspective is more distant than London's, and this may play a role in the impression of a less rich and warm orchestral tone.

What aren't in question, as I have suggested, are the skill and virtuosity of the Dresden orchestra, still clearly one of the great ensembles, and the chorus is also admirable. Kleiber's passion for detail is well served by the singers of small parts: the Sailor's song at the start of Act I, so full of harmonic and melodic implication for what is to follow, is very precisely limned by Eberhard Büchner, and the still sweet and lambent sound of Anton Dermota makes his casting as the Shepherd more than a mere sentimental gesture. Werner Götz is an effective Melot.

There is one further controversial feature to be mentioned: the side breaks. Not their location-all but one (the first break in Act III) are taken at structurally appropriate points, and in fact the three breaks in Act II neatly articulate its principal musico-dramatic divisions. However, except for two clean breaks, they are all placed in musical midstream and are achieved with fades and overlaps (shades of Leopold Stokowski!). In Act I, after the mocking refrain of the sailors, the tumultuous orchestral sequel is faded out; the next side backtracks to the beginning of the chorus and then proceeds. Once one is used to the idea, it becomes reasonably effective, certainly preferable to some of the midstream breaks that have proved unavoidable at some points in every other recording. Still, the aesthetic effect can be curious, for these "replay" breaks insist on the fact that one is listening to a recording rather than eavesdropping on a performance.

As of this writing, I have not seen the DG packaging, but I understand that Lionel Salter's excellent translation, now the common property of all branches of Polygram, will again be proffered. D.H.

BACKBEAT

"Don't Call Me a Brat!"

Billy Joel, as feisty and macho as ever, finds his critics have changed their tune. by Steven X. Rea



Joel relaxes in his "backyard" in Oyster Bay, Long Island

CBS RECORDS' ALL-TIME best-selling recording artist is sitting in a hotel room outside of Washington, D.C., waving his hands in busy little fits and leaping headlong into a tirade against rock criticism. Just a mention of the time he ripped up a review by pop writer Ken Tucker onstage in Los Angeles, slinging some nasty four-letter epithets in the process, has set this singer/song writer/keyboardist off on another diatribe.

"He called me a spoiled brat," Billy Joel says. "I remember it distinctly: He said I threw myself around the stage 'in a fit of vain glory.' I read the review and it actually amounted to ranking me out. It had nothing to do with the music. He was saying I was a brat, an egomaniac, that I thought I was Napoleon. The next night. I went onstage and I cursed him out. Where I come from, somebody ranks you, you rank 'em back. It wasn't a review of the music, it was an out-and-out put-down."

Where thirty-three-year-old William Martin Joel comes from is the Hicksville-Levittown area of Long Island, a middleclass community of tract houses, shopping centers, and parking lots. He still walks with the exaggerated, shoulders-first swagger of a high school kid trying to out-tough his competition. He never did graduate from high school-he was too busy plying his trade in the world of rock & roll. Since the age of nineteen he has been a professional musician, playing in a succession of bar and bar mitzvah bands. A couple of them-the Hassles and the heavy metal group Attila-commanded a fair-sized following.

The story of Joel's road to success is by now familiar: his first solo album in 1972, "Cold Spring Harbor," which was mastered at the wrong speed on a dubious record label, and for which he failed to receive any royalties; the stint in a Los Angeles dive called the Executive Lounge. where Joel, as Bill Martin, served up besotted cocktail ballads for a cluster of neighborhood regulars; then finally a contract with Columbia Records that led to "Piano Man" ('73) and his first hit single of the same title. "Streetlife Serenade" ('74) followed, then "Turnstiles" ('76), which he produced himself. But it wasn't until "The Stranger" ('77), his first collaboration with producer Phil Ramone, that his career really took off. While other producers had balked at Joel's suggestion to use his road band in the studio, Ramone encouraged it. With Liberty DeVitto on drums, Steve Khan on guitar, Doug Stegmeyer on bass, and Richie Cannata on reeds and keyboards, "The Stranger" spawned no less than four hit singles and sold over five million copies. "52nd Street" ('79) was no slouch by comparison, nor was "Glass Houses" ('80).

Joel is presently in the middle of a major North American tour, and his current dise, "The Nylon Curtain" is following the pattern of his last three, dominating the charts and the airwaves and even, this time, garnering praise from the critical establishment. Oddly enough, all those writers who've been lampooning his macho mannerisms, his pugnacious, feisty, streetwise wise-guy image, and his "crass commercialism" have decided to embrace "The Nylon Curtain" with open, adulatory arms.

Backbeat: How do you feel about this sudden turnaround in the press' attitude?

Joel: I try to ignore it, because if you believe all the good stuff, then you have to believe all the bad stuff as well.

Backbeat: Then why do you get so worked up about it?

Joel: The press can insult you, but you can't insult them back. I don't think that's fair. If they don't like the music, that's fine. But don't rank me out personally. Don't call me a brat. I'm not a brat—I'm a grown man.

Backbeat: Okay, let's change the subject. I can see the scars on your knuckles from your motorcycle accident last April. You broke your left wrist and thumb. Has it affected your playing at all?

Joel: The wrist will eventually be okay. It just hurts, that's all. But the thumb is another story. There's a piece of bone missing, so it has an extra wobble. I have to tape it up before I go onstage. Then again, I'm not Vladimir Horowitz playing a Chopin Polonaise. This is rock & roll. If you have to bang with your elbow, you bang with your elbow.

Backbeat: You collect bikes—did the accident scare you off riding them?

Joel: I have ten, and I'll keep riding them. I just won't trust intersections. A certain part of your faith in humanity becomes shattered when you realize that red lights don't stop people.

Backbeat: When you were crashing into that car, and you knew you had broken



I know who I am. I'm from Hicksville.

something, did it flash through your mind that you might never be able to play the piano again?

Joel: No. It never even crossed my mind. I was thinking about when I'd be able to ride again. In fact, I asked the doctor if I'd be able to play the violin, and he said, "I don't see why not." And I said, "Great, because I couldn't before."

But the band was really worried. I wasn't, because I've broken all my fingers before—I used to box. I'll probably develop some sort of weird style just from having damaged fingers.

Backbeat: I don't want to sound like the *Hollywood Reporter*, but were there professional problems between you and your wife/manager Elizabeth that caused you to separate?

Joel: She hasn't managed me for three years—I don't know if a lot of people are aware of that. She only managed me from '77 to about the end of '79 and it was only a temporary arrangement. She was just going to correct a lot of things that had been screwed up before. Basically, I've been managing myself for the last three years. Backbeat: How does that work?

Joel: I'm associated with a management group that makes all the business decisions, because I'm a lousy businessman. I just make decisions about my career. You know, if and when I'm going to tour, make an album, or be on television. There comes a point when you don't really need what they call "creative management" to make big career moves.

Backbeat: So what sort of decisions have you made in your capacity as Billy Joel's manager?

Joel: Let's see. There was a time when I was very isolated. I didn't talk to anybody. The management office would churn out these stories about who Billy Joel was, but I

wasn't accessible. That might have been where the chasm with the press came from. I finally thought, "there has been all this misrepresentation about me. I might as well talk to the people firsthand." That was my decision—to set the record straight.

Backbeat: Here we are in this hotel room quietly chatting, while down in the lobby there are swarms of girls dying to get a glimpse of you. You've sold umpteen million records. Your tour, even in these depressed times, is selling out. Do you perceive yourself as a star, or does the whole thing baffle you?

Joel: Well, I think of it as part of the gig. I'm supposed to be a "pop star," a "rock star." And then I look in the mirror: ick! look, I'm ugly. I need a shave.

It's fun, that's how I deal with it. What I do as a musician—well, that is my job. I don't think it's whoop-de-do. People come to see me because they like my music—I like other people's music. But I know who I am. I'm from Hicksville.

Backbeat: So you don't think your ego has gotten outsized with all the hoopla that has been showered on you—the comparisons to Edward Hopper and John Steinbeck, seeing your face on all those magazine covers, all of that hasn't had an effect?

Joel: No, because among the guys in the band and the crew there is no class system. Everybody smacks everybody else into line. There's no star crap. Sometimes we have to play that game. For instance with the record company, if you're trying to get more money out of them you have to have the attitude, "I'm the artiste, the recording artiste. I came here to discuss money,"

It's not a matter of ego anymore. The best judge of what I'm doing is me. I have a very high set of standards—if it passes my judgment, then it's okay. It's the best I can do.

Backbeat: And you're happy with your work to date?

Joel: Yeah. Since "Turnstiles" I've been very happy. I wasn't crazy about the records before that one. I didn't like the production. Some of the material sounds funny to me now.

Backbeat: Which of your records do you like best?

Joel: "Glass Houses" is probably my favorite.

Backbeat: Do you listen to much music when you're not working? Or would you rather listen to silence?

Joel: I listen to all music. Rock radio is really dreck—you hear the same cuts over and over again. So I'll listen to a jazz station. I love jazz. And if I can't get jazz. I'll switch to classical. There's good and bad music in every genre.

Backbeat: You've said that the Beatles were your main influence, musically, artistically, when you were growing up. Is there anyone nowadays who you think is awe-some—someone who is so good they make (*Continued on page 81*)

BACKBEAT **Reviews**



Marvin Gaye (above): A twenty-year trip to the top. Prince: Painting himself into a corner.



The King and the Prince

Reviewed by John Milward

Marvin Gaye: Midnight Love Marvin Gaye, producer Columbia FC 38197 Prince: 1999 Prince, producer Warner Bros. 23720-1 F (two discs)

For many of its greatest practitioners, rhythm & blues might as well be romance & sex. Bluesmen sang discreetly about wangdang-doodles and jellyrolls while r&b bands evoked the bedroom on the dancefloor. Before the sexual revolution, of course, things were often telegraphed with a wink. Then James Brown put the funk into black music, and that was about as subtle as his own *Sex Machine*. Disco, with its metronomic love-to-love-you throb, was even more blatant. Marvin Gaye's "Midnight Love" and Prince's "1999" represent the state of the art, so to speak, in 1982.

It's hard to get lustier than Gaye's Let's Get It On or his duets with Tammi Terrell. A Motown original with over half his life on records, Gaye remains one of the vocal treasures of pop. His voice, gritty on the groove and cuddly around the corners. commands instant attention, and when he writes a hit, watch out. Bet the rent money that the cut Sexual Healing will make "Midnight Love," Gaye's first non-Motown release, his biggest album in a decade. Such an inevitable comeback verifies a pop principle: A great artist is never beyond occasional brilliance. Sexual Healing (like Let's Get It On) is a groove that connects. It's the screaming peak of an album whose enjoyably seductive mood is

as smooth as his "I Want You" but a tad more insistent. "Get up, get up." he sings, "let's make love tonight." This middleaged man means to get it while he can and sounds ten years younger in the process.

Recorded in Europe, the bulk of "Midnight Love" is Gaye as one-manband, with Gordon Banks supplying guitar and occasional rhythm parts. Here's the concept: *Midnight Lady*, the uptempo club song; *Rockin' After Midnight*, the beautifully sung seduction line; *Turn on Some Music*, the back-home finale. The last encapsulates the LP's boudoir view. "What's Going On" it is not. The rest is party filler save for '*Til Tomorrow*, a fullbodied ballad of love, and *My Love Is Waiting*, a lightly rocking declaration of same.

After a nod to Columbia records, Gaye dedicates the latter song to Jesus; indeed, his great soulman career embodies the battle between the pleasures of the flesh and the spirit. He remains a traditionalist-a hard-driving doo-wopper with a taste for the ladies. He may sing of sex, but he is still the son of a preacher man. Prince also thanks God on the liner notes of "1999," but if truth be told, he's more concerned with tonight's new kink than tomorrow's salvation. Sensually speaking, the wunderkind of pop-funk makes Gaye sound almost prudish; from the start, his brazen sexuality has battled his untrammeled virtuosity for attention. Yet in spite of his need to outrage, Prince still delivers-there's one long album of wickedly wonderful pop-funk on these two specially priced discs.

1999 is a political party song; the idea

is to dance toward the apocalypse. When Prince, in his benign merriment, says he has "got a lion in my pocket, honey, and he's a-ready to roar," he is at his most socially relevant. His strong suit is dicing funk with rock, as on *Little Red Corvette*, a sinuous piece of pop that does justice to America's second favorite sex symbol. The hottest of one-man bands, he deserves his reputation as *the* auteur of pop-funk (he also produces Time and Vanity 6) and sweetensthe groove of *Let's Pretend We're Married* with a melodic chorus where "all the hippies sing."

Prince is also handy with hard funk, and D.M.S.R., for "dance, music, sex, romance," should fill up any dance floor. Automatic is the strongest of the technofunk songs, where synthesizers meet rhythm boxes and the trance is the trick. All the Critics Love U in New York is the worst. In truth, most of them agree that "Dirty Mind" remains his best album, simply because it contains his best songs. Good grooves come from good tunes—ask Marvin Gaye—and Prince often tries one's patience with his lesser jams and stretchedout winners. To become a consistent songwriter, he needs, above all, discipline.

For with a persona based on top-this sexuality, Prince has painted himself into a corner. The merely sane would have spoken their sexual peace with "Dirty Mind." Though he still has a sense of humor (such as when he blames his lack of romantic luck on *Something in the Water*), Prince has gotten into s&m on his fifth album. "Don't be afraid," says the distorted voice that begins the album, "I won't hurt you." Tell that to the woman screaming for help at the end of *D.M.S.R.*

Still, his first major hit, I Want To Be Your Lover, was an irresistibly saucy piece of Motown. And in terms of prolific and audacious talent, if not romantic outlook, Prince is the Smokey Robinson of the '80s. But the magic of the human voice has led Marvin Gaye on a twenty-year trip to Sexual Healing, a song that implies mutual pleasure as well as soulful redemption. Five years down his singular path, Prince would do well to consider that pop can be sexy without being hard-core, and that less can often mean more. Until then, he'll remain the prince who would be king.

Pat Benatar: Get Nervous

Neil Geraldo & Peter Coleman, producers Chrysalis CHR 1396

Hard-rock siren Pat Benatar isn't quite as trapped as her straitjacket album photo suggests, but "Get Nervous" does point up her stylistic constraints. While she continues to refine her balancing act in mating formal
vocal technique to gritty, gutteral singing, her persona leaves little room for surprise.

Although she has protested typecasting as a rock & roll sex object, Benatar here persists in the often unconscious exploitation of her sexuality: One minute, she's wailing in mixed compassion and impatience for The Victim who allows herself to be manipulated, but the next she herself is playing that role for all it's worth. Whether flirting with disaster in Looking for a Stranger or succumbing to the sexual demands of a lover she is ready to otherwise jettison (in I'll Do It), Benatar gives the lie to her pose of self-reliant modern woman. She lays down the law to a lover who insists on confiding to her the secrets he won't share with his other squeeze (Tell It to Her), but she fails to question how she could have given herself to such a heel in the first place

Such romantic contradictions aren't necessarily a problem, as attested to by the hardy durability of the torch song catalog. Benatar served her own apprenticeship performing such material, but it's clear from these hot-wired descendants that she has yet to master the form's most crucial element—emotional vulnerability. She exudes control to the point where her impersonations of women on the brink sound patently false. When she caps one of her impressively pure upper-register excursions with a sudden, rasping twist, it's merely another stylistic tic, not passion or pain.

Occasionally, she manages to keep her affectations in check and just ride on the wings of her powerful, flexible voice, pointing toward a bracing, lyrical vision of rock-edged pop. That surfaces here in the single and opening track, *Shadows of the Night*, which wisely exploits her instrument through overdubbed choral fanfares. Unfortunately, Benatar remains too calculating to recognize that promise, and the rest of "Get Nervous" is devoted to fine-tuning her increasingly predictable hard-rock tease. SAM SUTHERLAND

Crystal Gayle: True Love

Allen Reynolds & Jimmy Bowen, producers. Elektra 60200-1

Crystal Gayle sounds so good trading down-and-out double entendres with Tom Waits on the One from the Heart soundtrack that when I heard word of a new solo album, I found myself experiencing mild tremors of anticipation. "True Love" is the pop-country vocalist's ninth studio LP and her first for Elektra. It doesn't break new ground, but Gayle sings with such a graceful, easygoing eloquence that it's impossible to dislike.

Although nothing here approaches the jazzy verve of her duets with Waits, the material on "True Love" skillfully straddles the perimeters of rock, country, and easy-listening. *Our Love Is on the Fault*- *line*, a snappy piece of music by Australian writer Reece Kirk, sports some great, goofy earthquake metaphors and a neat little hook firmly planted in Chris Leuzinger's Dire Straits clip-along guitar style. (In fact, on *Deeper in the Fire*, Leuzinger has his Dire Straits licks down to such a tee that I had to check the credits to see if Mark Knopfler was playing on a Crystal Gayle record.) And Gayle brings something new to Rodney Crowell's oft-covered '*Til I Gain Control Again*. A chiming minicrescendo in the chorus takes the song in a sprightly pop direction unlike Crowell's. Emmylou Harris', or Willie Nelson's interpretations.

Then again, nobody's perfect. Let Your Feelings Show, with its semirollicking doo-wop beat and Jay Patten's bouncy saxophone, is ill suited to the lady's delicate quaver of a voice. Likewise, on the mushy Easier Said Than Done, she reaches beyond the hackneved sentiments of the song-her vocals are cloyingly pretty, not pretty. I'm still not sure what to make of He Is Beautiful to Me, a syrupy, celestial love song whose stately string arrangement and melody recall Lennon and McCartney's Yesterday. Yes, it's drippy. Yes, it's comball. But when Gayle warbles "and I will love Him 'til I die,'' stretching out her "i" sounds until they flutter and float into the heavens-well, it's pretty impressive stuff.

Gayle is certainly a limited vocalist; she seems incapable of imbuing her work with even a suggestion of toughness or raunch or impulsive passion. Instead, her angelic, breathy timbre suggests a cool, almost willowy innocence. If it's cool and willowy you want, you could do a lot worse than "True Love." STEVEN X. REA

The J. Geils Band: Showtime! Seth Justman, producer EMI America SO 17087

It does the heart good to hear an arena filled with people shouting out "Love stinks!," singing along on the catchy, inane "Nana-na-na-na" refrain of Centerfold (followed, appropriately, by Land of a Thousand Dances, on which "na-na"s also play a prominent part). "Showtime!" is a demonstration of the high-spirited rapport the J. Geils Band has with its audience, and it's also a freeze-frame that captures this tenacious band at the height of its dozen-year career. In the year that led up to the concert this disc documents, the group had earned its first No. 1 album and single, had toured the U.S. and Europe with the Rolling Stones, and had shown its class by making its sole TV appearance on The Joe Franklin Show. If the atmosphere on "Showtime!" is a bit too loose and predictably rowdy, put the blame on fame. Peter Wolf doesn't have to work very hard to get yelps and whoops from the crowd-listing junk food and pizza ingredients in a shaggy-dog story about Adam and Eve seems to do the trick.



BACKBEAT Reviews

But if Wolf plays shamelessly to the audience, the audience plays right back: "The next song is dedicated to the beer drinkers out there!," he shouts by means of introduction to Walls Come Tumblin' Down, and what fan would fail to cheer his fermented lungs out? "Detroit, are you gonna rock me?," he asks. More cheers. The music of the Geils band is, fortunately, totally in keeping with this give-and-take. Even when it seems to be coasting-as on Centerfold, the terrific novelty tune that took the group to the top of the popsthere's a taverny spunk and jivey enthusiasm that fuels the music. Abetted by the Uptown Horns, the band romps through the Marvelows' hit I Do (previously recorded on its finest LP, "Monkey Island"), and Magie Dick's harmonica is as feisty as ever on Stoop Down #39 and Jus' Can't Stop Me.

It's a tribute to the group's eagerness to please and sense of camaraderie that the album is as much fun as it is, and the goosed-up run-through of Land of a Thousand Dances (in the Wilson Pickett, rather than Cannibal and the Headhunters, arrangement) is a welcome breather from the strained efforts on "Freeze Frame." But except for providing aural evidence of how Wolf and Seth Justman's recent songs go over on stage, and giving Wolf a chance to play Lord Buckley on Love Rap, "Showtime!" doesn't offer much that's new. The fact that many people only discovered the J. Geils Band in this decade doesn't necessarily justify a third live album.

MITCHELL COHEN

Tom Petty & the Heartbreakers: Long After Dark

Tom Petty & Jimmy lovine, producers Backstreet BSR 5360

Six years down the line. Tom Petty is still making tuneful rock & roll that is kneedeep in pop music history. And while his and the Heartbreakers' fifth album, "Long After Dark," ploughs the exact same turf as its predecessors, the group's jangling brand of hard rock has yet to turn boring.

Maybe the only problem with Petty's tried-and-true formula-his variably yowling and phlegmy vocals, his lean, ringing guitars, and the Heartbreakers' concise, thumping accompaniment-is that the crashing chords of the new LP's opening track, A One Story Town, sound virtually interchangeable with those that have kicked off his previous dises. Still, with its chiming Byrds-like guitars and Petty's whining Roger McGuinn howl, the song is first-rate rock. So is You Got Lucky, on which Petty twists a weird, twangy slow-motion guitar line around Benmont Tench's ominous synthesizers, creating bobbing, up-and-down rhythms behind the admonition: "You better watch what you say, you better watch what you do to me."

Keyboardist Tench, guitarist Mike



Rod Stewart: What city are we in?

Campbell, drummer Stan Lynch, and bassist Howie Epstein are the Heartbreakers. Just how good they are is evident on two tracks in particular: We Stand a Chance and the doomy Straight into Darkness. On the former, a romantie, optimistie rocker, Lynch's drums literally thunder along under Tench's resonant keyboards. On the latter (as fatalistic as We Stand a Chance is upbeat), Petty sings about the moment, on a London-bound plane, when the realization hits him that he has fallen out of love. As the 747 flies into the black sky, the band envelops his plaintive wail in a dark, churning storm.

The main influences on Petty's music through the years have been the Byrds and the Rolling Stones, and there are little references all through "Long After Dark"from the coy, Jagger-ish meows of A Wasted Life to the stretchy, mannered vocals of The Same Old You (one of the album's two certified throwaway tracks). But while Petty has remained true to his school, he has also remained true to Petty, as proved by the fact that he and the Heartbreakers can continue to thrash out fresh, invigorating rock & roll. STEVEN X. REA

Rod Stewart: Absolutely Live Rod Stewart, producer Warner Bros. 23743-1 G

Last year, Warner Bros. reportedly balked at Rod Stewart's plan to release a live album and prodded him into producing his best LP in years, "Tonight I'm Yours." On the strength of Young Turks and the swinging title tune. Stewart's two best rockers in years, that disc revitalized his eareer. ereating a market for, yes, a live album. "Absolutely Live" could have been worse (he could be playing with his inferior earlier band), but hardly less surprising.

Stewart toured alongside the Rolling Stones, and where they creaked under the weight of accumulated history, he sashayed around the stage like nothing more or less than a great rock & roll singer. He was in fine voice and sang a solid set. Consequently, "Absolutely Live" is a better album than the Stones' "Still Life," and serves as a reasonable, if superfluous, greatest hits package. Side 3's double bill of Gasoline Alley and Maggie May makes as much magie now as those songs did their first time around. But a subsequent what-eity-arewe-in version of Tear It Up reminds us that we're listening to an in-concert souvenir.

If you ranked all of Rod Stewart's albums according to desirability, "Absolutely Live" (he guarantees it, repeatedly, and there's no reason to doubt him) would fall about two-thirds of the way down the list. With all due respect, you may as well buy some more Sam Cooke instead. JOHN MILWARD

The Waitresses: I Could Rule the World if I Could Only Get the Parts Mike Frondelli & Chris Butler, producers Polydor PX 1-507 (EP)

A patchwork EP consisting of a Christmas song that was available as an import in 1981, the live title track, a theme from a situation comedy, and two other songs. "I Could Rule the World if I Could Only Get the Parts" isn't likely to quiet the voices that have called the Waitresses a novelty act. But as quirky as they are-with Patty Donahue's conversational vocals, time signatures that jump around in the mode of the Mothers of Invention, jittery saxophone solos, and guitarist Chris Butler's lyries that look askance at life in these United Statesthe Waitresses ean't be dismissed as a joke. The songs on "I Could Rule the World ...," like those on their LP debut of a year ago, are shrewd and engaging.

Using Donahue as his mouthpiece, Butler draws characters who feel as though they're totally out of place: bright people who consider their work "empty and redundant." a single girl resigned to spending Christmas alone, a high school freshman whining about the slights and humiliations suffered at the hands of elassmates and teachers. The EP is inhabited by "square pegs." "fifth wheels," the "worthlessly overqualified." On the twitchy title song (which goes back to Butler's days with Tin Huey), Donahue steps up to a counter with her list of supplies, only to find that they're already obsolete.

Square Pegs, the TV theme, is cute the first few times through, and Bread and Butter has a snappy chorus that Donahue interrupts when it steps on her lines, but Christmas Wrapping and The Smartest Person I Know are the most persuasive cuts. Talk-singing over a jingly mambo beat, Donahue relates a story of missed connections and turned-down Christmas invitations that ends with true holiday serendipity: the girl meets the boy she had "been chasing all year" on line at the all-night grocery. It seems they both needed cranberries. *The Smartest Person I Know* doesn't offer as much narrative specificity, just the suggestion that having brains doesn't make people feel any less useless. As Butler/ Donahue sees it, the most intelligent people are wandering around worried that they don't fit in.

These are hardly momentous theories. But as an addendum to the best songs on "Wasn't Tomorrow Wonderful?" (*No Guilt, I Know What Boys Like, Go On*) "1 Could Rule the World" exhibits an intriguing analytic bent that matches the band's syncopated, stuttering musical mannerisms. MITCHELL COHEN



Anthony Davis, James Newton, Abdul Wadud: I've Known Rivers Jonathan F.P. Rose, producer Gramavision GR 8201 (260 W. Broadway, New York, N.Y. 10013)

First, a caveat to the general jazz audience: This is not mainstream, contemporary or fusion jazz. It is, in fact, closer to the music of, say, Pierre Boulez, Karlheinz Stockhausen, or Luciano Berio than to that of Miles Davis or Keith Jarrett.

All of the four pieces on "1've Known Rivers' use similar and quite common methods of organization. Like most contemporary composers of the post-serialist era (now representing most of the twentieth century), James Newton, Anthony Davis, and Abdul Wadud reveal little interest in either traditional theme and variations or nineteenth-century programmatic music. Instead, ideas are strung together in a flow of sequential events, expanding, contracting, perhaps related to what has gone on before, perhaps not. Newton's After You Said Yes and Davis' Still Waters, for example, have been assembled in sections that move from solo to ensemble to duet to trio, etc. While bits and pieces may have been precomposed, most of what happens sounds like free improvisation. (Much is made of the "pantonal" concept by musicians who work in this genre; the truth is that it's little more than a buzzword for playing whatever comes to mind.) Since Davis, Newton, and Wadud are technical masters of their instruments (piano, flute, and cello), and since they have agreed upon a vaguely Alban Berg-ian style, the net result is well-played, nonspecific, modernsounding concert music.

Newton's Juneteenth is somewhat

more distinctive, mostly traceable to the prominence of his wide-ranging, virtuosic flute sounds. (He is clearly closer to the avant-gardisms of Severino Gazzeloni than he is to the schmaltz of the better known James Galway.) I'm impressed by his translation of jazz melodies and rhythms into a disjunct pointillism that sounds a bit like berserk Thelonious Monk (if one can imagine such a thing). The net result, however, is that this music demands more of its audience than it does of its performers. For every special moment-Wadud's cello on Tawaafa, Davis' articulate piano textures on After You Said Yes, Newton's intermittent use of flutter-tonguing and bent-note wails-the listener must endure many more moments of avant-garde generalities.

DON HECKMAN

The John Lewis Group: Kansas City Breaks Ken Glancy, producer Finesse FW 38187

Although the Modern Jazz Quartet still makes occasional appearances, it essentially broke up in 1974, leaving leader John Lewis with no steady vehicle for his music. At New York's City College, where he has been teaching, he formed a group that consisted of flute, violin, cello, piano, bass, and drums and in 1981 used a similar instrumentation to record "The John Lewis Album for Nancy Harrow" (Finesse FW 37681). The sextet worked so well that he brought it together again for "Kansas City Breaks" and plans to do some live performances with it.

The John Lewis Group consists of Frank Wess on flute, Joe Kennedy, Jr., on violin, Howard Collins on guitar, Marc Johnson on bass, Lewis on piano, and Shelly Manne on drums. Together, they offer Lewis a much more provocative instrumental palette than the MJQ's piano, vibes, bass, and drums. And, unlike his quartet writing, his work here is geared more to compositional ends than to individual personalities.

"Kansas City Breaks" is a fascinating mixture of the familiar—both in the material (*Django*, *Sacha's March*, *D&E*) and the highly idiomatic Lewis piano style and the new, as represented by the ensemble's sound and the soloing. No one has been more successful than Wess in using the flute to positive jazz effect, and his playing here is warmly melodic, sweetly singing, and consistently brilliant. Kennedy who picked up the development of the jazz violin from the point when it was interrupted by electronics, evokes both Eddie South and Stuff Smith; he responds to Lewis' writing with great sensitivity.

Typical of Lewis' arrangements, Johnson and Manne are not relegated to basics but are essential coloristic elements. The former emerges as one of the great post-Jimmy Blanton bassists in these performances, and Manne shows the insights of a sly old fox, subtly supporting and extending the solos. "Kansas City Breaks" represents a very important new phase in John Lewis' career, suggesting that his years with the Modern Jazz Quartet were just a preparation for his work with this sextet. JOHN S. WILSON

Don Neely's Royal Society Jazz Orchestra: Happy Feet Ted Schafer, producer Merry Makers MMRC 110

Founded in 1975 at San Jose State College, saxophonist Don Neely's Royal Society Jazz Orchestra specializes in arrangements from 1920s jazz and pop recordings. Capturing the feeling, phrasing, and intonation of bands that recorded over fifty years ago is not easy, as is proven constantly by contemporary ensembles that try. But the RSJO is more successful and versatile than most, placing its primary emphasis on the spirit of the originals, not on slavish, note-for-note accuracy. This gives its performances a looseness that accounts for the success of The Stampede, Black Maria, and Happy Feet, in particular. The sources for those numbers-Fletcher Henderson's band, an Archie Bleyer stock arrangement, and Paul Whiteman's orchestra-reflect the variety of the RSJO's repertory.

The group also has an imaginative approach to programming. A creditable performance of Duke Ellington's Creole Love Call (featuring trumpeter Tom Brozene's excellent re-creation of Bubber Miley's solo) is followed by the totally different 1920 Whiteman arrangement of Whispering. The latter reading has its model's stiff, proper beat, his ricky-tick qualities in the final chorus, and the orchestral depth that made Whiteman's the great pop band of the '20s. A paraphrase of the New Orleans Rhythm Kings' 1925 recording of Milenberg Joys is succeeded by Fletcher Henderson's 1935 rendering, which Henderson later adapted for Benny Goodman's orchestra. In successfully bringing out the stylistic contrasts between the two versions, the RSJO shows its ability to work within a variety of colorations.

There are some weak spots—a corny Swamp Blues, written by Wayne King's lead saxophonist, and a You Rascal You that misses the lusty virulence of the Louis Armstrong or Cab Calloway versions. But guest cornetist Leon Oakley, who plays a ruggedly moving Armstrong-like solo on Home, helps add luster to the few dull moments. JOHN S. WILSON

Newport Jazz Festival—Live Jim Fishel, producer Columbia C 2-38262

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BACKBEAT REVIEWS

(Continued from page 73)

lonious Monk, Ornette Coleman [see BACKBEAT, January], and others. This twodisc set offers an impressive cross-section of Newport players, culled from the Festivals of 1956, '58, and '63. Organized in more or less chronologically stylistic order, it includes unreleased performances by Louis Armstrong, Jack Teagarden, Rex Stewart, Ben Webster, Duke Ellington, Benny Goodman, Teddy Wilson, Dave Brubeck, Miles Davis, Thelonious Monk, Sonny Stitt, and Gerry Mulligan.

"Newport Jazz Festival—Live" starts off with a strong first side. Armstrong in '58 is loose and joyful, singing energetically with Velma Middleton, joining Teagarden on their old specialty *Rockin' Chair*, and playing and singing *Sunny Side of the Street* with the Festival's International Youth Band. Webster plays a superb *Chelsea Bridge* with its composer, Billy Strayhorn, at the piano. Also joining Webster are Ellington alumni Stewart, Tyree Glenn, and Cootie Williams in a *C-Jam Blues* that shines with echoes of the Duke.

After this exhilarating beginning, however, the set becomes rather routine with only some occasional bright spots. Those include Wilson's pristine, light, and easy *Stompin' at the Savoy*; Cat Anderson's reworking of the Bubber Miley-Cootie Williams trumpet parts on *Black and Tan Fantasy* with the Ellington orchestra; and a bright and buoyant treatment by the '58 Mulligan Quartet of *As Catch Can*, in which Mulligan's baritone saxophone is paired with Art Farmer's trumpet.

But the potential fireworks in a Coleman Hawkins-Zoot Sims pairing do not go off; the odd mixture of Lester Young, Pee Wee Russell, Buck Clayton, Teagarden, and Don Ewell hangs together primarily because of Jo Jones's tremendous drumming; a Newport All-Stars group makes a ten-minute performance seem like half an hour, despite Ruby Braff's brilliant contribution; and a diffident band put together by Benny Goodman remains staid, listless, and uninspired by Jimmy Rushing's exultant singing. Actually, the set is a realistic representation of the Festival when it was still in Newport, R.I. Those long nights were a mixture of interest, disappointment, and the kind of excitement found on Side 1. JOHN S. WILSON

Harvie Swartz: Underneath It All Harvie Swartz, producer Gramavision GR 8202

Bassist Harvie Swartz stresses original compositions in this new release. Unfortunately, the verdict on his writing cannot be quite as favorable as that on his first-rate performing. Straight-ahead jazz lines like *Firewalk* and *Underneath It All* reveal a pleasant, if somewhat truncated melodic (*Continued on page 82*)

WALKABOUT

(Continued from page 53) ly matter.

(Not at all incidentally, I'm pleased to learn that the list price of DBX-encoded musicassettes, all real-time duplications and superchrome tape, has been reduced from a stratospheric \$20 to \$15 each almost "reasonable" considering their unparalleled technical quality. The number and variety of available DBX discs and tapes, including pop and jazz as well as classical and demo programs, have been steadily growing—as detailed in the latest catalog, available from DBX, Inc., P.O. Box 100C, Newton, Mass. 02195.)

But quite apart from DBX materials, which appeal primarily to elitist audiophiles, there already are some ingenious responses sparked by the fast-growing popular demand for taped music well suited for walkabout listening. One of the first was the best-selling CBS tape edition of Philip Glass's *Glassworks* (FMT 37265, "spccially mixed for your personal cassette player"), which I wrote about in some detail in the July 1982 "Tape Deck" and which I'm now not at all surprised to find even more seductively hypnotic when heard under the conditions for which it was specifically crafted.

Another approach, programmatic rather than technical, is Deutsche Grammophon's in bargain-priced "Doubletime Tapes designed for users of Sony Walkman and similar personal portable cassette players." These are classical "greatest-hits" programs of about ninety minutes each drawn from recordings mostly dating from the '60s and early '70s. Beethoven, Chopin, Mozart, and Tchaikovsky are represented in addition to the Bach and Johann Strauss examples I've heard, under both road and home conditions. The predominantly Germanic-Establishment Bach readings by Herbert von Karajan, Karl Richter, Wihelm Kempff, et al., may still be widely admired, but I find them only too pervasively pedestrian. And-paradoxicallythat quality is not conducive to a sense of walking on air. The Strauss waltzes, polkas, and overtures, however, more seductive than ever in both Karl Böhm's gemütlich and Karajan's high-voltage treatments, not only add a buoyant lilt to one's step, but also reveal scoring delectations we seldom appreciate fully.

Undoubtedly there will soon be many similar, perhaps more imaginative, attempts to exploit the immense new market just opening up. (The *New York Times* reported last spring that a potential audience of ten million already existed.) Such prospects are already largely responsible for the recent mushrooming of musicassette production in general and of bargain-priced programs in particular. I just pray that the heavy demand for material suited to teenage musical tastes won't blind a&r executives to the potential of the adult classical market, with connoisseurs just beginning to discover the rewards of exploring a wholly new *terra incognita* of musical experience.

For myself, I'm eagerly anticipating trying to determine—as a kind of analytical taxonomist—what specific criteria there may be for the walkabout affinities of various repertories. What compositions and which composers make the best travelling companions?

My preliminary guesstimates are partially based on carborne eight-track-cartridge listening years ago, now reinforced by early walkabout trials; these experiences, however, are surprisingly different in kind and perhaps will be in results too. So far, the most promising repertories seem to be those of the baroque, rococo, and earlyclassical eras—particularly works for smaller ensembles and chamber orchestras. Or am I simply falling back on old favorites as heard under any conditions?

Anyway, I strongly suspect that old favorites will be greatly preferred to anything new and that zestfully invigorating pieces will fare far better than portentous or even unco serious big works that need the greater sonic breadth, weight, and grandeur high-power speakers can provide. Impressionistic music may well profit significantly by the unique intimacy and spellbinding immediacy of the new medium. Certainly much of the long-lost Delian magic seems to be restored in alfresco rehearings of Beecham's matchless *Brigg Fair*, *Summer Night on the River*, etc., in their Seraphin reissue (4XG 60185).

But perhaps most revelatory of all my walkabout insights prove to be those into the sonic imagination and scoring craftsmanship (only imperfectly realized heretofore) of Mozart. I had already heard, in normal indoor playback, the belated Vol. 1 of the extraordinary Academy of Ancient Music period-instrument symphoniesfourteen of the very early examples written during the prodigy's travels to London, Holland, and Vienna, 1764-71. But now, rehearing the infectiously spirited performances with their glowingly vital Oiseau-Lyre recording incalculably enhanced, the music sounded as if its incredible young creator had just tossed it off today exclusively for my personal delight.

Perhaps I have minimized the possible dangers and drawbacks of Going Walkabout. There may well be insidious psychological effects of such new epiphanies of *Gebrauchs-* or *Gassenhauer-Musik*. (Or will it be simply *Weg-Musik* for today's teenage *fahrende Gesellen*?) One reacts like the legendary Frenchman to his first taste of ice-cream, feeling that anything so pleasurable must surely be a sin.

In any case, I can testify personally that the euphoria of walkabout listening is powerfully addictive. I should know: I'm already irredeemably hooked.



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MESSIAH

(Continued from page 51)

vincing though it is, the effect is nonetheless a bizarre mélange of Italian sonata da chiesa and Mendelssohn; it certainly could not have been achieved on period instruments. Tobin also disregards Ouantz's dictum that vocal cadenzas should be singable in one breath, giving his excellent battery of soloists prepared cadenzas of excessive length. Yet all in all, were someone to put a pistol to my temple and say, "Choose one Messiah!," I might well pick Tobin's. In addition to the alto forms of "But who may abide" and "Thou art gone up," he presents the duet and chorus version of "How beautiful are the feet" (uniquely using two countertenors, as at the Dublin premiere) and the tenor arioso form of "Their sound is gone out."

Richard Westenburg, in his new recording, uses the edition prepared by noted Handel scholar Watkins Shaw and opts for the revised 12/8 form of "Rejoice greatly." the Guadagni "Thou art gone up," and the soprano-alto variant of the duet and chorus version of "How beautiful are the feet," which he follows with the choral form of "Their sound is gone out." a combination Handel seems never to have tried. Westenburg, however, retains two vestiges of Mozart's arrangement: the assignment of the Guadagni version of "But who may abide" to the bass and the use of muted strings in both the Pifa and "He shall feed his flock.'

Westenburg is without doubt one of the world's finest choral conductors, and he has made Musica Sacra, which he founded and directs, one of the world's truly great choruses. As an interpreter, however, he falls short. He has many good ideas and brings them off effectively, but often he seems to let justifiable pride in his splendid chorus get in the way of the music. He appears unable to resist the temptation to show his talented choristers off like trained seals. He has them croon their way through "All we like sheep" and does violence to one of Handel's carefully considered effects in the "crowd" chorus "Let us break their bonds asunder." On the word "away" in the phrase "and cast away" (measure 11 and similar passages) there is an upward skip of a sixth on two eighth notes, with the second tied to a sixteenth on the same pitch. The doubling instrumental parts have no tie. The autograph demonstrates conclusively that Handel intended this apparent inconsistency. Writing in haste, he inadvertently carried the tie into the instrumental parts in several places, an error he later noticed and corrected. Westenburg breaks the ties in the choral parts, underscoring his group's agility while vitiating Handel's clearly expressed intention. (There are, of course, other conductors-Jean-Claude Malgoire, whose recording was discussed last month, among themwho conform the instrumental parts to the choral lines.)

But this is just a drop in the pan. Here is another lugubrious and painfully slow "Amen." begun by the chorus crooning and swooning, piano. After the ever gathering momentum established in the preceding two portions of this titanic, final threepart chorus-and here the penultimate 'Blessing and honor'' segment is too brisk-the sudden slowing causes the excitement to dissipate like a soft perfume in a summer breeze. The letdown, as a friend put it, is "like stepping into cold molasses." And the debacle is compounded at the end, when the first trumpeter inserts a stepwise progression to a concluding D an octave higher than written. This anachronistic touch of Hollywood is simply tacky

As a group, Westenburg's soloists are minimally satisfactory. John Cheek's is a full, powerful bass voice, and his "The people that walked" is both sensitive and compelling; yet on the whole his stentorian bluster would be more appropriate to the role of the Grand Inquisitor in Verdi's Don Carlos. Nor is John Aler particularly pleasant to listen to, notwithstanding his obvious affection and empathy for the music, since his voice has a pronounced, narrow, bleating vibrato of the kind baroque critics derisively termed the goat's trill. Katherine Ciesinski is the weakest of the group, lacking character in both voice and interpretation, and her vibrato-as pronounced as Aler's—is wide enough to drive a truck through. Judith Blegen turns in the one truly outstanding performance, although her voice is "wrong" for the music, with too much vibrato, and diction that rivals Tourangeau's in unintelligibility. Her interpretations of "Rejoice greatly," "I know that my Redeemer liveth," and "If God be for us' --- and the exquisite embellishments she adds to all three-are sublimely sincere and hauntingly beautiful.

Like the choral singing, the playing is excellent. Westenburg uses organ continuo more than is customary—and to great effect. His own continuo realizations at the harpsichord tend to be stilted and aggressive.

Editions Consulted

- Mozart-Hiller; Breitkopf and Härtel, 1803; reprinted by Kalmus from later edition.
- Chrysander; Deutsche Händelgesellschaft. 1902: reprinted by Belwin Mills.
- Prout; Novello, 1902; reprinted by G. Schirmer.
- Coopersmith; Carl Fischer, 1947.
- Shaw, W.: Novello, 1958.
- Mann; Alexander Broude, 1959.
- Holschneider; Neue Mozart Ausgabe, Bärenreiter, 1961.
- Schering-Soldan (rev. Priestman); Ernst Eulenburg, 1963.
- Tobin; Hallische Händel Ausgabe, Bärenreiter, 1965.

This first digital *Messiah* has a wonderful sonic aura. The atmosphere is intimate, not operatic, the sound is crisp and clear, and the instrumental parts—especially the continuo line—are distinct yet unobtrusive.

In sum, while this recording is a valuable souvenir of what is undeniably the best *Messiah* given each year in New York, it is in no way competitive. There are at least a dozen better accounts currently in the catalog.

At that, Westenburg's *Messiah* is a paragon of virtue compared to Anders Öhrwall's, recorded live in the Adolph Frederik's Church in Stockholm in February 1982. Choirmaster of that church, Öhrwall is also a fine harpsichordist. A member of Holmiae Musicae, one of Scandinavia's foremost period-instrument ensembles, he has built the Stockholm Bach Choir, which he founded in 1964, into one of the finest small choruses in Europe. Yet this is perhaps the fussiest interpretation of *Messiah* ever recorded—unpleasant in almost every respect despite the obviously high quality of both the choral singing and the playing.

Most grating is the mannered treatment of choruses. Every strong beat features an unnatural swell in volume, and the rhythm seems to lurch with the swells, rather like a stick-shift sports car driven by one inexperienced in the subtle niceties of clutch release. This queasy, seasick feeling, a noxious Harnoncourtian mannerism, infects every chorus—most offensively in the prissy singsong "His yoke is easy," which sounds like a massed third-grade Longfellow recitation. And Öhrwall's is yet another *Messiah* marred by a namby-pamby "Hallelujah" and a precious yet ponderous "Amen."

As he does for Malgoire, Martyn Hill sings with a wonderful understanding of the idiom that makes one forgive his anachronistic vibrato. Paul Esswood turns in yet another fine account of the alto part, with particularly affecting embellishments in "He was despised." Soprano Yvonne Kenny's vibrato, though strong, is inoffensive, her voice clearly focused, her diction excellent; one might describe her as a latter-day Isobel Baillie. Baritone Magnus Lindén, on the other hand, possesses one of the driest, ugliest voices it has ever been my misfortune to hear; for once, the absence of vibrato is not a virtue, but a detriment. He is particularly unpleasant when straining for the high notes-a fatal defect for a bass or baritone singing Messiah, since the bass parts tend to lie high.

Despite the occasional overinflection of strong beats and the overly careful, mincing, and precious aura of Öhrwall's interpretation, the playing is lovely, especially in the arias. The treatment of the violin parts in "Rejoice greatly" is particularly gorgeous—sensitively phrased with just the slightest hint of *inégalité*.

Considering Öhrwall's obsessively



Richard Westenburg: a Messiah with serious shortcomings but a valuable souvenir

fussy application of his misunderstanding of Handel's performance practice, one is surprised to discover, toward the end of Part II, that he makes cuts. He omits "Their sound is gone out," as well as "O Death, where is thy sting?," "But thanks be to God," and "If God be for us" in Part III, and the central section and dal segno reprise in "The trumpet shall sound" (though given Lindén's horrendous contribution, for once I won't gripe about the cut). Öhrwall, furthermore, alters Handel's scoring of the aria "How beautiful are the feet," replacing unison violins and continuo with oboe obbligato-albeit beautifully played-and a continuo of bassoon and harpsichord. Shades of Mozart, who assigned much of Handel's unison violin part in this aria to a solo flute!

Although magnificent from the technical standpoint—with especially realistic sound and clean pressings free of distortion—Öhrwall's *Messiah* is an interpretive disaster, superfluous for all but the archivist.

Far and away the best recording in the most recent crop is a single disc of portions of Part I that documents a complete performance given at a four-day Messiah symposium held at the University of Michigan in December 1980. Performed by the university's period-instrument ensemble, Ars Musica, and the Early Music Ensemble Chorus under the direction of harpsichordcontinuist Edward Parmentier, the record features four of the world's finest baroque specialists as soloists. All of them-Emma Kirkby (assigned the soprano forms of "Then shall the eyes" and "He shall feed his flock"), René Jacobs (given the Guadagni form of "But who may abide"), Marius van Altena, and Max van Egmond-are in superb form and sing with conviction, sensitivity, and impeccable taste. The instrumental playing is of an equally high

standard. With almost nothing of the eccentric in Parmentier's interpretation, this is the only period-instrument representation of *Messiah* to rival Hogwood's. When one recalls that a foundation grant made the Westenburg recording possible, it becomes an especially bitter irony to learn of the university's financial inability to record the whole oratorio. May some enterprising record-company executive run, not walk, to Ann Arbor to sign up Parmentier and Ars Musica to record the whole of *Messiah*! In the interim, the disc of selections is a must for devotees.

Despite the stampede back to authentic *Messiah*, attempts to modernize it and keep it "up to date" continue apace. "Hallelujah" and "I know that my Redeemer liveth" (retitled *Sun Dance*) turn up in tasteful popular arrangements by Quincy Jones in the soundtrack from the movie *Bob and Carol and Ted and Alice*. The notion of Sarah Vaughan singing the aria would have tickled Handel no end; after all, Kitty Clive, who had starred in *The Beggar's Opera*, was one of the soloists in the first London production of *Messiah*.

Simply gruesome, however, is a pop version released a decade ago under the title "The New Messiah." This attempt at a "new and improved" product, arranged and conducted by Andy Belling, is a monument to bad taste. In "For unto us a Child is born," for instance, he leaves out those wonderful sixteenth-note melismas on "born"—probably because his Infinite Wisdom told him that his One Experience Choir would have made hash of them.

The latest modernization, a record of synthesizer-accompanied choruses sung by the Elmer Iseler Singers, is better, if only because Handel's notes are not tampered with to any significant degree. Yet "The Electronic Messiah," as it is called, is no success. The synthesized accompaniments are not particularly colorful and have none of the paradoxically respectful humor that makes Wendy Carlos' "Switched-On *Brandenburgs*" such a delight. The choir, up to its customary high standard, can hardly be blamed for not being entirely "in sync" with the obviously dubbed-in accompaniments. The interpretation of the choruses, however, leaves much to be desired. Handel's dynamic markings are frequently disregarded, and the mawkishly affectionate "Please don't squeeze the Charmin" realization of "Hallelujah" is nauseating.

And finally, on the subject of abuse, the single disc of excerpts conducted by Randolph Jones on Summit is another travesty despite use of the original orchestration. The selections are thrown onto the disc in scrambled order, many of them severely cut. For example, thirty-eight measures are dropped from "For unto us a Child is born," and "Why do the nations," which concludes the first side, ends with the last notes of the main section. As HF's Allan Kozinn described it, "Instead of 'the kings of the earth' rising up, the needle rises up out of the grooves."

Yes, *Messiah* is alive and well. It pervades every aspect of our culture. It figures centrally in a murder mystery—Jane Langton's *The Memorial Hall Murder* (Penguin Books, 1981), in which each chapter begins with a musical quotation from the oratorio and the denouement takes place during an apparently unabridged concert performance at Harvard University.

The Soviets have knuckled under to its power, too. In April 1979, the *New York Times* reported that the oratorio had been heard in the Soviet Union for the first time since the revolution—Mozart's arrangement, performed at the Moscow Conservatory under the direction of Gennady Rozhdestvensky.

Messiah has even invaded the discotheques. I recall standing in awe in the balcony of New York's Studio 54 shortly before Christmas in 1981, watching hundreds of transported dancers wildly carrying on to an effective, mind-boggling neo-Lisztian disco paraphrase of "Hallelujah" (a Casablanca recording that antedates the rather poorly done excerpt in RCA's "Hooked on Classics"). I could not help but recall the words of Handel's friend Ann Dewes, who wrote to her brother Bernard "Bunny" Granville: "I hope you find Mr. Handel well. I beg my compliments to him: He has not a more real admirer of his great work than myself; his wonderful Messiah will never be out of my head; and I may say my heart was raised almost to Heaven by it." Messiah alone may not have raised those hearts in Studio 54 that cold December night, I admit, but had Handel been there, his only gripe would have been that, since Messiah is in the public domain, he would be unable to collect royalties.

GOULD

(Continued from page 56)

cious" version (his words) and that the exact mond he needed was achieved by cutting from one to the other. [For a similar description, see Gould's "The Prospects of Recording," April 1966 HF.—Ed.] This original approach to interpretive splicing delighted him, and I know of no other musician who integrated it into his working methods.

Gould loved recording. The studio was his laboratory, his playground, and his home. He embarked upon each new project with an enthusiasm and a childlike joy that were very moving. Even if one disagreed with his interpretive views, which were always intended to be highly personal and in no way traditionally "definitive," one was inspired by the depth of his perceptions and the integrity of his intentions. The fortunate few who were permitted to attend those very closed, almost secret, sessions-producer, control engineer, tapemachine operator, piano technician-were treated as confidants, colleagues, and trusted friends, and they shared the exhilaration of his uniquely creative music-making.

Andrew Kazdin: The time is early 1971. The place is the darkened auditorium on the top floor of Eaton's department store in the middle of Toronto. It is evening, and the building is almost empty. There are four people at work. One is the store's night watchman—who also knows how to run the elevator. Another is Verne Edquist one of the best piano tuners I have had the pleasure to work with. The third is Glenn Gould—with or without an overcoat. I'm the fourth. No one else is allowed.

For the next nine years, this recurrent scene became the crucible for approximately twenty-six records of Gould's musiemaking, his total output for CBS during the period.

From 1965 to 1971, we had worked together in Columbia Records' 30th Street Studio. The cast of characters was slightly larger—sound engineers, air-conditioning men, security guards, maintenance men—but one thing had already become standard: no visitors.

In view of the "airtight" security surrounding a Gould session, it is amazing that critics and writers have, over the years, had the gall to "report" on Gould's working methods for recording an album. Who told them? Certainly I didn't, I don't believe Edquist ever did, and Gould's own reports were carefully "laundered" so as to avoid details.

As in all facets of the arts, I suppose, mysterious and romantic legends spring up about "the unknown." Lots of people eat that up, and writers are always prepared to feed them. Gould became known as a "tape wizard"; he wasn't. He merely understood the potential of the tape-splicing process. His recording sessions became publicized as kind of laboratory experiments where Frankenstein monsters were assembled from scraps of carnage; they weren't. All one could see would be Gould hard at work recording his own interpretation of a piece of music in as accurate and beautiful a fashion as possible. The process, so simple as to be boring to an observer, consisted of three parts: 1) record a complete take of the movement (or, in the case of longer works, a large section of the piece); 2) listen to it and carefully note finger slips and/or imperfect musical balances; 3) go back to the piano and record small inserts to fix the errors. That's all there was.

Now sometimes there were complications to each of these steps. The quest for the "perfect" basic take could be satisfied with as little as one playing or require as many as a dozen attempts or, in rare cases, be frustrated by the realization that it would not be forthcoming that night and that more thought was necessary.

Sometimes listening to these first takes could consume much more time than their recording. It was a critical decision to pick the one version that would stand as the basic skeleton of the piece.

On occasion, the "fixes" themselves could cause problems. Gould was not without "mental blocks," and periodically he had trouble overcoming a flaw in a tricky passage. But these exceptions were rare. Mostly, the sessions ran like a well-oiled machine. It just took plain hard work and long hours—as many as six or seven more or less nonstop.

There were really no tricks used, but on two occasions, a few bars of music were overdubbed. This meant adding a few extra notes to the ones already recorded by Gould's two "full" hands. One case involved his own piano transcriptions of Wagner—a situation preplanned in his four-handed setting. The other instance was in his recording of Liszt's transcription of Beethoven's Fifth Symphony. A few measures in the finale were played by more than "two hands." In an output of more than seventy-three records, these "tricks" could hardly be called typical of his working methods.

In the forty or so Gould records I produced, one factor remained constant: The quest for perfection in production technique was matched by his quest for perfection in musical performance. Each recording was indeed a work of art and a justifiable source of pride for us both.

Samuel H. Carter: It should be obvious that anyone who worked with Glenn Gould held him in the highest esteem as the complete musician. I certainly did, and would only add that I also found him both amiable and utterly fascinating as a man. I was privileged to have been his coproducer and editor on his final five recordings (two of which will appear posthumously), including, of course, his second recording of the

Goldberg Variations.

It is certainly true that Gould wished to exercise the tightest possible control over every aspect of the recordings, particularly in recent years, since—apart from an occasional appearance on CBC television—this was his main method of conveying his art to the public. He wanted to make sure that each statement was genuinely his own. It is also true that he was quite fascinated by recording technology and enjoyed using it to the fullest—an interest far from exclusive with Gould.

In a sense he has come dangerously close to being victimized by his own eloquence in the service of a mystique he slowly created. To read or hear his discussion of the uses of editing and splicing in both video and audio recordings, one could easily come away with a mental image of hundreds of snippets of tape being compiled into some fantastically imaginative, albeit "unreal," performance.

In my own work with Gould, the actuality was at once more mundane and yet even more remarkable. For all his ecstatie celebration of the glories of the electronic age, he required less splicing than any other solo artist I have edited over a period of thirty years. He always came to our studio sessions totally prepared, though by his own account he spent far fewer hours in actual "practice" at the piano than most. Moreover, he knew exactly how he wanted to play. There was nothing-or so it seemed-of which the piano is capable that he could not convert to the service of his musical vision. It is this quality of intentionality that is the hallmark of his playing-quite the antithesis of randomness implied in the "scatter-gun" or "jigsaw puzzle" approach to a recording.

If Gould used two or more takes in some combination to attain a more compelling result, that is scarcely a radical departure from common practice. So we are brought directly back to the basic argument whether any degree of combination invalidates a "performance." Surely the use of editing to get a more controlled result has been accepted, to some extent at least, by all but the "purest" critics of the practice, and Gould's use of this procedure did not appreciably exceed that of other pianists. His concern with maintaining the integral character of a performance was paramount. No combining, however eleverly done, ran counter to this, and the number of one-take movements in his recordings would come as a surprise to most who have read his own statements on the subject. Should some Supreme Court on Acceptable Recording Practices ever have decreed "no more splicing," Gould would have been one of the most fortunate recording artists. He wouldn't have liked it, but it would have had little effect on his ability to produce recorded performances not much different from the unique ones it is our good fortune to have. HF

BILLY JOEL

(Continued from page 69)

you want to give up and get a day job? Joel: I used to feel like that, years ago, but I don't now. I don't know whether that's ego, or whether there just isn't anybody who's that hot. I think Elvis Costello is an excellent writer. As a musician, Steve Winwood is awesome to me. Let's see, who else? It's kind of hard to top the Beatles. As far as just a great rock & roll band goes, I still think the Rolling Stones are the best. Backbeat: Have you made any contact with the Beatles, since you started playing in the same league, so to speak?

Joel: No. I wouldn't know what to say. John Lennon had a house not far from where I lived on Long Island, and I always wanted to just go over and knock on his door. But I respected the man's privacy. I didn't want to bother him. Now, I wonder if maybe I shouldn't have just said hello.

Backbeat: A lot of your music—like Where's the Orchestra [from "The Nylon Curtain"]—has a very theatrical, Broadway feel to it. Do you have any desire to try something different, to write a musical? Joel: Yeah. Eventually I'll probably do something like that, or compose some movie themes. I'd like to write for other people, too. It's funny, I'm getting calls—John Cougar wants me to write a song for Mitch Ryder. David Johansen wants a song. Linda Ronstadt wants a song. Rodney Dangerfield wants me to write a song for a movie he's doing. That's what I've always wanted to do—write for other people. But now I don't have time. When we get through with this tour in January '83, I have to go right back into the studio and make another album. It's a year-round gig.

Backbeat: You've obviously become very adept at working in the studio. You've said you do most of your composing there, bouncing ideas off of Ramone and your band. Do you have any desire to offer your expertise to other artists, to possibly produce someone else?

Joel: I don't know. I might have a hard time not being involved firsthand with the playing. I think I'd go nuts in the booth if I was just watching. I'm basically a musician— I'd want to stick my two cents' worth in too much, which might take away some of the authenticity of what the people were trying to do.

Backbeat: Did you always know that you'd be a musician, or were there doubts or alternatives?

Joel: When I was nineteen I was a selfsupporting musician, and that was success. I didn't have to have another job. I could pay my own rent and the grocery bill. I don't think anything has ever felt as great as that did back then. So no matter what, if record sales bomb out or "Billy Joel—Pop Star" goes down the toilet. I can always make a living as a musician. I guess I've always known that.

Backbeat: Speaking of sales bombing out, where do you think the record industry is going? Do you think all the reports about its imminent demise are accurate?

Joel: Yeah, I think that it has bottomed out. All the people in the Sixties who helped make the music business the big monster that it was are now my age. They have kids. They're not going to the store once a week and buying records anymore. Plus. there isn't a lot of music being made for them. My idea of hard rock is Led Zeppelin. I'm not going to take AC/DC as a substitute for Led Zeppelin. So why should we buy records?

And also, there's the whole home taping thing. I understand why kids tape. Money's tight, your friend has got a record, you've got a cassette machine and a cassette, so tape it. I did it at that age, too. The only thing that bothers me about it is these kids aren't engineers and they're taping on any kind of crappo cassette player they can find. They're losing a generation—they're not getting first-hand quality.

The industry's bottoming out. It has had its run. But that doesn't mean there won't be any more music made. Maybe pop music as we know it will change. It's time for some new art forms.



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BACKBEAT REVIEWS

(Continued from page 76)



Harvie Swartz: an adequate composer but a first-rate player

sense. But he has trouble handling the manipulation of larger thematic groups. *Rainbow*, which makes up the first half of Side 1, has been assembled from a number of different, and not necessarily complementary, melodic fragments. While each has some potential for further development, Swartz elects to throw them together into a crazy-quilt fabric that glaringly reveals its seams.

The highlights, in fact, come not from the piece itself, but from two good solos. Cellist Erik Friedlander, making his recording debut, displays a totally unexpected ability to produce jazz-inflected rhythms in *arco* passages. And Swartz produces a technically adroit improvisation whose fluid, note-bending sound resembles an Indian sarod. But the potential scope and emotional range of the solo is too prescribed by the repetitious pedal figure that lies at its foundation.

Beauty Within the Beast is a better sample of Swartz's compositional ideas. Although none of the thematic material is particularly impressive, the solo blocks and rhythmic sections have been assembled with a wonderful sense of contrast. The piece starts slowly, builds to a Bolero-like rhythmic climax, then simmers down to a thoughtful epilogue-an impressive organization of the output of improvisational musicians. The final piece, Leaving, is clearly a reflection of Swartz's sentimental inclinations. There's nothing particularly wrong with sentimentality, but in this case, the music doesn't have any more lasting impact than the emotion does.

Throughout the album, the leader is not served very well by his associates (aside from Friedlander). Pianist Ben Aranov has listened too closely to Swartz's usual associate, Steve Kuhn; flugelhornist John D'earth's sound is too juicy for this ensemble; and drummers David Charles and Peter Grant seem to fade into the wallpaper. DON HECKMAN Bob Wilber and the Bechet Legacy: On the Road Joanne Horton, producer Bodeswell BW 105 (Box 624, Brewster, Mass. 02631)

The Sidney Bechet legacy, as kept alive by protégé Bob Wilber, comprises not only Bechet's familiar clarinet and soprano saxophone styles, but also his compositions. Not surprisingly, they embody the same warmth, passion, and fiery sense of drama that his playing did. In view of their melodic appeal it seems odd that, aside from Wilber's performances, they are almost totally neglected these days. Ballads such as *I Keep Calling Your Name* and *Ghost of the Blues* have a haunting charm; his more uptempo material—*What a Dream* and *Polka-Dot Stomp*—are superb jazz tunes.

"On the Road" is split between Bechet the performer and Bechet the composer. Except for Bechet's classic rendition of *Summertime* (which lifted him from relative obscurity in 1939), Wilber does not copy note-for-note. Between opening and closing choruses that stay very close to his mentor's readings, Wilber aims more for stylistic essence. His loose and spirited performances on soprano sax and clarinet are brilliantly complemented by Glenn Zottola's Armstrong-like trumpet, the two men exchanging solo and support roles with flowing ease.

Summertime aside, the non-Bechet compositions (Lady Be Good, Love for Sale, Indian Summer among them) are of less interest. One of them, Clarence Williams' Santa Claus Blues, is entirely vocal, sung by Joanne Horton with the forthright positiveness of the black vaudeville singers of the '20s. Bechet's Ghost of the Blues also includes some vocalizing; it is much less effective than the all-instrumental Classic Jazz recording Wilber made in 1959 with pianist Dick Wellstood and trombonist Vic Dickenson. JOHN S. WILSON

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