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Most of the companies now introducing digital audio players were just recently introduced to digital audio themselves.

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The 32-channel X-800 model shown (rear) is the most sophisticated audio recorder ever engineered. Taking over where the last generation of analog recorders left off.

And now the digital sound revolution has come full circle, from our pioneering work in digital tape recording to our new digital disc player. Taking over where the last generation of analog record players left off.

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⁷⁶



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Kathleen Davis, Director of Production Janet Cermak,

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Publisher

ADVERTISING

ADVERTISING New York: ABC Leisure Magazines, Inc. 825 7th Ave. 7th Fior. New York. NY 10019. Telephone (212) 225.48360 Jampis A. Casella, Advertising Director: Raymond Foster. Asso-viate Advertising Director: Raymond Foster. Asso-viate Advertising Director: Raymond Foster. Asso-viate Advertising Director: Raymond Foster. Maddocks. Director of Graphics. Kathleen Davis, Director of Production Leisen and Advertising Production Manager. Cecella Midwest: ABC Leisure Magazines, Inc. 547 Whitter Ave-res. Glassified Advertising Nanager. Science and Science and Midwest: ABC Leisure Magazines, Inc. 2020 Avenue Science Science Advertising Director, Vision Midwest: ABC Leisure Magazines, Inc. 2020 Avenue Asochates, Suite 245. Century City, Calif 30067. Telephone Science Science Mid Street, New York, NY 10017. Telephone Stres, Inc. 50 East 47nd Street, New York, NY 10017. Telephone (212) 682-0385. Peter McCann, The McCann Group, 333 Michigan Avenue, Chicago, III, 60601. Telephone, (312) 782-284 Midwest Avenue, Advertising Communications in c. New

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

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() PIONEER

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3 Heads, Direct Drive Capstan Motor, dbx^{*}, Dolby^{*} B & C NR, Manual and Reference Bias/Level/EQ Calibration, Digital Real Time Tape Counter, 14-dot FL Bar Graph Meter, Monitor Sync, Block Repeat (Memory Repeat), Auto Locator, Memory Stop/Play, Computomatic Program System, Power-Assisted Eject Door, Auto Spacer, Standard Remote Control Unit.



3 Heads (Ferrite Play, Sendust Rec), 3 Motors, Direct Drive Capstan Motor, Dual Capstan, dbx, Dolby B & C NR, dbx Disc Position, Manual & Reference Bias/Level/EQ Calibration, Digital Real Time Tape Counter, 30-dot FL Bar Graph Meter, Monitor Sync, Auto Tape Select, Block Repeat (Memory Repeat), Auto Locator, Memory Stop/Play, Computomatic Program System, Power Assisted Eject Door, Pitch Control, Auto Spacer, Resonance Free Diecast Chassis, Remote Control.

Z-7000



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Number 3 in a series

Elliptically Speaking

Stylus size and shape are critical to the performance of any phono cartridge. Small is generally better to trace more accurately the highest frequencies. However, if the radius is too small, the stylus will ride at the bottom of the groove, where dirt and debris tend to gather, and noisy playback is the inevitable result. Fortunately, stylus designers have found a way for you to have your cake and eat it too!

One Stylus, Two Radii



The answer is the elliptical (or BiRadial) stylus. Seen from the front it appears to have the same radius as a spherical tip (usually 0.7-mil) so that it touches the groove walls about halfway down. But from the side, the radius may be from 30% to 60% smaller. This smaller side radius still tracks halfway down the groove wall, but now can fit into much smaller groove variations. A major difference in elliptical stylus choices is the exact size of this 'side' radius. A-T offers BiRadial tips with a choice of 0.2-. 0.3-, and 0.4-mil side radius. The smaller the side radius the more benefits in terms of tracing ability, especially at very high frequencies and at the crowded inner grooves.

For Better Systems Only

While an elliptical stylus better fits the record groove, its small contact area (rather egg-shaped and smaller than the spherical contact area) puts increased pressure on the groove wall for the same vertical tracking force (VTF). For this reason, elliptical styli are recommended only when low VTF can be achieved. This demands a cartridge mechanism with good responsiveness (compliance) and a good tone arm. Fortunately, most modern systems can take full advantage of the benefits of the BiRadial stylus.

A Microscopic Look

Since most better styli are almost invisible, and some advertising claims a bit optimistic, you may well question whether you are getting the precision you're paying for. Which is why we encourage A-T dealers to install sophisticated stereo microscopes designed to display styli correctly. Viewed ultra close-up, A-T styli display accurately dimensioned, well-polished tips. (We don't believe your valuable records should do the final polishing.) The microscope can also display any faults of your present stylus, including the ine vitable wear. We urge you to take a close look for yourself at your Audio-Technica dealer. And our next installment will tell you about another class of very advanced stylus designs.



audio technica. About This Issue

Inside the Pages of May's High Fidelity

HIGH FIDELITY HAS BEEN FOLLOWING new developments in car stereo for many years, but this marks the first time we have given the topic such extensive coverage. In doing so, we are acknowledging manufacturers' strides in improving the quality of car gear, and we are also, literally, putting these manufacturers to the test: Part of our special section is devoted to the first in a series of test reports on auto-sound components. Analyzing this equipment is a far cry from analyzing home gear (see "Tackling the Tests," page 36). Performance criteria that suggest excellent results on a receiver at home may actually indicate poor results on a mobile music system.



Road-test rig

When we began developing our testing program, we realized the potential contradictions inherent in reporting only lab results and thus came up with the second, on-the-road portion of our tests. Our road-testing rig can accommodate all sizes and shapes of front-ends; the smaller ones can be dash-mounted, and the oversized units (such as that pictured above) can perch easily on a homemade wooden jig. This test bed thus enables us to exchange head-end units quickly and take them on our fifty-mile test track. By reinforcing lab results with practical on-the-road listening tests, we can offer more meaningful results. Our car-stereo coverage begins on page 27.

Coming in June—New Technologies

Our June issue will mark another step forward in the evolution of HIGH FIDELITY. Longtime readers know that we have followed home video from its inception to its current prominence; that we were the first magazine to conduct lab tests on video equipment (November 1978); and that we were the first in our field to cover video regularly in VIDEO TODAY & TOMORROW, which was launched in late 1980. Next month we move even closer to the twenty-first century with a sixteen-page section called New Technologies.

New to our coverage will be home computers, which, as you will discover, have a lot in common with music, audio, and video. For example, next month we'll suggest several ways to organize your disc and tape collections (audio or video) with a computer. We'll also review performances of pop and classical music on video disc as well as music-related computer programs. --- W.T.

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Complete Car String Gorde (Page 27)

Cover design: Robert Maddocks Cover photo: George Menda

ON THE COVER: (from top) Bose 301 Series II loudspeaker, NAD 4150 tuner, Mitsublshi DP-101 Compact Disc player, Teac Z-6000 cassette deck, Sota Sapphire turntable with Signet XK-35 tonearm

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Letters

Digital Queries

Your long-awaited article on digital audio discs ["Digital Sound: It's Here!," December 1982] is very informative but leaves two major questions unanswered. The first, and more important, is about blank Compact Discs: When will they be available, and will a separate component be needed in order to record on them? It seems to me that CDs could make the cassette obsolete if just a single component were required for both recording and playback (and if components for dubbing from one disc to another were made available).

The second question pertains to international compatibility. There is all the difference in the world between an Angel pressing and an EMI import of the same release, largely because of the RIAA. Will digital technology wipe away the differences between domestics and imports? And where will CDs be manufactured: Will the U.S. now manufacture its own Philips and Deutsche Grammophon discs?

Mark H. Schmieder Concord, Mass.

Michael Riggs replies: There will be no blanks: The Compact Disc is strictly a playback medium. As for your second question, yes, there is often a considerable sonic difference between domestic and import versions of the same recording, though not because of the RIAA equalization curve (if that's what you mean), which is an international standard. The reasons have more to do with differences in disc-cutting practices and sometimes in the quality or equalization of the master-tape copies distributed to overseas subsidiaries or licensees. The Compact Disc will eliminate most, if not all, such variation; certainly there will cease to be any rationale for premium remasterings, since any two CDs made from the same tape will sound exactly alike. And as digital displaces analog in the recording studio, almost all of the remaining sources of unpremeditated sonic variability will dry up, as well.

At present, all CD manufacturing is in Europe and Japan, but CBS/Sony plans to open a North American production facility in 1984.

In regard to Michael Riggs's article on digital sound, I would like to know if there is any way to convert conventional analog phonograph recordings into digital recordings, and if so, how? And will the recording industry handle the conversion, or the consumer?

Michael A. Sauer Evansville, Ind.

Michael Riggs replies: If you like, you can use a PCM adapter (such as the Sony PCM-FI or the Technics SV-100) and a VCR to dub LPs onto video cassettes in digitally encoded form. There is no particular advantage to this, however, other than longer continuous playing time and freedom from further wear and deterioration. It is also possible to make Compact Discs from analog master tapes, which is exactly what the record companies will do to create many of their early releases. The sound won't be any better than that on the tapes, but it won't be any worse, either—something that can rarely be said for LPs, which usually degrade the sound at least a little.

Misinformed

I have read HIGH FIDELITY for more than twenty years for your helpful reviews of recordings and equipment. I was therefore greatly disturbed to read the technical misinformation in the fourth paragraph of the Carver tuner test report [January].

It is not true that the L-R signal is not frequency-modulated. It is true that the difference signal is first amplitude-modulated onto a subcarrier to move it to a different frequency range, as compared to the L+R signal. If the upper-frequency limit of audio is 15 kHz, this means there is information in the frequency range of 0 Hz to 15 kHz and 23 (38-15) to 53 (38+15) kHz. All of this information is then frequency-modulated onto the carrier.

The intrinsic nature of noise in FM is that the effect of received noise power on output signal-to-noise ratio depends on how far the noise is from the carrier frequency. Since decoding a stereo signal requires using that information transmitted in the 23–53 kHz range, stereo FM contributes a disproportionate amount of the total noise.

There is another ambiguity: Your quieting curves show one for mono reception. It is my understanding (from another review) that the tuner has no stereo/mono switch; if this is true, such performance would only be obtained from signal generators set to "mono" or from stations not broadcasting a 19-kHz pilot signal. **Charles G. Nelson** Professor and Chair Department of Electrical and Electronic Engineering California State Univ. Sacramento, Calif.

You're right on both counts. However, the review does mention, in the second paragraph, that the TX-11 has no mono switch.—Ed.

Don't Forget DBX

Your comparison of Compact Discs and LPs [January] is a well-written critique of an exciting new medium. However, any discussion of low surface noise, wide dynamic range, durability, and cost is incomplete without at least a mention of DBX-encoded discs and cassettes, especially those made from digital masters. **Steve O'Brien**

Sherman Oaks, Calif.

Time for an Update

I am pleased that HIGH FIDELITY is once again devoting more space to longer articles and reviews of classical music than had been true in the recent past. Not too long ago, you devoted several issues to huge discographic discussions of the operas of Mozart and Wagner, and your Beethoven discographies of the early 1970s were

Correction

March's "Basically Speaking" contains a misprint in the first complete sentence of the third column. The sentence should read as follows: "Most [fixed-coil cartridges] require the industry-standard 47,000 ohms of resistance in parallel with some capacitance between 100 and 500 picofarads, the exact value depending on the particular model."

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

unsurpassed. If memory serves, you also did some time with Verdi, chamber music, various other composers, piano music, et al. Do you plan another round of listening and reporting in such breadth and depth as before? A lot has transpired in the past decade, and it would be fascinating to discover just how such articles would compare and contrast all that has happened in it. If memory serves again, when you did the Mozart and Wagner series, you claimed you did them just because it seemed like a good idea at the time, not to commemorate such-and-such an anniversary. They were models of their kind, and updatings of them and many other categories would be a great service to your readers. David L. Miles

Charlevoix, Mich.

The timing of Mr. Miles's letter is very convenient: This issue contains the first of four parts of a relatively "huge discographic discussion of the operas of . . . Wagner." Other such projects, not necessarily tied to anniversaries, are being conceived ____Ed

Basic Recording, 101

This letter is prompted by J.B. Moore's article on home recording studios ["Compact, Portable Multitrack Studios," November 1982]. He notes that both the Fostex Model 250 Multi-tracker and the Tascam Model 244 Portastudio are useful for learning the basics of recording. That is my purpose. Can you recommend any books on the subject? Also, does the Fostex have simul-synch? James Makagon

Pago Pago, American Samoa

Fred Miller's Studio Recording for Musicians (Music Sales Corporation, 799 Broadway, New York, N.Y. 10003) comes to mind, as does John Woram's The Recording Studio Handbook (Elar Publishing, 1120 Old Westbury Rd., Plainview. N.Y. 11803). Both authors have written several articles on home recording for HF, both are experienced producer/engineers, and both explain their area of expertise in language the layman can understand. Remember, though, the best way to learn is by doing; the Tascam and the Fostex are patient, affordable teachers. And ves, both have simul-synch.-Ed.

Adler Memories

The tribute to Herman Adler ["Behind the Scenes," January] brings back memories of the Sunday afternoon record concerts Adler arranged in 1944-45 when our signal intelligence unit was stationed in the Atlas Mountains of Algiers and later in the Naples-Caserta area. His accompanying commentaries were interesting and informative, such as the lecture on the differences between North German and South German organs prior to introducing us to Buxtehude's organ music **Hillary Fisher**

Los Angeles, Calif.

Someone Slipped Up

Only now have I read John Canarina's review of the second album of my Haydn symphonies [October 1982]. His generous comments are marred only by the reservation that the second set "doesn't seem to have been produced with the

same care as the earlier one." This points to a slip-up in quality control somewhere down the line, and it may well have been rectified by the time this reaches you. As regards the production of the original tapes, homogeneity of quality was guaranteed by a remarkable set of circumstances, sufficiently unusual to warrant recounting.

After we had recorded the twelve Havdn symphonies in Naples, the reviews of our Schubert symphonies came out, expressing a wish for better string sound if possible. With this in mind, and after careful consideration, Edmund Purdom and I decided to rerecord the whole Haydn series, adding an all-star group of first violins to the orchestra, led by the brilliant Franco Gulli. This means that the present recordings were all made under identical conditions, within the week

between Christmas and New Year, a symphony per session, two sessions per day. Thanks to the revolutionary design of Purdom's six-track equipment, I was able to balance all the six tracks myself at transfer time and thus obtain exactly the orchestral balance and color that I wanted for each symphony. The sound for all twelve symphonies was virtually identical when the tapes were sent to New York, and the product on the market should reflect this unity of concept. Denis Vaughan New York, N.Y.

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



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AUDIO High Fidelity News

New equipment and developments



Magnavox's Smallest CD Player

Said to be the smallest, lightest Compact Disc player yet introduced, Magnavox's top-loading FD-1000SL is 121/2 inches wide by 3 inches high by 10¹/₂ inches deep and weighs only about 11 pounds. A 4:1 oversampling ratio, noise shaping, and digital transversal noise filtering enable the unit's 14-bit digital-to-analog converter to achieve a signal-to-noise ratio equivalent to that of a conventionally operated 16-bit D/A chip. An advantage of this method is that it moves the effective sampling frequency from 44.1 to 176.4 kHz, permitting the use of simple third-order outputsmoothing filters, for better phase linearity in the audio band. Other features include track skipping, forward and reverse scan, pause, repeat, and the ability to program a playback sequence of as many as fifteen tracks in any order. Price is \$800. Circle 120 on Reader-Service Card



An "Integrated Amp" from Levinson

Working together, Mark Levinson's preamp and power amp might well be considered the ultimate integrated amplifier. Making use of its companion's power supply and line-amplification stage, the ML-12 preamp (\$1,200) is designed to be used only with the ML-11 power amp (\$1,700). The ML-11, however, can be used with any preamp and is rated at 50 watts (17 dBW) per channel; in the bridged mode, its power rating increases to 140 watts (21½ dBW) into 8 ohms. The ML-12 preamp is equipped with a universal phono stage and will accommodate moving-coil pickups without an accessory step-up device. The preamp also includes a two-position input selector, tape monitoring facilities for one tape recorder, a mono-stereo switch, and separate volume controls for each channel.

Circle 131 on Reader-Service Card



Picturing Sound

A spectrum analyzer can be a fascinating and useful adjunct to an equalizer. Numark's SD-2900 (\$300) provides dual octave-band displays, each calibrated to show a level range of +8 to -20 dB in eight segments. Using such a device for room and speaker equalization necessitates a pink noise source and calibrated microphone, both of which are included in Numark's PX-2626 (\$160) accessory package. *Circle 122 on Reader-Service Card*



Form Follows Budget

A two-way system designed for accurate time-domain reproduction, the Model II from Acoustical Physics Labs is available in three forms: prebuilt at \$600 a pair; as a kit for \$400 with cabinetry included; as a kit for \$225 without cabinetry but with instructions for cabinet construction. The Model II's driver complement consists of a 10-inch polypropylene woofer and a one-

inch soft-donie tweeter mounted in free air. The system has a rated frequency response of 28 Hz to 22 kHz, ± 2 dB, and a maximum power handling rating of 150 watts. *Circle 130 on Reader-Service Card*



Sennheiser Hits the Streets

Sennheiser's MS-100 headphones are designed to complement any personal portable tape player or radio. They come with a ¼-inch plug converter, enabling them to be used with home audio equipment as well. Priced at \$85, the MS-100s are said to have a frequency response of 20 Hz to 20 kHz and a sensitivity of 96 dB for a 1-milliwatt input.

Circle 125 on Reader-Service Card

Self-Monitoring from Technics

Technics has found still another use for computer chips in audio equipment. A microprocessor built into the SA-410 receiver continuously monitors operating parameters at several points in the unit's circuitry and makes adjustments in order to keep distortion low. The unit is rated at 45 watts ($16\frac{1}{2}$ dBW) per channel with 0.007% total harmonic distortion. Key operating features of the SA-410 include: sixteen station presets, frequency-synthesis tuning with numerical and analog tuning displays, two tape monitor loops, and a switchable infrasonic filter. The SA-410 sells for \$300.

Circle 124 on Reader-Service Card



On the Road with Polk

Topping off Polk's new line of Mobile Monitor loudspeakers is the three-piece, two-way MM-V, consisting of a 51/4-inch woofer, a 3/4-inch dome tweeter, and a complex 12-dB-per-octave crossover network. Its three-piece configuration is said to allow optimum placement of each driver for best possible balance and imaging. The bass unit has a cast-magnesium basket and a polymer-impregnated nylon cone, while the tweeter is ferro-fluid damped for smooth response and high power handling. A onepiece flush-mount version of the same system, the MM-IV, sells for \$100; the MM-V sells for \$130. Coaxial and single-driver systems are also available.

Circle 121 on Reader-Service Card



Updating a Classic

The venerable Klipschorn has recently undergone some modifications, all aimed at reducing modulation distortion and improving frequency response. Internal connections are now silver soldered, and internal wiring is kept to a minimum by segregating the high- and low-frequency portions of the crossover network into the appropriate portions of the enclosure. For the remaining wiring, low-loss Monster Cable and Monster Wite are used exclusively. And, finally, to ensure a close fit between the speaker and the two sides of a room corner, the tailboard assembly now sports a neoprene gasket. The Klipschorn costs \$1,390. Circle 132 on Reader-Service Card



Sony's Low-Mass Moving-Coils

At a mere 3 grams each, Sony's new moving-coil cartridges are said to be among the lightest available. The company says it has achieved this by combining its proven figure-eight coil system with tiny high-efficiency ring magnets. All three pickups have user-replaceable styli—elliptical for the XL-MC1 and XL-MC2, line-contact for the XL-MC3. The XL-MC3 is also distinguished from the other two models by its use of a boron-tube cantilever for low mass and high rigidity. Prices are \$60 for the XL-MC1, \$80 for the XL-MC2, and \$200 for the XL-MC3. Miniature HA-T10 step-up transformers, which plug directly into the standard phono inputs of an amp or preamp, are available for \$25 per pair. *Circle 119 on Reader-Service Card*



NOTHING UP OUR SLEEVES.

NO LINT. NO LINT. NO TEARING. NO SCRATCHING. NOTHING. Serious record collectors know that the inner sleeves provided with most records often do damage tather than offer protection. They disintegrate over time, generating and depositing int on record surfaces. They treate static, which causes "clicks and pop" in addition to attracting dust like a magnet.

In short, paper inner sleeves are good for one hing — throwing away. Nagaoka No. 102 Anti-static Record Sleeves

Anti-static Record Sleeves are the sure way to keep your records mint. Each sleeve is subjected to a spezial static prevention process and therefore is not susceptible to the generation of static generation of static elevinicity created by the inicition between the record and the sleeve itself. Nagaoka Anti-static Record Sleeves will not deteriorate over time and therefore cannot scratch valuable records with selfgenerated dust.

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AUDIO CrossTalk

Practical answers to your audio questions

Back-Cue Blues

I'm having a hard time deciding which turntable to buy—the Technics SL-B1 or the new SL-B10. I want to use whatever I get for deejay work, and I don't know whether the P-Mount cartridge for the SL-B10 can handle slip cueing, back cueing, and so on. And even if I were to damage the standard cartridge for the SL-B1, it would cost a lot less to replace than a P-Mount, which I'm told costs as much as the entire turntable.—Brian S. Sebastian, New York, N.Y.

Most consumer record-playing gear is built with little thought to such "esoteric" pursuits as back-cueing and often prevents them altogether. To get around this, you must go to one of the two extremes: either the ultramanual, ruggedized professional gear or the utility models that are clunky but sturdy. No P-Mount pickup I know of falls into either of those categories. But unless you're going for a clunky pickup at a rockbottom price, I can't understand why you think the P-Mount models would cost so much more. They don't.

If you want first-rate sound and *must* go the deejay route, you'd better start saving up for the kind of equipment the pros use. This usually means a sturdy directdrive turntable that can come up to speed almost instantaneously on turn-on. And you might want to take note of the fact that both Shure and Stanton (and perhaps others, as well) make very good cartridges specifically for such applications.

Collectors' Items?

I own an H. H. Scott Model 121A Dynaural equalizer/preamp, a Fisher mahogany floor cabinet with Fisher electronics (preamp, tuner, power amp) installed, and an Electro-Voice Patrician speaker. Are these collector's items, and how much would the Fisher cabinet be worth? (I've looked up the prices on all the equipment items.)—B. Mele, Villa Park, Ill.

The monetary value of antique items is much too volatile and specialized a subject for this column. But each piece you mention can genuinely be called a collector's item. The Scott, in particular, qualifies because the Dynaural circuit was for years the only widely used single-ended consumer "noise reducer" (dynamic filter), though it doesn't seem so swift in this post-Burwen era of integrated-circuit dynamic filters. The Patrician, after a long hiatus, recently went back into limited production to satisfy the demands of collectors—first in Japan and later elsewhere—willing to pay the now-formidable price of such a complex folded-horn speaker.

by Robert Long

Too Much Expansion

I bought a DBX 3BX Series II dynamicrange expander before the owner's manual was ready, so I was on my own in figuring out how to use it. Everything seemed fine except when I recorded a. tape with the music pre-expanded by 50% (using the 3BX) and attempted to expand it again on playback by another 50%, figuring to get a 100% improvement. The sound seemed to oscillate when I tried this procedure. What causes this?—David Speier, Rockville, Md.

You can get too much of a good thing, and just because a 50% increase in dynamic range might sound good doesn't mean that a 100% increase will sound better. Overexpansion can cause gross side effects. And the 3BX is not engineered with your double-pass setup in mind, which could be part of your problem, whatever strain the expanded signal may or may not put on the dynamic range of your tape equipment. So for starters, I'd strongly recommend using the 3BX only in playback.

A lot hinges, however, on exactly what you mean by "oscillate." If it's some sort of ringing or whining sound extrinsic to the music, a malfunction seems likely. But if you mean volume fluctuations unrelated to the music's dynamics, tape-to-head contact in your deck is suspect. Variations in tape-to-head contact will be reflected in the output, and any variation in output will be magnified by the dynamic processing. If this is what is happening, your deck may be due for repair.

Boost or Bust

I have bought a pair of RTR Series 4E loudspeakers for use with my Kenwood KR-850 receiver. They are rated at 8 ohms, but when I play them with the "power boost" button on the Kenwood pushed in, its automatic protection circuit is activated. According to the Kenwood manual, this is an indication that the speaker impedance is less than 8 ohms. Also, an ohmmeter gives a 2.5-ohm reading across the speaker terminals. Should I use a resistor or another speaker in series with each of the RTRs to solve the problem?—George E. Wehrley, Columbus, Ohio.

An ohmmeter measures only the resistive component of a speaker's impedance, which is beside the point here (and in almost any other context). The actual impedance is complex and varies with frequency. Adding resistance, including the impedance of another speaker, in series with the existing speakers is inadvisable because of the resulting degradation of amplifier damping factor, among other possible problems. The best solution is simply to turn off the power-boost feature.

Pure FM

When I listen to a reasonably strong FM station, the reproduction seems much purer than if I were listening to a tape or LP of the same recording. Is it the inadequacy of my equipment or some extra quality in the FM signal that makes the difference?—Kenneth J. Ferris, Salinas, Calif.

First, let me say that you're lucky. Some of my local FM stations send me running to my records and tapes for sonic relief. Apparently, your station(s) are "purer" than mine. With so little information to go on, I can only guess that they take more care with things like cartridge mounting and record cleaning than you do or perhaps that they are indeed using significantly better disc- and tape-playback equipment. But that may be too glib an answer. When you say that even tapes don't match the broadcast signal's quality, for instance, I wonder whether you may not be reacting favorably to the very sort of dynamic processing and "sweetening" that stations indulge in to "grab" an audience-and turn me off altogether. Only an A/B comparison with the disc or tape being broadcast could even begin to supply the basis for a real answer.

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

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Maxell XL I-S and XL II-S are the ultimate ferric oxide cassette tapes. Precision engineered to bring you a significant improvement in dynamic range.

XLI-S provides exceptionally smooth linear performance characteristics with high resolution of sound and lower distortion.

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AUDIO Basically Speaking

Audio concepts and terms explained

Making Sense of Tuner Specs

TUNER SPECIFICATIONS FALL into two categories: radio frequency (RF) and audio frequency. The former pertain to how well a tuner functions as a radio receiver, while the latter define the quality of its audio output under good signal conditions. Of the RF specifications, the most basic is sensitivity: How much signal is needed to get listenable reception? Signal strength is expressed in dBf referenced to 1.0 femtowatt, where 0 dBf equals 1.0 femtowatt and every doubling of the signal strength (in femtowatts) amounts to an increase of 3 dBf, and the current EIA standard pegs "lis-

tenable" at a signal-to-noise ratio of 50 dB.

Sensitivity ratings of 16 dBf in mono and 38 dBf in stereo (for 50-dB quieting) are about average for high-quality home units, and a few dBf better than that (12 and 34 dBf, respectively) is as good as you'll find in a conventional FM tuner. But, if you are interested only in local broadcasts, you probably can get adequate reception on a receiver of far less than average sensitivity—especially if you have a good antenna.

To supplement the raw sensitivity numbers, HF's test reports include mono and stereo quieting curves, with signal-tonoise ratio plotted on the vertical axis and signal strength on the horizontal axis. The farther to the left a curve begins and the steeper its descent, the better. Most stereo quieting curves flatten out somewhere between 65 and 75 dB down at a signal strength of 65 to 85 dBf. The mono curves level off at a much lower signal strength, usually somewhere between 70 and 80 dB down. Any tendency for either curve to begin rising again at higher signal strengths is a sign of premature front-end overloadsomething you should be wary of if you live in a strong-signal area.

Just as important as a tuner's ability to pull in desired signals is its ability to reject unwanted ones. Selectivity is a measure of how well a tuner discriminates against broadcast signals on channels close to the one you've tuned. The number normally reported is for alternate-channel selectivity, indicating how completely broadcasts two channels (400 kHz) away are rejected. Since the FCC takes pains to ensure that stations within a geographic area are at least that widely separated, this is usually the most relevant figure, as well. Tuners average about 60 dB of alternate-channel selectivity these days, which is more than adequate for all but very severe interference; most listeners can get by quite well on 40

by Michael Riggs

dB of selectivity. This is most likely to be inadequate if you are using a high-gain directional antenna capable of pulling in very distant stations. In that case, your tuner might even have to deal with stations only one channel (200 kHz) away from the tuned signal. And for that, it would have to have good adjacent-channel selectivity. This is difficult to achieve without some loss of separation and increase in distortion, which is why most



tuners test out at only 3 or 4 dB of adjacent channel selectivity. Some tuners achieve 10 dB or occasionally even more, however, which is superb.

Capture ratio is a measure of how well a tuner discriminates between signals on the same channel. This might seem to be a very unlikely problem, and it would be were it not for multipath. But in most areas, a tuner will receive a multitude of reflections in addition to (or even instead of) the direct signal from the transmitter—a condition that will create noise and distortion in the tuner unless it can latch onto just one of the signals and ignore the others. The amount by which one signal must be stronger than a competing one for the former to be demodulated and the latter to be suppressed is the tuner's capture ratio. Most of today's home units come in at 11/2 dB or less, which is quite good; the very best tuners have capture ratios of 1 dB or less.

A related specification is AM suppression, which is a measure of how immune the FM detector is to amplitude modulation of the carrier. This is important to removing noise from the signal, especially any that may be generated by multipath. You should expect an AM-suppression ratio of 50 dB or more; a rating of 60 dB is excellent.

Even after the radio signal has been demodulated into audio, there remain certain elements that must be removed if the highest possible fidelity is to be maintained. Most important is the 19-kHz pilot tone that turns on the stereo demodulator. We like to see 60 dB or more of pilot suppression, if only to reduce the likelihood of Dolby mistracking when you record off the air. It is likewise desirable to attenuate the 38-kHz stereo subcarrier by as much as possible; again, we like to see 60 dB or better.

A tuner's principal audio-only specifications are frequency response, channel separation, distortion, and noise. The fre-

> quency responses of good tuners are generally with $\pm 1\frac{1}{2}$ dB from 50 Hz to 15 kHz, and most are pretty flat down to 30 Hz (though you're unlikely to hear the difference). Since 15 kHz is the upper limit allowed in FM broadcasting, there is no reason for a tuner's response to reach higher.

Separation between signals in the two stereo channels is essential to maintaining correct stereo imaging. You don't need very much, however: About 20 dB between 300 Hz and 3 kHz does nicely for most purposes. Any decent tuner of recent vintage can do far better than that.

The EIA standard calls for harmonic distortion to be measured at 100% modulation at each of three frequencies: 100 Hz, 1 kHz, and 6 kHz. It also provides for a mono intermodulation distortion (IM) measurement and a stereo test for intermodulation with the 19-kHz pilot (a sore spot with many old tuners). No good home tuner will exhibit more than 1% distortion on any of these tests in either stereo or mono, and most will show less than a negligible 0.5%.

Signal-to-noise ratio is measured at a signal strength of 65 dBf, which is about where most tuners approach full quieting in stereo. Some will continue to improve up to about 85 dBf in stereo, but, unless they suffer from poor sensitivity, not by much. Signal-to-noise ratios are typically between 65 and 75 dB in stereo and may be as much as 10 dB better in mono. This is good enough to take full advantage of the best most stations have to offer. Indeed, there are probably no more than a handful of stations in the country with broadcast signal-to-noise ratios of better than 70 dB: The limiting factor will not be your tuner. HF

AUDIO New Equipment Reports

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



Digital Delights from Mitsubishi

Misubishi DP-101 Compact Disc player, with wireless remote control. Dimensions: 16¾ by 5¾ inches (front), 12¼ inches deep plus clearance for connections. Price: \$1,100. Warranty: "ilmited," two years parts, one year labor. Manufacturer: Mitsubishi Electric Corp., Japan; U.S. distributor: Mitsubishi Electric Sales America, Inc., 3030 E. Victoria St., Rancho Dominguez, Calif. 90221.

All data obtained using the Sony YEDS-2 test dlsc.

FREQUENCY RESPONSE

DB	
-5	
HZ 20 50 100 200	500 1K 2K 5K 10K 20K
L ch	+<1⁄4, −3⁄4 dB, 100 Hz to 20 kHz
····· R ch	+<¼,¾ dB, 100 Hz to 20 kHz
DE-EMPHASIS ERROF	
	$+ < V_4, -1/4 \text{ dB}, \frac{1}{1} \text{ to } 16 \text{ kHz}$
CHANNEL SEPARATIO	$\ge 81 \frac{1}{4} \text{ dB}, \frac{100}{100} \text{ Hz to } 20 \text{ kHz}$
SIN RATIO (re 0 dB; A	weighted) 97 dB
DISTORTION (THD at	0 dB; 100 Hz to 20 kHz) ≤ 0.047%
	n <mark>o m</mark> easurable error, <mark>0 t</mark> o -80 dB
PITCH ACCURACY	no measurable error
OUTPUT (from 0 dB)	1.57 volts
SQUARE-WAVE RESPONSE	
	- Li - E - E - E - E - E - E - E - E - E -



THE MITSUBISHI DP-101 is the first Compact Disc player to pass through our laboratory testing program. (Our report on the Sony CDP-101, in the December 1982 issue, was strictly a hands-on use and listening evaluation.) It is also among the most stylish and fully feature-laden CD players we have yet seen. Like most, it is a front-loader, with a disc holder that tilts forward out of the left side of the control panel when you press the open/close button in the top left-hand corner of the faceplate. Slip a disc into the slot in the holder, press OPEN/ CLOSE again, and the player automatically loads the disc, starts it spinning at the correct speed, reads the disc's "index," and positions the laser pickup at the start of the first track.

Most of the faceplate's middle section is given over to status displays. Along the top are four numerical readouts. The first indicates the number of the track being played, programmed, or recalled from memory. Directly to its right is a time display, which briefly shows the total playing time on the disc when it is first loaded, then reverts to elapsed time for the track in progress in minutes and seconds. Compact Discs can be coded with index numbers

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 High FIDELITY. Samples normally are supplied on loan from the manufacturer. Manufacturers are not permitted to read

keyed to specific passages within a track (such as arias in an opera); the index display gives the number (if any) corresponding to the position of the laser pickup on the track being played or the index number being entered into or recalled from memory. The final readout, called "next no.," covers several bases. When you have programmed a playback sequence, it shows the number of the track that will be played next. Conversely, when you are programming such a sequence, it indicates the total number of tracks you have entered so far. It can also be used to show the sequence of the programmed tracks, and when a disc is first inserted, it indicates the total number of recorded tracks.

In the middle of the display section is a narrow row of six function lights. From left to right, they indicate that a starting position has been entered into memory, that an ending position has been entered into memory, that a track sequence has been programmed, that the de-emphasis network has been automatically activated (to correct for the standard high-frequency pre-emphasis with which virtually all CDs are mastered), that the repeat function has been activated, and that some command cannot

reports in advance of publication, and no report or portion thereof may be reproduced for any purpose or in any form without written permission of the publisher. All reports should be construed as applying to the specific samples tested. High FibeLITY and Diversified Science Laboratories assume no responsibility for product performance or quality.





The DP-101's secondary controls reside behind a partially transparent plastic door. At the bostom are the REPEAT and the REVERSE and FORWARD SCAN. One row up are the keys governing the unit's memory: CLEAR, ENTER ("memory"), and RECALL. The next row of buttons is for use in setting start and end points by time or index number. The remaining function keys-START, END, and PROGRAM—form a column in the upper left-hand corner. They are used to signal the entry of a start point, an end point, or a track-sequence program. The numeric keypad directly to their right enables you to enter track numbers, elapsed times, and so forth. To the far right are two small buttons for switching the address/level display between its two modes, a headphone volume control, and a headphone jack.

be performed because of an entry error.

Below these lights is a large dual-function address/level display with two rows of thirty-nine illuminating bands each. When you first turn on the DP-101, it automatically goes into the address mode, in which each band represents one minute of playing time on the disc. The top row is marked for 0 to 39, the bottom, from 40 to 75 (reflecting the maximum playing time of a CD). Based on information from the disc's index, the player lights the bands representing, to the nearest minute, the starting points of every track on the disc. At the touch of a button, the display converts to a pair of level indicators, one for each channel, calibrated from -60 to 0 dB.

At the very bottom of the center section is a row of five keys, which control the most commonly used operating functions. PLAY initiates playback either at the start of the disc, or at a previously programmed start position, or if the machine is in pause mode, at the point where playback left off. REVERSE and FORWARD SKIP move the laser pickup backward or forward a track at a time. The pickup will continue to move until you release the key, at which time it will seek out the beginning of the next track in its direction of travel and resume playback from there. PAUSE totally mutes the output without moving the pickup, while STOP ends playback altogether, returning the pickup to its rest position.

At the far right of the front panel is a group of secondary controls, protected by a partially transparent plastic door that swings open to the right. Included here are buttons for switching the address/level display between its two modes, a headphone jack and volume control, and forward and reverse scan buttons (which enable you to zip the laser ahead or back at high speed while listening to the output at reduced level). More important, however, are the programming keys. They are the secret of the DP-101's extraordinary flexibility.

There are two basic ways of programming the machine. One is to enter the sequence of the tracks you want to play; the other is to specify start and end points. It might seem that the second would be subsumed under the first, but it isn't. In the random-access mode, you can select only by track number. But when you specify a start or end point, it can be by index number within a track, or even by elapsed time in a track. You can execute a program immediately, or you can store it in memory for future use. And by pressing REPEAT, you can make the DP-101 play the programmed sequence or segment (or if not running in a programmed mode, the entire disc) over and over, until you press the key again. The many programming options can make the procedure seem a little complicated at first, but any feelings of confusion evaporate quickly with practice.

The icing on the cake is that you can do almost everything from a palm-sized wireless remote control, as well. It's almost too good to believe. But if you want to disable the remote, you can do so by means of a slide switch on the back panel, next to the gold-plated RCA output jacks and a thumbscrew ground terminal. Setup is exceedingly simple, requiring only the removal of two transit screws and connection of the signal cables.

Diversified Science Laboratories tested the DP-101 with the Sony YEDS-2 measurement disc. Frequency response is extremely flat—well within $\pm \frac{1}{4}$ dB from 100 Hz (the lowest spot frequency on the disc) to 10 kHz, rolling off by just a shade more than 3/4 dB at 20 kHz. The de-emphasis network is within a tenth of a decibel of perfect accuracy at 1 and 5 kHz, drooping by slightly more than 1/4 dB at 16 kHz. Since this accounts for almost all of the response error at 16 kHz, it seems likely that the de-emphasis network, rather than the output-smoothing filter, is primarily responsible for what little treble rolloff there is within the audio band. There is some ringing in the reproduced square wave, however, which suggests the presence of the steep cutoff above 20 kHz necessary to remove ultrasonic noise and sampling glitches from the output.

Separation is phenomenal—better, in fact, than that of most amps and preamps

and far better than necessary for good stereo effect. Signal-to-noise ratio is likewise exemplary and a real challenge to the quality of the rest of your electronics. Harmonic distortion at 0 dB (maximum output level) is extremely low-less than or equal to 0.015% from 100 Hz to 10 kHz. True harmonic distortion cannot be accurately measured above 10 kHz, because of the output filter. (Such products would be ultrasonic and therefore inaudible in any case.) But there are some "birdies," caused by intermodulation between the test signal or its harmonics and the 44.1-kHz sampling frequency. If we neglect an inaudible (and very weak) 24.1-kHz birdie generated by the 20-kHz tone, distortion does not exceed 0.015% anywhere within the audible band above 100 Hz (again, the lowest test frequency on the disc).

CCIF twin-tone (19 and 20 kHz) intermodulation distortion is similarly negligible, consisting entirely of a 24.1-kHz birdie amounting to 0.035% at 0 dB and 0.031% at -10 dB. Harmonic distortion at 1 kHz is well below 0.01% from 0 dB to -20 dB, rising to 0.1% at -60 dB and 6.0% at -80dB. This increase at low levels (inherent in the digital process) is no cause for alarm, however: The distortion components themselves are down around -100 dB (0.001%) or less relative to maximum output leyel well below the threshold of audibility. Deviation from perfect input/output linearity is unmeasurably low.

With good program material, these numbers translate into the best sound this side of paradise. Top-notch digital playback is a thrill not to be missed—certainly a far cry from what decades of phonograph records and cassettes have accustomed us to. And the versatility and convenience of operation afforded by Mitsubishi's first player make it all the more enticing. Highly recommended.

Circle 100 on Reader-Service Card



NAD's Budget Supertuner

NAD Model 4150 AM/FM tuner. Dimensions: 16½ by 2¾ inches (front panel), 10 inches deep plus clearance for connections and AM bar antenna. Price: S338. Warranty: "limited," two years parts and labor. Manufacturer: Made in Talwan for NAD (USA), Inc., 675 Canton St., Norwood, Mass. 02062.





THE WORD "BREAKTHROUGH" is much abused. Though applied to FM tuners many times over the course of the last decade, it generally has signified very little in the way of improved listening from the features or circuitry that have occasioned its use. The performance plateau now routinely attained by even inexpensive FM tuners is admirably elevated, but until very recently, this meant that high fidelity components were all pretty much the same in this area. Fresh thinking finally is creating genuine breakthroughs, however, and we here review the second tuner that rises far above the plateau of conventional excellence (the first being the Carver TX-11, reviewed in the January issue)

The means employed by designer Larry Schotz for the NAD 4150 are astonishingly simple, considering the results. A control circuit evaluates the IF (intermediate-frequency) signal for strength, noise, and amplitude-modulation components (a common by-product of multipath) and adjusts the bandwidth of the tuner's phaselocked-loop FM detector accordingly. The reason detector bandwidth is so important, it turns out, is that IF bandpass characteristics vary with signal strength. The IF filter has its best shot at the ideal square shape (with a flat top and steep sides at the band edges) when signal strength is high; its effective passband at low signal strengths is narrower and more round-shouldered forcing signal elements down the sides of the filter curve ("onto the skirts," as it's called). These elements create amplitude modulation in the IF strip and noise and distortion at the detector if the full IF output is detected. The Schotz Variable-Bandwidth PLL Detector is designed to prevent this by narrowing to exclude signals outside the flat portion of the IF passband.

In banishing much of the noise and distortion that normally arises from weaksignal reception, the Schotz detector dramatically increases sensitivity. In theory, it does so at some cost in channel separation (because some of the stereo subcarrier gets sheared away when the detector bandwidth closes down), but when Diversified Science Laboratories measured separation with an input signal strength of only 35 dBf, it found that the unwanted channel still was so low as to be largely obscured by residual noise—which, of course, was higher than it would have been at the standard 65-dBf level.

Other claims made for the 4150 are good selectivity, AM suppression, and capture ratio—particularly at signal strengths below the usual test levels. That AM suppression should be good goes almost without saying, and DSL's data confirm that it

AUDIO New Equipment Reports



Teac's Ultimate Cassette Deck

Teac Z-6000 cassette deck, with Dolby B, Dolby C, and DBX noise reduction. Dimensions: 17 by 61/4 inches (front panel), 17 inches deep plus clearance for connections. Price: \$1,400; optional RC-201 wired remote control, \$50. Warranty: "limited," one year parts and labor. Manufacturer: Teac Corp., Japan; U.S. distributor: Teac Corp. of America, 7733 Telegraph Rd., Montebelio, Calif. 90640. is. And though the alternate-channel selectivity (at $54\frac{1}{4}$ dB) is fine, the adjacentchannel measurement is superb: At $9\frac{1}{2}$ dB, it is much better than average and among the best DSL has ever measured. Capture ratio, measured as usual at 45 dBf, is a very good $1\frac{1}{4}$ dB and degrades only very slightly at lower signal strengths (to $1\frac{1}{2}$ dB at 25 dBf, for example). And frequency response and separation could hardly be bettered.

But the star turn is surely the quieting curves. DSL had to begin testing at 0 dBf (instead of the usual 5 dBf) to document the 4150's incredible quieting at ultralow signal strengths in mono-in which respect the 4150 is by far the most sensitive FM tuner we have ever measured. As a concomitant of this and of the exceptional stereo quieting, there is lower noise and distortion in the output for any given signal strength below that at which full quieting is achieved than with any conventional tuner. But the 4150 is an exceptional performer with strong signals as well, as it turns out, with stereo signal-to-noise ratios of more than 70 dB for all RF input levels greater than 60 dBf and one of the highest mono signal-to-noise ratios DSL has ever measured. The "waviness" of the quieting curves may look a little strange by comparison to those for other tuners; presumably the irregularities are due to mid-course corrections by the IF-evaluation circuitry as signal strength increases.

You don't have to struggle to hear the 4150's superiority. Stations that are veiled by a slight hiss with conventional tuners come off dead quiet with the NAD. Severely noisy stations are made markedly more listenable, with interference noises (such as automobile ignition sputter) greatly ameliorated. Unquestionably, this tuner represents a genuine breakthrough in reception of weak or degraded FM signals. All stations that are in want of audible improvement on conventional gear are indeed improved by the 4150, and even where no audible gain seems likely or possible, there may be a measurable benefit. AM section! Unfortunately, it is no better than its opposite numbers among conventional products—which is to say that most multiband radios will perform rings around it. It will, however, receive local stations with a minimum of noise and distortion, which is all that most people require from an AM tuner.

The back panel holds a rotary outputlevel control (whose full-on position should deliver appropriate levels in most systems), a swivel-mounted AM loop antenna, spring-loaded connections for bared-wire external antennas (AM, 300-ohm FM, and 75-ohm FM), and an F connector to mate the standard termination of 75-ohm coaxial FM lead-ins from antennas or cable systems. This last is a particularly welcome feature: Most tuners require you to bare the center conductor and dress the outer shield or to interpose a balun transformer between the coax and the tuner's 300-ohm inputs.

The front panel is almost as simple as the back. A green button turns on the AC power; similar brown ones control the muting and mono-only modes. Two buttons at the upper right corner of the faceplate trigger tuning up or down the "dial," while a bar beneath them chooses between a scan tuning mode and one that steps manually along the band—rapidly, if you hold one of the upper buttons in, or one step per tap in 0.1-MHz increments on FM and 10-kHz increments on AM. A row of buttons to the right of the frequency display chooses between AM and FM and stores five station presets for each band.

Physical glamour is not part of NAD's lifestyle, and the 4150 shares the "sensibleshoes" look of the rest of the line. But its plainness is only skin deep: Lurking beneath that bare brown escutcheon is one of the most glamorous FM tuning circuits available. We know of only one other tuner with a comparable margin of performance superiority over the rest of the field, none that's significantly easier to hook up and use, and no other model with legitimate claim to supertuner status at so low a price. All told, it's quite an achievement.

If only we could say the same of the

To MINCE NO WORDS, the Z-6000 is the finest cassette deck we have ever seen from Teac. It can reasonably be compared to the company's traditionally rugged, capable open-reel decks for advanced-amateur and semipro use—or even to the Tascam professional decks. The Z-6000's die-cast frame makes it eminently suitable for the rough-and-tumble of field recording, while its tape-matching and many other features—incorporating almost anything a demanding recordist could conceive—suit it to the more sedentary (if fussy) ways of home or studio.

The front panel's apparent complexity recedes with a little familiarity. Its entire right end is given over to a single function:

tape matching. The deck senses the basic tape type from the keyways in the cassette shell and switches itself accordingly for Type 1, Type 2, or Type 4 operation. You can choose preset values of recording sensitivity (Dolby tracking), bias, and recording EO for each tape type by pressing the button marked "reference," or you can use the remaining controls to tune each of these parameters independently for each channel for any particular brand and formulation. When you press MANUAL CAL, one of three indicators ("norm.," "CrO2," or "metal") lights, depending on the tape type. When you press any of the oscillator control buttons (bias, level, or EQ), the indicator starts flashing. A pair of screwdriver adjust-



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

DB 0 -5 120000 HZ 20 50 100 200 500 1K 2K 5K 10K 20H L ch +0, -21/4 dB, 315 Hz to 18 kHz +0, -21/4 dB, 315 Hz to 18 kHz

RECORD/PLAY RESPONSE, TYPE 2 TAPE (-20 dB)



with DBX noise reduction — R ch +5, -3 dB, 28 Hz to 16.5 kHz

SIN RATIO (re DIN 0		
Type 2 tape	Type 4 tape	Type 1 tape
without noise reduction	n	
553/4 dB		55 dB
with Dolby B noise re-		
643/4 dB		64 dB
with Dolby C noise re	duction	
691/2 dB		691/2 dB
with DBX noise reduc	tion	

83 dB

751/2 dB

751/4 dB

ments (one for each channel) in the column of the flashing indicator and the row of the pressed oscillator button enable you to perform the desired adjustment. When you're done, you press TEST TONE OFF. (The indicator will remain lit until you switch tape types or press REFERENCE.)

The fluorescent peak-level indicators register 0 dB about 1 dB below DIN 0 dB, stretch from -40 to +10 dB (with respect to their own 0), and are calibrated in 1-dB steps from -10 to +10-an unusually generous range. They respond quickly and take about half a second to decay, except that the uppermost element is retained for about 11/2 seconds by the peak-hold design. The switching (at the left) enables you to choose source; "cal.," which gives you "absolute" playback levels, keyed to recording levels; "tape," which passes the playback signal through the output level control before metering, inflating readings by about 6 dB with the control turned all the way up; and "sync," which delivers the "tape" signal during actual recording or playback but the source signal in all other transport modes.

Also on the display panel are indicators for most of the other functions controlled from the pushbuttons at the left end of the faceplate. The counter reads in minutes and seconds and is indexed manually to the tape length in use via buttons for C-90, C-60, C-46, and C-46L (large-hub C-46) lengths. A large yellow number indicates how many selections will be skipped in either direction of fast wind before playback begins when the CPS (Computomatic Program System) feature is in use. Each tap on the CPS button steps this number upward by one (to a maximum of 19). Further readouts tell you the tape length selected, the noise reduction system (DBX, Dolby C, Dolby B, or none), and the memory function (memory stop, memory rewind, or repeat), if any has been punched up. There are no indicators for the multiplex filter, the input source (line, mike, or DBX disc), the timer modes, or the "intro-check" feature, which samples a few seconds of each selection on the tape until you press a transport

The recording level controls are sliders; Teac suggests setting the left and right controls at their midpoints and the master at "7" (which is specially marked) for typical input levels. The separate left and right sliders enable you to compensate for poor stereo balance in the source signal and to adjust for unusually high or low overall levels without moving the master control out of its best operating range. (This range presumably is chosen, as it is on Tascam professional equipment, for optimum signalto-noise performance.)

The transport controls, farther left, include a recording mute. One tap during recording will lay down a four-second

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, requiring 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 EQ but somewhat higher bias. They sometimes are styled LH (low-nolse, highoutput) formulations or "premium ferrics."

Type 2 (IEC Type II) tapes are intended for use with 70-microsecond playback EQ and higher recording blas still (nominal 150%). The first formulations of this sort used chromlum dloxide; today they also include chrome-compatible coatings such as the ferricobalts. Type 3 (IEC Type III) tapes are dual-layered fer-

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

AUDIO New Equipment Reports

	-	-
INDICATOR READING Type 2 tape Type 4 tape Type 1 tape	S FOR DIN 0 DI +1 dB (with 3.) +1 dB (with 2.) +1 dB (with 1.)	5% THD) 8% THD)
INDICATOR READING Type 2 tape Type 4 tape Type 1 tape	S FOR 3% DIST 0 dB (for -1/2 o +1 dB (for +1/ +3 dB (for +1)	B DIN) 2 dB DIN)
DISTORTION (third har Type 2 tape Type 4 tape Type 1 tape	$\begin{array}{l} \text{rmonic; at } -10 \text{ d} \\ \leq 0.88\%, 50 \text{ f} \\ \leq 0.72\%, 50 \text{ f} \\ \leq 0.61\%, 50 \text{ f} \end{array}$	Hz to 5 kHz Hz to 5 kHz
ERASURE (100 Hz)		\geq 67 dB
CHANNEL SEPARATIO	ON (315 Hz)	42 dB
INDICATOR "BALLIST	ICS"	
Response time Decay time Overshoot		2.6 msec = 550 msec 0 dB
SPEED ACCURACY	0.2% fast, 105	to 127 VAC
SPEED ADJUSTMENT RANGE	12% fast to 12	.4% slow
FLUTTER (ANSI weigh	ited peak; R/P)	±0.048%
SENSITIVITY (re DIN 0 dB; 315 Hz) line Input 98 mV mike input 0.40 mV		
MIKE INPUT OVERLOAD (3% THD) 32 mV		
MAX. OUTPUT (from DIN 0 dB) 1.0 V		

blank (needed between selections for the CPS and intro-check features to operate correctly) and leave the deck in the recording/pause mode. A second tap before the four seconds is up will keep the mute engaged indefinitely. Two buttons at the lower left of the control panel pop out, when you push them, to become rotary controls. One adjusts transport speed (by about $\pm 12\%$ in either recording or playback), which reverts to standard when you return the button to its "in" position. The other adjusts the headphone output.

Diversified Science Laboratories tested the deck with TDK tapes-SA as the Type 2 ferricobalt, MA as the Type 4 metal, and AD as the Type 1 ferric-manually adjusting the deck for each (as opposed to using the preset "reference" setting). Like some other decks we have tested recently, the Z-6000 can be "shaded" to buy more high-frequency headroom at the expense of the midrange or vice versa. Unlike previous models of this sort, however, the Teac comes with rational, step-by-step instructions for making the tradeoff-and retaining flat overall response at the same time. This is possible because of the recording-EQ adjustment, which is not included in most other manual tape-matching schemes

Even a glance at the data will confirm that performance is high. Frequency response is very flat and extended with all three tapes. (To minimize confusion, we have omitted the Dolby B curves. In all cases, they duplicate the Dolby C curves in the deep bass, are approximately as flator flatter-throughout the midrange and most of the treble, and roll off at the very top end a bit more sharply than do the curves without noise reduction.) Teac says that the Z-6000's basic settings favor highfrequency headroom (a matter of keeping bias on the low side and making up the difference through recording EQ), and DSL's high-level curves confirm this: At 0 dB, the response remains unusually extended. In consequence, midrange headroom is not quite as generous as it is with some decks and distortion is a trifle higher. But you can lower the bias and regain the midrange performance if you choose.

The Z-6000's excellence is, in part, the result of Teac's attention to detail. The back-panel signal jacks, for example, are gold-plated. Teac itself cites its direct-coupled EQ amplifier as an unusual feature that contributes to signal quality. So does the closed-loop dual-capstan drive, in a transport that uses three direct-drive motors. And there are the three noise reduction options-any of which can be used for recording from the built-in DBX disc decoder, which the switching on some equipment makes impossible. But most important is the ability to get spot-on response with any of these noise reducers, with any tape in reason, and despite changes in tape formulations. Only a relatively elaborate tape-matching system, such as that in the Z-6000, can make this possible.

Circle 104 on Reader-Service Card



Sota's Super-Isolated Turntable

Sota Sapphire two-speed (33 and 45 rpm) manual belt-drive turntable. Dimensions: 2014 by 1634 inches (top), 744 inches high with cover closed; additional 1314 inches clearance above and 3 inches behind required to open cover fully. Price: \$750 with oak base, \$850 with koa-wood base. Warranty: "limited," one year parts and labor. Manufacturer: Sota industries, P.O. Box 7075, Berkeley, Calif. 94707. THE STATE OF THE AUDIO ART has advanced to the point where truly bad products are almost a thing of the past. In turntables, this means that speed-accuracy, wow-and-flutter, and rumble specifications are now routinely so good that musical enjoyment is unimpaired by these problems. Acoustic isolation is still a sore point, however. A great many otherwise excellent turntables are susceptible enough to shock, vibration, and acoustic feedback to cause sonic degradation in some installations.

The Sota Sapphire takes this bull firmly by the horns, using one of the most sophisticated sprung-subchassis suspensions we have ever encountered to isolate the platter and tonearm from external interference. As in other such designs, the platter and tonearm are fixed to a single rigid subchassis, so that when one moves, the other moves with it. But there are several important departures from usual practice. For example, the subchassis hangs from the suspension springs, instead of perching on top of them. Sota chose this approach to minimize any tendency for the subchassis to rock when excited. Another blow for stability is the use of a heavy (11-pound) platter in conjunction with an extraordinarily heavy (22-pound) subchassis, so that the SPEED ACCURACY

no measurable error at either speed, 105 to 120 VAC

 SPEED ADJUSTMENT RANGE

 at 33 rpm
 +5.6 to -6.2%

 at 45 rpm
 ±4.7%

WOW & FLUTTER (ANSI/IEEE weighted peak) ±0.065% average; ±0.090% maximum

TOTAL AUDIBLE RUMBLE (ARLL) -72 dB

'See text

moving system's inertia is high and its center of gravity is low. (The platters on most similarly designed turntables are more massive than their subchassis—an inherently less stable arrangement.) And the Sapphire uses a four-point suspension instead of the usual three-point configuration, with two of the springs wound in the opposite direction from the other two. This is said to cancel any rotational energy generated when the springs are stretched or compressed.

Most interesting is Sota's approach to leveling the subchassis. Instead of compensating for the weights of different tonearms by changing the tension on the springs, you add or subtract lead shot from a well under the arm board. This results in a constant mass distribution, with the springs preset for a uniform 2.5-Hz resonance.

All of these things contribute to isolating the Sapphire from shock and vibration. This is not to say that Sota has neglected the basics. The bearing thrust plate is a disc of polished sapphire (second only to diamond in hardness), attached to the underside of the platter, riding on a hardened steel ball bearing. This novel inverted bearing, together with customized fitting and balancing of each platter, is said by Sota to reduce bearing and platter wobble. The platter itself is designed so that most of its mass is concentrated near the periphery, for maximum flywheel effect, and has a special bonded-on mat that serves to damp both it and the record. Power is delivered to the platter by a compliant belt driven by a DC servo motor bolted directly to the base. rather than to the subchassis, to isolate its vibration from the record.

We found the Sota a relatively easy turntable to set up, compared to others of its ilk, despite a fairly sketchy instruction manual. The only part that's the least bit tricky is the subchassis leveling procedure, which can require you to remove one or both of two lead cylinders lodged in holes so deep that you can't grasp the weights. It can be done, but it strikes us as unreasonably difficult. To the left of the platter is a control board with a power switch, a speed switch (33 or 45 rpm), and an adjustment knob for each speed. A paper strobe disc is included for getting the speeds dead on nominal—an adjustment most users will need to perform only once.

All testing was performed using a Signet XK-35 tonearm (also reviewed in this issue). Diversified Science Laboratories' data show the benefits of Sota's excellent mechanical design. Flutter is very low, and rumble is the lowest DSL has ever measured using a test disc, ranging from a minimum of -72 dB to a once-around maximum of -681/2 dB. These extraordinary figures prompted the lab to haul out a Thorens Rumpelmesskoppler, which couples the stylus to the platter by means of a precise, low-friction bearing, to see if the rumble measurement was being limited by the test disc. Using this special instrument. DSL measured rumble levels between -74 and -811/2 dB

Our informal tests of the Sapphire's acoustical isolation have yielded equally impressive results. We have not been able to induce feedback under any conditions; even pounding on the table or the turntable's top plate has absolutely no effect on the tracking of the record. If we bump the Sapphire hard enough sideways, the platter will brush against the edge of the base, inducing some momentary wow, but there is never any groove skipping. This remarkable performance qualifies the Sota's suspension as the most effective we have yet encountered.

In fact, we can find almost nothing to complain about in the operation of this beautifully engineered and finished product. (Its three adjustable mounting feet have a rather homemade look to them, but that's not what we'd call a big deal.) And the Sapphire's price, though not small, is reasonable in light of what its direct competitors are fetching these days. So if you're in the market for a superb record-playing machine without a lot of extra features and frills, we heartily recommend that you consider this one.

Circle 103 on Reader-Service Card

An Elegant Tonearm from Signet

Signet XK-35 tonearm. Dimensions: approx. 9½ inches from pivot to stylus, plus 2¼ inches clearance at rear for counterweight; 5-foot audio cables. Price: approx. \$250 (varies somewhat from market to market). Warranty: "limited," one year parts and labor. Manufacturer: Audio-Technica, Japan; U.S. distributor: Signet Div., A.T.U.S., inc., 4701 Hudson Dr., Stow, Ohio 44224. WHAT FIRST ATTRACTED us to the XK-35 was its look—a clean, uncluttered elegance of the kind that often follows on good design. Most separate tonearms are a pain in the you-know-what to install and adjust, and a good many are ornery to use, as well. The XK-35 promised to be neither, without sacrificing performance in the bargain.

Its most unusual performance-oriented feature—called Signetrace Planar-Pivot Tracking—involves mounting the arm tube slightly above the vertical bearings, so that the stylus is in line with the pivot. Customary practice is to put the arm tube in line with the vertical pivot, which must therefore be positioned above the plane of the record. According to Signet, this causes some of the drag force exerted on the stylus by the record groove to be resolved in an upward direction. This reduces the tracking force very slightly, especially on the heavily modulated passages where it's needed most. Placing stylus and pivot in the same horizontal plane, as in the XK-35, ensures that this will not occur.

The arm tube itself—tapered to combat resonances—is permanently bonded to the headshell at one end and the pivot housing at the other, for maximum stiffness combined with minimum mass. A discshaped rotatable counterweight serves both to balance the arm and to apply the necessary vertical tracking force (VTF). Bias compensation is adjusted by means of a cal-

AUDIO New Equipment Reports



EFFECTIVE MASS

14.0 grams

TOTAL LEAD CAPACITANCE

VTF-GAUGE ACCURACY no measurable error, 0.5 to 3.0 grams ibrated dial governing a cleverly conceived thread-and-weight mechanism. Included with the XK-35 is a syringe of silicone oil, which you can release into a trough just left of the arm pillar to provide viscous damping of the arm's horizontal motion. And there is an integral hydraulic cueing mechanism.

Installation is straightforward, as these things go. If the maker of your turntable cannot prepare a mounting board for the XK-35, you will have to drill your own using the supplied cardboard template. After securing the arm baseplate to the mounting board, the mounting board to the turntable, and the cartridge (loosely) to the headshell, you can plug in the cables and insert the arm pillar into the baseplate. Arm height is fixed by means of a setscrew in the side of the baseplate.

Final adjustment consists of setting overhang (with the help of a supplied cardboard protractor), tracking force, and antiskating. Only the first of these is in any way difficult or involved, and then no more so than usual. The instructions do, however, throw you a slight curve on balancing the arm, by failing to mention a small cylindrical weight that screws into the counterweight-support tube. Without the help of this extra ballast, some relatively heavy cartridges cannot be balanced; for lighter pickups, using it will yield the lowest total effective mass.

The XK-35 is primarily suitable for use with lightweight and middleweight cartridges of low to medium compliance. Signet could enhance the arm's versatility by supplying a heavier counterweight for use closer to the pivot, where it would make a smaller contribution to the arm's effective mass. In particular, this might make the XK-35 more compatible with medium- and high-mass high-compliance pickups-+a category that includes some of the top fixed-coil models. We are also a little puzzled by Signet's avoidance of vertical damping, which is more effective than horizontal damping in taming warp-induced oscillations.

But these are minor reservations. The XK-35 can serve a great many cartridges exceedingly well, and with a relatively small amount of fuss and bother on the part of the user. The tonearm is elegant in operation and appearance, and its design is sound and beautifully executed. Most important, however, it coaxed truly superb performance out of some of our favorite pickups—which is, after all, what a tonearm is supposed to do.

Circle 102 on Reader-Service Card



Tonearm/Cartridge Matching Graph By means of this nomograph, you can quickly and easily determine the compatibility of any cartridge and tonearm we have tested. Ideally, the arm/cartridge resonance frequency (indicated by the diagonal lines) should fall at 10 Hz, but anywhere between 8 and 12 Hz will assure good warp tracking and accurate bass response. (It is usually okay to let the

resonance rise as high as 15 Hz, although we don't normally recommend this.)

Begin by looking up the weight and dynamic compliance shown in the cartridge report and the effective mass listed in the turntable or tonearm report. Add the weight of the cartridge to the effective mass of the tonearm to get the total effective mass. Then find the point on the graph where the vertical line for the total effective mass intersects the horizontal line for the cartridge's dynamic compliance. For a good match, this point should fall in the white region, between the 8and 12-Hz diagonal lines.

When necessary, you can back-figure compliances and effective masses for cartridges and tonearms tested before we began reporting these figures directly (in January 1983). For cartridges, look up the vertical resonance frequency (measured in the SME 3009 Series II Improved tonearm) and the cartridge's weight. Add 15 grams (the SME's effective mass) to the cartridge weight to get the total effective mass. Then find the intersection of the vertical line representing that mass with the diagonal line representing the measured resonance frequency. Now you can read off the compliance from the horizontal line passing through the point of intersection.

For tonearms, look up the vertical resonance frequency as measured with the Shure V-15 Type III cartridge. Find the intersection of the diagonal line for that frequency with the horizontal line representing the Shure's dynamic compliance of 22.5×10^{-6} cm/dyne. Reading down the vertical line on which the point of intersection lies will give you the total effective mass of the arm with the Shure V-15 Type III mounted in it. Then subtract 6.3 grams (the weight of the V-15 Type III) to get the tonearm's effective mass.

Because of differences in measurement techniques, manufacturers' specifications for compliance and effective mass often differ from our findings and may therefore yield inconsistent results if used with this graph.



Bose Goes One Better

Bose 301 Series II loudspeaker system, In wood cabinet with wainut-grain vinyl finish. Dimensions: 17 by 10½ inches (front), 9½ inches deep. Price: S390 per pair. Warranty: "full," five years parts and labor. Manufacturer: Bose Corp., 100 The Mountain Road, Framingham, Mass. 01701.

ROOM RESPONSE CHARACTERISTICS



SENSITIVITY (at 1 meter; 2.8-volt pink noise, 250 Hz to 6 kHz) 861/2 dB SPL

AVERAGE IMPEDANCE (250 Hz to 6 kHz)

EARLY RETIREMENT SEEMS to be the rule in the speaker industry: A model that falters even momentarily in the marketplace is quickly snatched off the shelf and replaced with a new version that often bears little resemblance to its predecessor. Though some manufacturers resist such marketing stratagems, few match Bose Coporation in tenacity and consistency of design. The Model 301, for instance, has been a staple of the Bose line for almost a decade (see test report, November 1975), and the changes that now appear in the Series II version are all aimed simply at improving what was already a fine little bookshelf speaker.

Still offered in mirror-image pairs, with woofers and tweeters mounted horizontally at opposite ends of the respective enclosures, the 301 Series II maintains Bose's Direct/Reflecting design philosophy. The wide stereo image that results from providing the listener with a mix of direct and reflected sound was achieved in the original 301 via a rotatable vane in front of the tweeter. A portion of the driver's sound output was deflected off the vane onto nearby walls. The Series II omits the vane (and hence any adjustability) in favor of a fixed two-tweeter "Free-Space Array"-one driver angled into the listening area, the other, toward the wall. To help maintain a stable stereo image over a wide listening area, the speakers' forward-firing tweeters are oriented so that their axes cross. As you move closer to one of the speakers, you become increasingly off-axis with respect to its tweeter and more nearly on-axis with respect to the other's.

Modifications were necessary to accommodate the side-mounted tweeter array, but the ported enclosure's internal volume and overall dimensions remain the same. Bose has also changed the crossover points slightly, so that the "Dual-Frequency" network now provides a hair less than an octave of overlap (1.5 to 2.5 kHz) between the operating ranges of the 8-inch woofer and the 3-inch tweeters.

Since the 301 Series II is intended for bookshelf placement, Diversified Science Laboratories took its measurements with the speaker against the wall, 28 inches off the floor. Power-handling proved quite good, with the 301 accepting the full 68volt peak output of DSL's amp-equivalent to approximately 271/2 dBW (560 watts) into 8 ohms-in the 300-Hz pulse test. Total harmonic distortion is higher than we're used to seeing, but at a moderately high sound-pressure level (SPL) of 85 dB, it still averages only about 1% from 80 Hz to 10 kHz, rising to an average of slightly less than 3³/₄% at a very loud 95 dB SPL.

The speaker is moderately sensitive and has a relatively high impedance, ranging from minima of 7 ohms at 45 and 170 Hz to a maximum of 39.6 ohms at 80 Hz, with an average value of about 19 ohms. This should make the 301 an easy load for just about any amplifier, and in most cases, running two sets in parallel should pose no difficulty.

The 301's third-octave response is within ±5 dB from 50 Hz to 16 kHz onaxis. Off-axis response is only slightly different-±5¼ dB from 40 Hz to 16 kHzand would actually fall within the same envelope were it not for a sharp, localized deviation at 315 Hz. This dip, by the way, and the peak at 630 Hz are interference effects caused by a reflection off the floor, rather than by anomalies in the speaker's actual output. Although they can be audible, their severity and center frequencies vary according to the placement of the loudspeaker and test microphone (or listener), and they may disappear altogether under some conditions. So you'd best take this part of the curves with a grain of salt.

Apart from that two-octave-wide wiggle, the response is fairly smooth, its main features being a peak of a few dB at about 100 Hz and a shallow trough between approximately 1 and 6.5 kHz. The on- and off-axis curves are remarkably similar, especially at high frequencies, where most speakers show the greatest disparity. This undoubtedly is a result of the very wide distribution of treble energy afforded by the Free-Space Array.

We began the listening sessions in our sound room, where we compared the 301s to our far more expensive reference monitors. This can be a withering experience for some speakers, but the Boses held their own with style and verve. Their sound is a bit less neutral than that of the monitors— "warm and rich," as one auditioner has characterized it—but quite satisfying in long-term listening. Bass response is particularly good for such a compact speaker.

To evaluate the special imaging qualities of the 301's Direct/Reflecting tweeter array, we have also conducted listening tests in a home living room—and a problematic one at that. Long and narrow, it poses many placement difficulties, and a rather haphazard seating arrangement just about precludes listening positions equidistant from the two speakers. Mounted on stands against the room's long wall, the 301s easily transcend their environment's shortcomings, creating a stable stereo image that holds up until we move so far off to one side that we can hear only one speaker's output.

Though the market abounds with bookshelf speakers, the 301 Series II is as removed from the ordinary now as its predecessor was when introduced eight years ago. More significant, however, is the care Bose has taken to ensure that the changes made to the original would result in a better speaker—not merely a different one. *Circle 101 on Reader-Service Card*



enjoyment of driving.

Fourth in a series on how Delco Electronics and Bose technology contribute to your "...you have to hear it to believe it!" Popular Mechanics

"A new and revolutionary sound system has been developed by the most unlikely partnership ever to be created in the audio

industry...General Motors...has teamed up with Bose Corporation to create a car stereo system that is so far ahead of anything currently available in car audio that audio enthusiasts who can afford it may well be spending more time listening to music in their cars than they do at home."

Len Feldman, Audio Times

"The performance of the Delco-GM/Bose Music System was astounding...I can't imagine anyone...buying (one of these cars) without the Music System."

Gary Stock, High Fidelity

"If your car is this well equipped, you won't want to go home again."

Rich Warren, Chicago Magazine

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



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Getting into Car Stereo: A Basic Guide to Mobile Music

by Gary Stock

A FEW YEARS AGO, car stereo equipment was hardly worthy of the term high fidelity—even though few of us could imagine motoring any distance without it. Car decks had the unfortunate habit of eating tapes, FM stereo reception was usually a noisy nightmare, and car speakers sounded, well, like car speakers. In short, a *serious* music system on wheels—one that could match the performance of a home setup—seemed totally out of reach.

But car stereo has come a long way: Even some of today's modestly priced equipment can perform rings around the high-priced stuff of a few years back. And modern high-end gear can, if properly installed, bowl you over with its sonic performance.

The market has gotten fairly specialized and can be, at first glance, a bit confusing. Though automobile systems take the same source material as home rigs (cassette and radio signals) and process it to produce the same final product (wide-range sound), the processing steps are divided up a little differently. There are four basic components in an auto-sound system:

Gary Stock is HIGH FIDELITY's "Autophile" columnist. He writes frequently about electronics and automobiles for a variety of publications.

in the dashboard and contains the AM and FM tuning circuits, the volume and tone controls, the tape player, and in low- and midpriced models, a small amplifier with 5 to 10 watts of power per channel.
2. The power amplifier in higher-priced systems is a separate component,

priced systems is a separate component, usually sold as part of a complete set. Some power amplifiers include tone controls or even several bands of equalization, and separate ones may accept only a line-level

1. The front-end unit (still called

"the radio" by novices) most often mounts

Car Stereo Special

- A Basic Guide
- Auto-Sound Terms
- Installation Dilemmas
- Protect Your Investment 30
- New Products
- What We Test and Why
- Lab/Road Tests
 - Jensen RE-530
 - Fujitsu Ten CE-4432EX1
 - Kenwood KRC-1022

input. To add amplification to a preexisting system, you'll need a booster amp—that is, one with high-level inputs.

3. Car speakers are available in a variety of sizes and configurations. Most people opt for two or perhaps four speakers, but I've been in cars that had upwards of eighteen.

4. The antenna plays a key role, so it's important that it be a good one. A surprising number of factory-supplied car antennas are utterly worthless, so be prepared to buy a new one.

Prices

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It's possible to assemble a basic car stereo system for \$200 to \$300, if you're willing to install it yourself and forego such minor conveniences as an automaticreverse and a station-seeking tuner. The \$300-to-\$1,000 range buys you greater convenience, somewhat more power (important not just for adequate volume but for better fidelity), and a greater number and more sophisticated variety of loudspeakers and the electronics necessary to power them. From \$1,000 up, you're looking at the same situation as in home audio, where more money buys increasingly subtle performance improvements.

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A basic \$200 to \$300 system should consist of a front end and one or two pairs of loudspeakers. If you have two pairs, mount one each in the front and back of the passenger compartment. The next step would be an outboard power amplifier, which might run anywhere from \$80 to \$200. You might then add a \$100-to-\$200 equalizer to tailor the system's response to the acoustical irregularities of the car.

Once you become a real "autophile," you may want to biamplify your speakers (one amplifier for each) or add outboard noise-reduction. A few systems even use the home-audio approach of dividing up the in-dashboard elements into a separate tuner, tape deck, preamplifier, and power amplifier, though this arrangement has little intrinsic advantage over a conventional, allin-one AM/FM-cassette front end.

Installation

Installation can add considerably to your costs. Good shops charge \$30 an hour, and a complex setup may take a day to put in. Anything more elaborate than a simple three-piece system will almost certainly require the specialized tools and fitting accessories of a professional installer. For any serious rig, figure on investing as much as one-third of the equipment's cost in its installation. It will pay off-not only in the final setup's appearance, but in its reliability over time. Also, the pros are far more adept than you at hunting down radio interference gremlins that cause buzzes, crackles, and whines. It's best to be properly debugged before you get behind the wheel and start tearing your hair out.

What you will hear when you finally

Auto-Sound Terms You Need to Know

Adjustable Shafts: volume and tuning shafts whose positions in the front-end unit can be aftered to fit different vehicles.

Automatic Antenna: feature that raises a power antenna as soon as the front end is turned on. Automatic Eject: feature of a front end that ejects the cassette when the ignition is turned off. Booster Amp: power amplifier used to augment the power output of a front-end unit. It accepts inputs of several watts and usually delivers outputs of ten or more watts.

DIN Nosepiece: particular size of front-end unit that permits an exact filt in most European cars (see "universal noseplece").

Electronic Antenna: antenna that has circuitry to boost strength of incoming radio signal; not to be confused with an electric antenna, which is simply a mast raised and lowered by a motor.

Fader: feature that adjusts the balance of sound from front to rear of the passenger compartment. Flush Mount: type of mounting in which speaker is recessed into an Interior panel. In most cases, it requires cutting fairly large holes In the panel.

Front-End Unit: combination AM/FM radio and cassette player. It may also incorporate a power amplifier with modest output.

Joystick: movable stick-shaped control that adjusts both left-to-right and front-to-rear balance (see "fader").

turn on your new system will be somewhat different from what you're used to hearing at home. In a typical four-speaker setup, the driver is an off-center listener to sounds emanating from the front and rear. Though there is a definitely localized character to the instruments and voices, you won't hear the same stereo soundstage as with a home rig—for one thing, they will generally sound as though they're behind you.

Maintenance

The same rules of care and mainte-

Local/DX: two-position switch on a front-end unit that optimizes radio-receiving parameters for nearby ("Local") or distant ("DX") stations.

Music Search: feature that automatically hunts for and plays the next musical selection on a cassette.

Plate Speaker: speaker composed of two or more drivers mounted on a flat plate. Usually intended for mounting on rear deck or in side panel.

Raw-Frame Speaker: driver sold without enclosure or ancillary circuitry. Used primarily by custom Installers.

Seek-Scan Tuning: feature that enables a radio to scan across the band, stopping at each listenable radio station.

Subwoofer: speaker or speakers, often supplied with separate amplifier and frequency-dividing circuitry, intended to reproduce the deepest bass octaves.

Suppressor: any of a variety of small components added to the wiring of a sound system to eliminate such radio-frequency-induced noises as whining and static.

Surface Mount: type of nonrecessed mounting for self-enclosed speaker.

Universal Nosepiece: compact front-end unit sized to fit into European, Japanese, and American cars (see "DIN nosepiece").

nance that apply to home equipment apply to auto-sound gear. Clean the tape heads and tape path every other month (your home audio cleaning accessories should work just fine); keep cassettes in their plastic boxes when not in use and out of the sun's rays. Be sure the speakers are protected from sun and moisture by fabric coverings (in the case of rear-deck speakers) or water-shields (in the case of door speakers). In fact, keep all the elements of your system as dry as possible. With proper care, there's no reason that a music system shouldn't outlive the car it's installed in.

Installation Dilemmas



The case for using a professional installer is easy to make. A pro has the wiring diagrams and the experience necessary to make sense of the tangle of wires lurking behind the dash (left). His know-how is just as important in speaker installation; cutting into a

door (center) without knowing what's behind the panel can result in damage to window mechanisms. And with the tools and parts necessary to customize cables (right), a pro can hook together equipment that differs in connector formats.

From the Driving Force:

Only Panasonic has Ambience circuitry to create a stereo image beyond the capability of conventional car stereo.

masonic The Supreme Series

STEREO

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AMBIENCE

Only the Panasonic Supreme Series has Amblehoed to take your music where its never been. With the push of a button,

music seems to wrap itse f around you, surround you. You don't just hear it, you live it.

But the Panasonic Supreme Series with mbience doesn't stop there. Theres

Sushbutton tuning. There's FM Optimizer for moroved fringe area reception. INQ circuitry reduces noise and interference caused by passing traffic. The adaptive front end reduces



=NI fade and drift. There's Radio Monitor that lets you listen to the radio withour ejecting the cassette. There's locking last forward/rewind and more.

And nothing enhances the sound of Ambience like Panasonic high performance car speakers.

Experience the magic of Ambience. Only from Panasonic.

Panasonic, car audio The driving force

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Keeping the Bad Guys Out

IN CASE YOU HADN'T HEARD, the youth of today isn't idling away on street corners. No, a surprising number of enterprising young lads and lasses are working full-time in one of the fastest growing markets in the U.S.—hot car-stereo components.

So what do you do to prevent your "auto-reverse adorable" from being kidnapped? To begin with, try a little common sense. Keep your doors locked, your cassettes out of sight, and if possible, your front-end unit concealed behind a strategically placed tissue box or pair of driving gloves. Avoid speakers with flashy grille assemblies; if they're mounted in the rear deck or panel, cover the whole area with acoustically transparent fabric.

Of course, that won't keep the Serious Bad Guys out for long, particularly if you have the kind of car that attracts their attention. (Expensive luxocruisers, sports machines or European compacts are among their favorites.) To hold off a determined car thief, you're going to have to spring for an alarm system. That's because even the best door locks open in a flash with a hookshaped "Slim Jim." (Remember the time the attendant at the lot opened your locked doors in thirty seconds flat?) Also, the police in most cities don't bother checking suspicious-looking car-related incidents anymore.

What you need is an alarm that protects the car's contents-not just one that simply keeps the car stationary by cutting off the ignition current or the fuel pump. The simplest type is what dealers call a pintype perimeter system: It goes off whenever a door, the hood, or the trunk is opened. Cheap perimeter alarms activate the horn, which will continue to sound until the battery goes dead. A step-up buys you a relay/ timer that turns off and resets the system a few minutes after it has been activated. The real flaw in any system that uses the car's power and noise sources is that the Bad Guys can simply snip the wires to the horn (easy-they're just behind the car's grille). or cut off the battery's juice (easy againjust ground out the starter terminal from beneath the chassis.)

For tougher protection, you need a system with its own battery and its own siren, both hidden in hard-to-get-at places. This requires the Bad Guys to start hunting around; usually, they would rather just go pick on someone else.

If you're going to go this far, it also makes sense to improve the means by which the alarm detects the thieves. Pin switches work only when the crooks open



the doors, hood, or trunk; if they break the window, the alarm remains a mute witness. You would be wise, therefore, to add current sensors, which detect tamperings with the car's electrical system, or pattern identifiers sensitive to the sound of breaking glass. An increasingly popular type of alarm uses a small transducer to flood the car's interior with ultrasonic energy; if the energy field is broken by any movement, the alarm is activated. Another system makes use of motion detectors, which respond to activity in or outside of the vehicle. These are sometimes subject to false alarms-particularly if the car is parked on a hill or near a busy intersection. The bottom line: Go with as many different forms of detection as you can reasonably achieve with one alarm system, all connected to a hidden, loud siren and separate battery. And don't forget to mount a decal on the window, announcing that your carhas an alarm system.

Once your car is safely armed, how do you get into it without activating all the bells and whistles? Alarm system designers use two different approaches to 'reentry,'' as they call it. The simpler one puts a keyswitch (or in some cases keypad) on the exterior of the car—frequently in a small hole in the fender, hidden by a false reflector. The other approach is an entry/exit delay system, in which the alarm system waits a few seconds after you get out before automatically arming itself, then waits another few seconds after you reenter the car before going off. The delay gives you time to deactivate the system by flicking a switch or punching a code into a keypad. Both approaches have their problems: External keyswitches give the heavy-duty hoodlum an opportunity to pull it out and twist the lead wires together, effectively disarming the whole system. And delayed entry/exit devices give him a few seconds to rummage around under the dash before the siren goes off. A reinforced external keyswitch with an armored cable is the toughest system to crack. But a clever installer may be able to make either approach *almost* Bad Guy-proof.

As to the question of prices, the least expensive pin-type alarms can be bought for as little as \$25 for the do-it-yourself-er. As the sophistication increases, however, the price rapidly rises into the \$150-to-\$300 range for the components, with a hefty \$60 to \$200 for professional installation. I'd recommend it for any complex system, though: The installers usually know from experience how the Bad Guys think and can design the appropriate countermeasures. If you're driving a high-profile automobile that attracts thieves like bears to honey, figure on tossing as much as \$1,000 total into the alarm system. Check with your insurance agent as to premium discounts: He may be able to give you a break that would help justify the expenditure. Then sit back and try to view the alarm system as an investment in peace of mind.-G.S.



"Thanks anyway, but without Jensen speakers, you're only going halfway."



So now that Jensen engineers receivers too, naturally peop e recognize that same quality. But some of them are making a big mistake, by hooking that Jensen receiver up to speakers that are just not Jensen quality.

A truly great car audio system starts with a Jensen receiver, and goes all the way with the quality sound of Jensen speakers, too. That way, great sound won't be s detracked on the way to your ear.

Seeing the name Jensen on a receiver is a terrific start. But if it's the sound that moves you, you want to *hear* Jensen from beginning to end. The way to do that is with Jensen speakers. Anything less is only halfway.

JENSEN CAR AUDIO When it's the sound that moves you.

C Jensen Sound Laboraterics, 1982 Triaxial[#] and Triax[#] are registered tradimarks/dentifying Jensen Sound Laboratories as the producer of the patented 3 way speaker systems.

AR STEREO NEW PRODUCTS CAR STEREO CAR

Las Vegas Lowdown

DATELINE: LAS VEGAS, NEVADA. In early January each year, tens of thousands of people gather here for the Winter Consumer Electronics Show. (For complete coverage of the Winter CES, see April HF.) Their purpose: to see The Gear, a crop that this year includes everything from digital E.T. watches to \$5,000 power amplifiers, from computers to calculators. I am one of those 75,000 people. I carry a badge.

A plastic editorial press badge, that is. It gets you a free cup of coffee each morning in the pressroom and entrée into most of the show's exhibit rooms. It gives you a chance to question the fast-talking guys who sell most of the equipment you'll be seeing. I cover car stereo. Here's my report.

Friday, 10:18 a.m.: A quick tour of the convention and the year's biggest automotive audio news is obvious: The major makers of car stereo gear have awakened to the fact that theft is a major concern for most buyers. Sony introduces an AM/FM cassette combo called the Music Shuttle, which converts in a moment from a conventional-looking front-end unit to a Walkmanstyle tape player-eject the tape section, couple it to a power supply attachment and a pair of headphones, and off you go. The blonde demonstrator keeps repeating that "they can't steal what's not there" as she pops the tape section in and out of the dash.

Nakamichi's four-piece car stereo setup is a technical tour de force in every regard (more details later.) Like Sony's unit, this one reveals notable engineering effort to discourage theft. The TD-1200 front end has a numerical code engraved in ROM (read-only memory); to turn on the system, you must know the code and enter it in proper sequence. A thief trying to peddle this \$1,260 deck would be faced with unloading a nonworking piece of hardware. Nakamichi hopes he'll tell his friends.

All over the Convention floor, alarm companies are offering new technological approaches to car protection-ultrasonics, microwaves, solid-state pattern identifiers that recognize the sound of breaking glass. Philips-the venerable Dutch inventor of the cassette and the Compact Disc-has added a series of sleek, unobtrusive ultrasonic alarms to its growing automotive line. The company is also offering a complete line of auto power amplifiers, a digital front-end unit with sumptuous Eurostyle cosmetics, and several new loudspeakersincluding a rear-deck three-way "platestyle" system with a midrange/tweeter panel that tilts upward like a square-rigger's mainsail. Philips fills out its budget end with a line of low-priced speakers and electronics under the Norelco brand name.

Friday, 3:42 p.m.: Another general conclusion comes to mind: Car stereo is attracting a growing number of prestigious names in home audio, many of whom bring much needed and specific areas of expertise to mobile sound. Nakamichi's aforementioned complete music system breaks new ground in several ways. Its front-end unit uses not one but two microprocessors for

by Gary Stock

control of station-hunting, memory, and antitheft sub-systems. Its tape player incorporates a first for car stereo-an automatic head-azimuth alignment system for flat high-frequency response—as well as a superbly designed front-panel layout. (For an in-depth explanation of Nakamichi's automatic azimuth correction system, see the test report on the Dragon cassette deck in the April issue.) The separate power amplifier is said to provide a robust 70 watts of output for each of its four channels, at an astounding 0.005% harmonic distortion. And the system's three-way, plate-type speakers come with crossover assemblies mounted in separate enclosures to prevent magnetic interaction between crossover coils and speaker magnets. All told, Nakamichi's system (\$2,000 with power amp and speakers) is one of the most thoroughly engineered and rigorously refined in the short history of serious car stereo design.

Several other manufacturers weigh in with intriguing new ideas. BGW, the wellknown maker of professional high-power amplifiers, recently bought high-end car stereo supplier Spectron and has now introduced two automotive power amplifiers under the BGW name. Both are notable for clean, high-power output capability and "bulletproof" overload-resistant circuits. Boston Acoustics shows a two-way plate speaker that uses a polypropylene cone woofer and a copolymer tweeter similar to those employed in its most expensive home speakers. Proton, which last year introduced a pair of front-end units that use the



American Audio ET-9000TV

New Functions, New Formats

The tape section of Sony's Music Shuttle leaves the car when you do. Nakamichi's front end remains mute until you enter a security code. And video addicts need never miss an episode of "Laverne and Shirley" if they opt for American Audio's TVequipped combo unit.

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Audiovox AMP-800E





Pursuing Power: Boosters and Amps

One of the easiest and least expensive ways to improve a carstereo system is to add some extra amplification. Boosters from Jensen, Panasonic, and Audiovox give you the watts you want plus seven bands of graphic EQ; Audiovox even throws in some



echo. For the more component-conscious, there are lots of separates to choose from. BGW has entered the car-stereo market with high-power separate amps, and MGT's newest amp has its own built-in crossover network.



Jensen 5000

innovative Schotz FM detector circuit, dramatically expands its presence with a broad line of power amplifiers, raw frame speakers (including an intemperate 12-inch car subwoofer), and five front-end units. Their top-of-the-line piece has a Schotz-massaged electronically tuned radio, Dolby B and C, and an innovative front panel that uses soft-touch rocker switches instead of knobs. Sherwood, a well-known home audio name, emerges with a broad new line of front-end units, amplifiers, and speakers. And Alpine continues its strong technological presence with a computerized equalizer/analyzer that automatically adjusts system frequency response and a new top-of-the-line front-end unit with Dolby B, Dolby C, and DBX.

Saturday, 11:30 a.m.: The convoluted history of stereo AM in America becomes even more baffling as I talk with people about the show's big stereo-AM announcement: GM's Delco division has endorsed the Motorola system for stereo-AM broadcasting. More than a year ago, as you may recall, the FCC judged that "the market" should determine which of the four competing stereo-AM techniques would become the broadcast standard. The result has been a kind of chaos, with the contenders furiously promoting their systems. Among broadcasters, the Motorola-designed system was probably the least favored of the four, but a move by Delco, the nation's largest manufacturer of auto radios, carries

Once there was only one way to hear great speakers in a car.



Now there is another.

Once you had only two choices: Great sacrifice or bad sound. Now you've got a third: Voice of the Highway speakers. They are to car sound what Voice of the Theatre® speakers (the big ones in the back seat) are to pro sound.

C Altec Corp. 1982

There's a self-powered subwoofer, three kinds of 6 X 9, a new 5¼" Duplex and more. See your local Altec Auto Sound specialist for details.

ALTEC LANSING Voice of the Highway

1515 S. Manchester, Anaheim, CA 92803

Circle 31 on Reader-Service Card

O NEW PRODUCTS CAR STEREO CAR STEREO C



Front Ends with Flash

From Grundig's Euro-styled number to Alpine's top-of-the-line model with Dolby B, C, and DBX, there's a unit for every purpose and purse. Panasonic is pursuing the high-end market with its Supreme Series, and Sherwood joins the auto-sound fray with its



first line of car gear. All have "smart" tuners and tape players designed to withstand the rigors of the road.



Alpine 7347



Panasonic CQ-S788



JBL T-425



Bose 1401 Series II



B&W LM-1



Philips tweeters



Boston Acoustics C-700



Car speakers must contend with a difficult acoustic environment and inherent placement problems; highperformance multidriver systems could be the answer. Boston Acoustics, B&W, and JBL have new two-ways; Sanyo goes coaxial; and Pioneer puts four in one. Bose refines its fourdriver, equalized approach, and Philips lets you tweak the treble with separate tweeters.
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a lot of weight. It's still too early to tell when large-scale stereo-AM broadcasting will begin, and it's unlikely that anything will happen for a year or so. The situation is one of those rare cases where *lack* of government intervention has messed things up.

Sunday, 4:12 p.m.: Despite all the new high-end gear here, the middle ranges of auto-sound seem exceptionally well attended to. Jensen is reacting to the gradual downsizing of cars by expanding its line of shallow Thinmount speakers to include a 4-by-10-inch version and offering adapters that shoehorn large speaker frames into small spaces. Boman, a well-know name in the field, has made a strong bid for the affections of import-car owners with a classy-looking new line of Euro-styled front ends and electronics called the Carrera series. Sanyo has numerous new automaticreverse front ends with relatively high output (8 watts or so) at exceptionally attractive prices. Sparkomatic has upscaled the performance of several of its AM/FM/cassette combos with the addition of DNR noise reduction. And Pioneer is intent on waking up the neighborhood with a new midpriced line of heavy-duty speakers ominously called the Maxxial series, presumably intended for the Road Warrior in us all. The company also demonstrates its latest refinement in tuning circuitry-Supertuner III-by comparing it to the competition.

Sunday, 5:30 p.m.: With most of the major news sorted out, it's time to assemble the list of special awards. The Loudest Loudspeaker Award goes, without question, to Cerwin-Vega for its new line of "digital" car speakers, which play at thunderous volumes and have an appropriate sort of metal-gridded industrial appearance. The Most Outrageous Display Vehicle Award is dead heat between Boman, which chopped the top off of a Porsche Turbo to create a one-of-a-kind Turbo Cabriolet, and California speaker manufacturer AUM, which brought a Ferrari coupe that once belonged to actress Sharon Tate. The Most Ouestionable Concept Award goes to a company called American Audio for its indash front-end unit with a 11/2-inch television built in. And the Most Surprising Turn of Events Award is won hands-down by Blaupunkt, which forsook the exotic democar sweepstakes in favor of an exotic, spectacular-looking hostess with the sleepy hauteur of a young Ava Gardner. In contrast to most gingerbread hostesses, this one seemed to know a great deal about the technical side of automotive sound. You can find anything in Vegas, if you look long HF enough.



"Perhaps the only significant performance option you can add to a car like this comes from ADS."

It's already fast enough to get you in a heap of trouble. So why not look into an option that can make the double nickel bearable? A sound system from ADS.

Any car audio pro will tell you that ADS is first in the field. So instead of bragging, let us instead offer some options to consider.

The ADS 300i. A two-way speaker designed for flushmounting in decks and doors. A pair of these will impress you. Four could melt the windows.

The new ADS 320i. A sensational six-piece system which includes a pair of 2" samarium cobalt tweeters that can be surface or in-dash mounted, a pair of 51/4" woofers that should be flush-mounted in panels or doors, and a pair of crossovers to split the signal between them.

The CS 400 Dual Subwoofer system. Purists will combine these with the above to hear the tubas better.

The ADS P100 Power Platetm amplifier which puts out a healthy 50 watts per side.

Whether you're into Puccini or The Police, some combination of the above can significantly enhance your driving pleasure. If you don't know where to find ADS locally

call 800-824-7888, Operator 483. In California, 800-852-7777, Operator 483. Or write Analog & Digital Systems, Inc., 239 Progress Way, Wilmington, MA 01887.

ADS. Audio apart.

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STEREO SOUND VIEWS CAR STEREO CAR STEP

Tackling the Tests

THIS ISSUE MARKS HIGH FIDELITY'S first foray into auto-sound testing, an area to which both HF's editors and Diversified Science Laboratories bring a good deal of expertise. DSL conducted the car-stereo lab tests for HF's former sister publication STE-REO and has served as independent test lab for one of the country's most prestigious automobile manufacturers.

The high-fidelity car-stereo market is still a relative youngster, but it is approaching its adolescence with the right attitude. On the whole, today's gear-as represented by the equipment reviewed in this issue-is better than it was two years ago, when I last conducted a round of car-stereo tests. Tuners are more sensitive both in FM and AM, for better reception in rural areas, and city dwellers should expect fewer multipath problems, thanks to lower FM capture ratios and higher AM suppression. This is not to say that new tuners have completely conquered problems as sticky as picket fencing, but they do seem somewhat better. And those of you who switch to AM when FM reception proves impossible will appreciate the wider automatic-volume-control (AVC) ranges, which make tuners less sensitive to signal fading as the car moves away from the transmitter.

Microprocessors have made features like automatic search, electronic station presets, and numerical frequency displays more the rule than the exception in car tuners. More important, some tuners can decide for themselves whether reception conditions at a given moment make clean stereo possible or whether it is preferable to blend left and right channels for better quieting. Should signal conditions be worse still, several tuners will go into soft mute, progressing from stereo blend to mono, then fading gradually in volume, rather than muting all output abruptly.

Tape decks have improved as well. Automatic reverse mechanisms are more common, treble response is generally better (although still not equal to that of good home gear), and wow and flutter is somewhat less of a problem than it used to be. Each of the front-end units we review in this issue has power-assisted loading; it's no longer necessary to push and shove to insert a cassette. Noise reduction (of one form or another) is quite common, and more decks offer a choice of playback equalization to accommodate chrome and metal tape, as

Edward J. Foster is a consulting technical editor of HF and the director of Diversified Science Laboratories. well as normal ferric.

Output power is one area in which the status quo has prevailed. A car battery is still a car battery, and, unless a DC-to-DC converter steps up the voltage in the front end (a technique commonly employed in separate car power amps) or an output transformer is used, theory dictates how much power can be made available into a standard 4-ohm load. For typical front ends, that's roughly 61/2 to 71/2 dBW with the 14.4-volt battery specified by standard test conditions. A good car battery under charge may indeed supply 14.4 volts, but with the engine off, it provides 12.6 volts at most and available output power drops 11/4 to 2 dB.

Output power from the amplifiers built into front ends is, therefore, at a premium, and there's little sense wasting it on frequencies too low for a car speaker to reproduce. Accordingly, some auto-sound equipment rolls off the very low end. In our

Our data reveal the problems of stereo in the fast lane.

experience, that's not a disadvantage (when used in moderation) unless you configure your system with a separate power amp and speakers that can take the strain.

Auto-sound equipment also operates under fundamentally different conditions than home gear, and what is sauce for the goose is not necessarily equally tasty on the gander. For this reason, different criteria of excellence apply, and we have altered our reporting format accordingly.

Since you're more likely to listen to AM in your car than at home (because of the difficulty of getting consistently good FM reception), we've also tested the portion of the tuner that applies to AM. Don't expect wide-band response: AM radios seldom go beyond 3 kHz, and one that does is more prone to crackles and static than one that doesn't. AM sensitivity-measured in microvolts rather than dBf-provides a relative indication of how many stations you can receive. The lower the number, the more stations you can get. AVC range suggests the constancy of sound level as you drive farther from a station; the larger the number, the better. AM selectivity indicates how well the tuner rejects a station on the next channel. It will not be nearly so

by Edward J. Foster

impressive as FM selectivity, but look for as large a figure as possible if stations are packed close in your area.

FM data is presented somewhat differently, too. Home FM tuners are designed to achieve full limiting and uniform output at the lowest possible signal level, and a single quieting curve is the clearest form of presentation. Some auto-sound tuners are purposely designed to mute gradually as the signal fades and so reduce noise under these conditions. To show this effect, we plot both the audio signal level and the noise level as a function of RF input. The *difference* between the curves is the dynamic range. Since the tuner may have various reception modes, a number of curves may appear on the same graph.

We have tabulated the key data—50dB quieting in mono and stereo, selectivity, captureratio, AM suppression, and THD +N. Some tuners cannot be assigned a 50-dB stereo quieting figure: The tuner is really in mono at this point, despite the stereo beacon's indication to the contrary. This can be a practical advantage, because quiet mono reception under dynamic conditions is more agreeable than noisy stereo or abrupt changes between modes.

The capture-ratio, alternate-channelselectivity, and AM-suppression data are conventional. A low capture ratio and high AM suppression suggest less susceptibility to picket fencing in urban areas and so are desiderata. A high selectivity figure is advantageous, especially in rural areas, although, other things being equal, selectivity and capture ratio are conflicting attributes, and the designer must trade off between them.

Expect to find greater distortion than in home equipment. On front ends that include a power amp, we measure to the speaker terminals and so lump amplifier distortion with tuner distortion. Such units provide no convenient means for injecting a test signal into the amplifier section separately. Thus, output power is determined by receiving a mono FM test signal and cranking up the volume until 3% THD+N is reached. Since car stereos are designed to operate with 4-ohm speakers, we use that impedance—rather than 8-ohms—as a load.

The differences among car-stereo units are even greater than those among home high fidelity equipment. In launching this test program, HF hopes to bring order out of chaos and provide our readership with an intelligent basis for deciding what to buy.

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Lab and Road Tests

HF evaluates three receiver/tape deck combos

Laboratory data for HIGH FIDELITY's auto-sound equipment reports were supplied by Diversified Science Laboratories; road testing and text are by Robert Long. Preparation was supervised by Michael Riggs and Peter Dobbin. All reports should be construed as applying to the specific samples tested. HIGH FIDELITY and Diversified Science Laboratories assume no responsibility for product performance or quality.

MY ROAD TESTING of these three front ends-Jensen RE-530, Fujitsu Ten CE-4432EX1, and Kenwood KRC-1022-differs in one key aspect from Diversified Science Laboratories' bench testing: power amplification. DSL measured all three products as systems-that is, from input (antenna or tape) to power output (at the speaker connections). For the Kenwood KRC-1022, which has no built-in amplifier section, this meant combining the product under test with an amplifier-Kenwood's KAC-801, a matching model. This represents a worse-case testing in the sense that any distortion or limitation in frequency response that is occasioned by the poweramplification section is reflected in the measured results. And for audible check, DSL used full-range car speakers of the sort that might logically be employed with the limited power of built-in amplifiers. As a result, the sound tended to roll off toward the frequency extremes, and the limited power of the built-in amps tended to inhibit any use of tone controls (let alone outboard equalizers) to restore the missing range.

Taking the opposite approach, I hooked the line output of each unit into the same biamplified multispeaker system, for a different sort of worst-case testing. By maintaining broad response throughout the amplification/speaker chain, I gave each unit maximum opportunity to display deepbass anomalies (such as undue thumping during picket-fencing FM reception) or high-frequency undesirables (hiss, for example). Thus the relative weight you place on DSL's tests and mine should be determined by your intentions: DSL's weigh more if you plan to use the built-in amps and simple speakers; mine, if you decide on a maximum-capability system.

The amplification/speaker system, which we plan to use in testing all automotive front ends, is all-ADS and chosen with my wife's Datsun 310 hatchback in mind. Since there is no rear deck or enclosed trunk in such a car, and the cargo space is in frequent use, freestanding speakers beneath the rear window were ruled out. So were amplifiers too bulky to be hidden under the front passenger seat. Aside from the practical difficulties that either equipment would pose, their ability to be seen and, therefore, stolen was ruled a drawback.

At the recommendation of ADS, 320i woofers and tweeters were chosen for the doors, with the crossovers hidden behind a panel below the glove compartment. The advantage of the 320i is that the woofer and tweeter can be mounted separately. The tweeters might have been mounted on the upper surface of the dash, for example, to use the inner windshield surface as a reflector. If the woofer could have been mounted reasonably close-by, this might have given the best stereo imaging, but the fairly high crossover (2.5 kHz) precludes the wide interspeaker spacing that the Datsun would have imposed on such a plan.

Flanking the back seats are ADS 300i two-way systems. Aside from their singleenclosure construction, they are similar in basic design to the 320is: A 1-inch softdome tweeter is combined with a 5-inch woofer via a 2.5-kHz passive crossover. Even the rated frequency response is similar, at 50 Hz to 20 kHz (\pm 3 dB), which only just noses out the 58-Hz bottom of the 320i rating.

Both pairs of speakers are driven in parallel by an ADS Power Plate 100 amplifier rated at 50 watts per side into 4 ohms. Having a single stereo amplifier precludes use of the fader on typical front ends to adjust front/back balance, of course, but the standardization of the test-bed system seemed more important than its ultimate optimization.

The installation was done, at ADS's request, at Car Tunes in Watertown, Mass. Richard Inferrera, president and founder of Car Tunes, is one of those irrepressible spirits who make audio such an interesting business. Dominating his waiting room is a huge window onto a floodlit garage, which houses his better half, so to speak: a thoroughly customized 1967 Chevy that, among other things, boasts an array of five ADS Power Plates driving his subwoofered sound system.

Though the dashboard's space is cramped in the Datsun, Car Tunes managed to install the Jensen in it—albeit at the expense of the lower left-hand corner of the escutcheon. I installed the Fujitsu Ten in the same way, but the Kenwood requires a larger rectangular cutout and, hence, could not be dash-mounted in the Datsun. To make it just as visible and accessible, I built a crude wooden jig to fit between the shift console and the fire wall, using heavy rubber bands to hold the front end on the jig and to keep the wiring—threaded down from the dashboard—from sprawling onto the car floor.

My "test track" runs some fifty miles through the Berkshire hills of Massachusetts. I always operate the stereo equipment while driving. Some of the ordeals along the way are a hilly, bumpy, winding stretch of road near Tanglewood that offers maximum stress to the speed stability of the tape transports, two passes through downtown Pittsfield, known for its multipath conditions, and an almost unbroken, five-mile stretch, offering a visual fix on the antenna tower of FM station WAMC atop Mt. Greylock-an added means of gauging reception performance. In all, two stations on each band were regularly used as test signals; three more FM stations were programmed into the presets as a test of distant reception, but proved too far away for adequate listening quality with any of the three front ends.

As I determined from my road tests, presets and station-scan are necessities in modern, high-quality front ends. Manualonly tuning would be a nuisance even with familiar stations and terrain and, as I confirmed on the drive from Watertown back to the Berkshires, nearly hopeless in terra incognita. Also important on FM is some means of softening the blow when fluctuating signal strength is approaching the stereo threshold or the muting threshold. The bursts of high-frequency noise that result at such times are referred to as "spitting" in the individual reviews since, at their worst, they sound like evidence of massive feline ill will.

If you try mixing brands in a car system, you may feel some ill will of your own because of the incompatible couplings you're likely to experience. If you're having a professional do the installation, this won't worry you, of course; but do-it-yourself-ers can't expect the kind of standardized interconnection that obtains in home gear. You can't even rely on the fuse holders to be inserted the same way into the power lines, though the fuse holders themselves are quite standard. To help you spot problems in advance, the supplied connections are listed in the data columns of the individual reviews; but often twist, solder, and tape will be easier than finding all the

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appropriate connectors

But in most respects—and observing the caveats cited by Ed Foster in "Sound

Views"—the terminology and criteria of these reports are similar to those of our home-equipment tests. This is not to say that listening is equally pleasurable under the two conditions. Let the individual reviews explain.— \mathbf{R} .L.



THE RE-530 IS WELL-deserving of its flagship status in Jensen's line. High performance and an exceptional degree of operating flexibility make it a most welcome traveling companion. Though there are many controls to cope with here, they prove unusually easy to manipulate. Jensen does not require you to push or pull a given knob to achieve a different rotary function. Instead, the two main knobs have added pushbutton features: station scan when you press the left button (or stop when you press it again), preset-station scan (or stop) when you press the right if there is no cassette in the well, and eject if there is one. Since these are the pushbutton functions most often used, their assignment to large knobs instead of tiny buttons is welcome. The remainder of the controls are small push buttons with illuminated IDs. The only drawback to them is that they extend outward from the faceplate far enough to obscure their own legends at night. The best solution is to memorize their sequence so that you can find the one you want by feel.

Both Dolby B noise reduction and DNR dynamic filtering are built into the RE-530. The former works only on tape (no Dolby FM reception); the DNR can be used to ameliorate hiss in both tapes and broadcasts. A power antenna's automatic retraction is activated even when you switch from radio to tape, as well as when you turn off the unit. Another useful feature is the clock, or actually the time readout that replaces the tuned frequency at the touch of a button. Considering the unreliability of built-in car clocks, this seems a welcome plus.

Jensen's approach to controlling the effect of fading FM signals is called APC (Automatic Program Control). Weak stereo stations are reduced in output (by as much as 10 dB at extremely low signal strength), partially blended to cancel much of the stereo noise, and rolled off very slightly above about 3 kHz. The circuitry also makes a slight difference in mono (not shown on the graph), particularly around 10 dBf, where the quieting curve is even a little better than that for APC reception of stereo. In prac-

Jensen RE-530 AM/FM/cassette car receiver, with automatic reverse, Dolby B, DNR. Dimensions: 7 by 3 inches (chassis front), 51/4 inches deep; escutcheon, 7/4 by 21/4 inches; main shafts, 5, 53/4, or 61/4 inches o.c.; dlai area, 41/8 by 13/4 inches. Connections: single-wire flat-clip female for main power (ignition), memory power (battery), power antenna; standard coaxial female for antenna input; female pin jacks for preamp outputs; six-pin male for speakers; spade-lug attached ground. Fuses: In-line 3-amp (main power) and 1-amp (memory power). Price S500. Warranty: "limited," one year parts and labor. Manufacturer: made In Japan for Jensen Sound Laboratories, 4136 N. United Parkway, Schiller Park, III. 60176.

FM tuner section

FREQUENCY RESPONSE & CHANNEL SEPARATION







Mono sensitivity (for 50-dB noise suppression without APC) 211/2 dBf tice, strong stations deliver the best stereo imaging without APC, but as signal strength drops, spitting starts earlier and is more severe without it. Thus the APC was

CAPTURE RATIO		23/4 dB
SELECTIVITY (alternate	551/2 dB	
AM SUPPRESSION		511/2 dB
DISTORTION (THD+N)	,	
	stereo	mono
at 100 Hz	0.64%	1.05%
at 1 kHz	0.46%	0.50%
at 6 kHz	0.32%	0.25%

AM tuner section

FREQUENCY RESPONSE



Cassette transport section

at 100 Hz

at 1 kHz

at 6 kHz

	FREQUENCY RESPON	SE
		النباز هي كالكا مى حي الله
	-5 HE 510 (4)	
	HZ 20 50 100 200	500 1K 2K 5K 10K 20K
	forward	+1/2, -31/2 dB, 33 Hz to 14.2
		kHz
	reverse	+1/2, -3 dB, 32 Hz to 14.8 kHz
	WOW & FLUTTER	±0.15% average; ±0.22% peak
	SPEED ACCURACY	2.4% fast in either direction.
	OF EED ACCOMACT	10.8 to 14.4 volts
	Preamp/amplifier section	on
)	BASS CONTROL	+11, -14 dB at 100 Hz
	TREBLE CONTROL	+10, ~9 dB at 10 kHz

OUTPUT (per channel into 4 ohms; at 3% THD+N)

3.2 watts (5 dBW)

4.2 watts (61/4 dBW)

4.2 watts (61/4 dBW)

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used for most of the road tests and the defeat seems desirable only with excellent signal strength. Given this use pattern, FM reception with the RE-530 is unusually good by car standards. Incidentally, the presets will store five stations from each band.

The AM section has excellent response characteristics, holding up well to about 3 kHz and rolling off quite rapidly above that frequency. There is a bit of a bass bump in the measured curve (through the amplifier), which might account for the slightly "thick" sound through the line outputs; a combination of AM-station EQ practices and the unusually deep bass response of the Jensen, as auditioned through the ADS test setup, might also be the cause. In any event, the AM section is well behaved and no further from true high fidelity than you would expect from a quality car front end.

The tape section is arguably the star performer in the RE-530's lineup. Response is very flat, extended, and consistent from one tape side to the other for an auto-

matic-reverse car deck. And it is unusually resistant to shock. On very hard bumps there is a slight "bobble" in piano tone, just audible under the noise of the shock itself. Recovery is complete and immediate; there is no audible waver of "aftershock." The deck's only annoying habit is the audible output in the fast-wind modes, which may help you find the spot you want but seems excessively noisy. On the plus side, the deck ejects the tape automatically when you shut off the ignition. The switchable Dolby B noise reduction and tape equalization contribute to accurate tape playback, of course; the DNR can be useful in hissy tapes recorded without benefit of Dolby B. The threshold of the DNR is on the low side, however, making its action quite aggressive-more aggressive than you may like. If the hiss is not severe, audiophiles will probably prefer playback without DNR.

The threshold also is a little low for FM, which nonetheless profits from DNR when signal strength begins to fade badly.

Spitting is materially reduced without closing down high-frequency response severely when the music is loud enough to break through the threshold. Some signals "fool" the DNR into varying its filtering, which can be most discernable and annoying on sustained notes. So FM DNR might best be rated as extreme unction for dying stations. On AM, with its inherently limited highfrequency response, the opportunities for disconcerting side effects are much rarer.

A chassis switch on the RE-530 permits you to route line-level outputs through and around the fader control. Bypassing the fader entirely would be appropriate if the unit were to be used with an outboard main amp; in such a configuration, the volume control would govern output. Alternately, you can tap line-level signal from the backspeaker side of the fader, maintaining control over a supplementary amplifier. Such exceptional functionality in combination with overall fine sound merits high praise, indeed, for the RE-530.

Circle 98 on Reader-Service Card



AT \$300, THE CE-4432EX1 is just about at the midpoint of the Fujitsu Ten lineup. Its price tag, which should appeal to the budget-conscious, reflects its relatively simple array of features. The controls proved generally satisfactory. The left-hand knob does triple duty, adjusting volume, treble (when you push it in), and bass (when you pull it out). The push-pull action is hair-triggered; it's important to brace your hand in a moving car, or you may find that the wrong function responds. And using one button for both mono-only FM reception and 70microsecond ("metal") tape EQ can be a little confusing. Otherwise everything is pretty straightforward.

Typically, among current digitally tuned car equipment, the right-hand knob is spring-loaded and steps the tuning up or down when you give it a quick twist or "fast-winds" in either direction across the dial when you hold it. Personally, I find this scheme easier to use in a moving car than the alternative rocker arm, familiar from home equipment. A SEEK button tunes upward until a receivable station (or, sometimes, the lower edge of a very strong FM station) is reached. Tuning stops there; if you don't like what you're hearing, you press the button again. There is memory capacity for five stations on each band.

The FM band is received very much as it would be by a home tuner. As RF signal strength decreases, the full stereo effect remains right down to the stereo threshold (at 14¼ dBf), and audio output remains unattenuated until even mono reception is on the way to becoming quite noisy. In strong signal areas, this means uncompromised stereo; in even moderately weak signal areas you may prefer to keep the monoonly button pushed in to reduce spitting. Curiously, Fujitsu has chosen not to enable use of the DNR feature to ameliorate highfrequency noise under these circumstances. (It operates only in playing tapes.) Where signal strength is extremely strong, the local/distant switch may promote clean reception by attenuating RF input (by 28 dB); for all our tests, however, the distant ("DX") setting, which is listed as normal operation by Fujitsu, delivered equal or bet-

Fujitsu Ten CE-4432EX1 AM/FM/cassette car receiver, with automatic reverse, DNR. Dimensions: 7 by 2 inches (chassis front), 5 inches deep; escutcheon, 7¼ by 2¼/inches; main shafts, 5, 5½, or 5¼ inches o.c.; dial area, 4½ by 15½ inches. Connections: bared wires for main power (ignition) and memory power (battery); single-wire flat-clip female for power antenna; standard coaxial female for antenna input; four-conductor flat-clip male (and mating plug with bered-wire stubs) for speakers; separate ground. Fuse: 3-amp in main power lead. Price: \$300. Warranty: "limited," one year parts and labor. Manufacturer: Fujitsu Ten, Ltd., Japan; U.S. distributor; Fujitsu Ten Corp. of America, 19281 Pacific Gateway Dr., Torrance, Calif. 90502.

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ter-usually much better-results.

The AM section rates better than average. Though huge differences in performance can't be expected, reception is relatively quiet and clean. The fact that the AVC range is on the high side probably contributes to this by increasing the signalstrength range over which full audio output can be maintained. Also contributing, doubtless, is the relatively restricted frequency response, which attenuates some sparkle along with the noise.

Tone-control range is a hair more generous than the usual ± 10 dB. The controls, however, take a bit of practice, not only because of the push-pull action, but also because of their restricted rotation range and the difficulty in feeling the center detent position.

The response of the tape section is adequate, though it is not quite as broad as that of some decks. In the measurement sample, response is noticeably better in reverse than in the forward direction, and both speed accuracy and flutter are very slightly better in reverse as well. Some flutter was discernable even on the less bumpy sections of the "test track," though even the bumpiest could not induce severe wow, and speed stability generally ranked fair or better. Surprisingly, the DNR often produced quite acceptable results with Dolby B tapes, though the one cannot be expected to produce precise decoding of the other. Circle 97 on Reader-Service Card









KENWOOD'S KRC-1022 differs from the other two front ends reviewed here in its lack of a built-in amplifier; it is a true autosound component and must be used with a separate power amp, such as Kenwood's own KAC-801. It differs, too, by dispensing altogether with the traditional small rectangular "nose piece" flanked by two big and fairly complex knobs. The unit is relatively large and requires a dashboard cutout to match, and the styling of its controls and displays resembles that of a home component, except that the volume knob is at the left (nearest the driver), rather than the right. The two pop-out tone controls next to it can be pushed in once they've been adjusted, out of the way and in minimum danger of being inadvertently reset. This is a considerable advantage over conventional arrangements. My only reservation about the layout is that the controls are not clearly grouped by function. There are some handy features built into the KRC-1022. Like many top models, it can be wired to retract a motorized antenna automatically when the receiver is turned off. The power switch is built into the volume control, which is not unusual, except that turn-off requires a push rather than a turn of the knob; this leaves the volume setting undisturbed when you turn the receiver off. Then there's the output metering; its flashing LEDs will impress some, its

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defeatability will delight others. A chassis switch gives you two output-level options, for respective nominal maxima of 1.0 ("high") and 0.3 ("normal") volts. And panel illumination is controlled by a light sensor near TREBLE: The fact that you save current for panel lighting when it's not needed isn't earthshaking, but it's a nice touch.

For travelers who want nonstop aural stimuli, there are two features that can be set to take over when the station you're listening to fades beyond reach. CASSETTE STANDBY switches from the tuner to the tape; ABSS (Automatic Broadcast Sensor System) turns on SEEK to advance to the next receivable station.

There are six presets for each tuning

Kenwood KRC-1022 AM/FM/cassette car "front end," with automatic reverse, Dolby B. Dimensions: 7 by 2 inches (chassis front), 5¾ inches deep; escutcheon, 7½ by 2¼ inches; cutout required in dash, 6¼ by 2 inches. Connections: round single-wire male for main power (ignition) and memory power (battery; flat single-wire female clip for power antenna; standard coaxial female for antenna input; separate 5-pin DIN male for front and back outputs. Fuses: 3-amp in-line for main and memory power lines. Price: \$550. Warranty: "limited," one year parts and labor. Manufacturer: Trio-Kenwood Corp., Japan; U.S. distributor: Kenwood Electronics, Inc., 1315 E. Watsoncenter Rd., Carson, Calif. 90745.

FM tuner section





band—a little more generous than average and useful on long trips, when you don't want to dump home stations to make room for new ones. Because the memory button is tiny, you are less likely to touch it inadvertently and lose preset stations; its size, however, makes it a little more awkward than usual to memorize newly found prospects. The automatic seek will stop (accurately) at only those stations that are quite strong at the moment of finding them and will pass up stations that are only moderately strong. This is a boon to those who want to avoid wading through a lot of borderline broadcasts.

The FM section employs Kenwood's ANRC (Automatic Noise Reduction Circuit), which progressively blends channels

		_		
AM SUPPRESSION		601/2	2 dB	
DISTORTION (THD+N	,			
at 100 Hz	stereo	mon 0.94		
at 1 kHz	0.64%	0.94		
at 6 kHz	0.45%	0.34		
	0.4074	0.01	/0	
AM tuner section				
FREQUENCY RESPON	ISE			
-5				
-10				22 (3)
HZ 20 50 100 200	500 1K	2K	5K 10K	20K
	+0, - <mark>3 d</mark> B	1, 80 Hz to	2.2 kHz	
SENSITIVITY		2.0	μV	
AVC RANGE		72 d	B	
Cassette transport se	ction			
FREQUENCY RESPON	ISE			
0			+	
HZ 20 50 100 200	500 1K	2 K	5K 10K	20K
forward	+11/2, -3 +11/2, -3			
reverse	+11/2, -3	ab, 33 Hz	10 13 KM	2
WOW & FLUTTER	±0 <mark>.15</mark> % a	verage, ±	: <mark>0.20%</mark> pe	ak
SPEED ACCURACY	1.3% fast	at 14.4 vo	olts,	
	1.6% fast			
	forward (w	orst case)	
Preamplifier section				
BASS CONTROL	+91/4, -93	/4 dB at 1	0 0 Hz	
TREBLE CONTROL	+91/4, -10	1/4 dB at	10 kHz	
	-3 dB at 5	<mark>kHz</mark> ; ≈6	dB/oct.	
Kenwood KAC-801 po	wer amplif	ler. Dime	nsions: 1	11/2

Kenwood KAC-801 power amplifier. Dimensions: 11¹/2 by 6¹/₄ inches (base), 2³/₄ inches high. Connectors: 5pin DIN input connector (includes 12-volt turn-on supply when connected to Kenwood front end); round single-wire female for speakers (2 pairs); round single-wire male for accessory 12-volt output; round single-wire female for main 12-volt supply (battery); spade-lug ground. Fuse: 15-amp in main supply. Price: \$250 Warranty: "limited," one year parts and labor. Manufacturer: Trio-Kenwood Corp., Japan; U.S. distributor: Kenwood Electronics, Inc., 1315 E. Watsoncenter Rd., Carson, Calif. 90745.

OUTPUT (per channel into 4 ohms; at 3% THD+N)
at 100 Hz	60 watts (173/4 dBW)
at 1 kHz	63 watts (18 dBW)
at 6 kHz	63 watts (18 dBW)

and reduces total output as signal strength diminishes. You cannot defeat the circuit for stereo reception, but MONO defeats it. There is no stereo threshold as such and no 50-dB stereo quieting; since the ANRC blends channels, reception is mono by then anyway.

Diversified Science Laboratories and I reacted to these features in dramatically different ways, depending on which speakers were used for audition. DSL, using the Kenwood KAC-801 amplifier and fairly conventional single-cone speakers, remarked on the clean reception, saw no purpose in the mono-only switch position, and commented that the high filter (another unusual feature of the Kenwood) produced little audible effect.

With our wide-range ADS amp/speaker setup, however, the sound seemed noticeably on the bright side, emphasizing high-frequency reception problems, among other things. As reception deteriorated on the road, a certain amount of garbage (not just straight hiss or spitting) crept into stereo signals. Both the mono-only setting and the high filter controlled these intrusions well. Our differences on these points demonstrate the importance of viewing any mobile music setup as an integrated system, as well as on a component-by-component basis.

The AM section is well behaved though unusual in one respect: The response cuts off extremely sharply above 4 kHz, dropping to a minimum (-34 dB, which is beyond the range of our graph) at 5 kHz, above which it creeps back up. Though response is still down by almost 20 dB at 20 kHz—well above the signal limits of any AM broadcaster—this peculiarity may be why I was less enthusiastic with the AM played over my ADS amp/speaker setup.

The high filter proved useful in playing non-Dolby tapes through the widerange system-which produced a bright sound that profited from some treble cut even with Dolby tapes. Though the measured wow and flutter is excellent for a car deck, audible flutter rated only good in the moving car due to some audible waver on bumpy roads. Like the tuner, the deck has what amounts to a seek feature: The tape advance fast-winds the tape to the beginning of the next selection or of the one currently playing (for a repeat), depending on which of the fast-wind buttons is pushed. The tape ejects when you switch off the ignition. (Unlike some decks, the automatic-reverse mechanism does not revert to Side I play when you turn it back on.) The cassette standby certainly has its uses, though you can suffer from culture shock, darting from bluegrass to Bruckner simply by driving behind a large building. HF

AUDIO/VIDEO Environments

Bringing technology home

Design for Living—and Listening

To BE TRULY SUCCESSFUL, a high-fidelity system should reflect the needs and habits of the user and integrate acoustically, functionally, and aesthetically into the home. The key is planning: In fact, for Kay and Bob Anderson, two Minnesotans who had long dreamed of assembling what they call a "living system," the planning took some eighteen months.

Their first and most basic goal was to have high-quality music throughout the house, but with just one system functioning as musical headquarters. Second, the recording functions in the setup had to have lots of flexibility. Bob and Kay create audiovisual slide shows for friends and need easy access to an open-reel deck. Bob also wanted to be able to conduct informal recording sessions of Kay's piano playing.

House hunting was the next step. Bob explains, "I wanted a house whose room dimensions weren't nice even multiples, so that at least the system would have a chance of sounding good." Once they had selected a house that met that requirement, they had

by Christine Begole

to find the right spot for the core of the system. Since they wanted access to their components in the living room (also the site of Kay's grand piano), they hit on the idea of breaking through the wall that separates the living room and den to create a sort of audio closet. The rack-mounted components fit flush with the living room wall (see bottom right photo), and the ensemble is framed with oak paneling; opening a door in the den reveals the components' back panels. The turntable could not be rack mounted; it and the cassette deck, grouped together to simplify taping from discs, are located in the den, outside the closet.

Bob says that the audio closet concept combined with rack mounting "avoids the problem of 98% of all stereo setups inconvenience. With my system, you don't have to turn everything around, crawl on your hands and knees, or hang over the back of the components every time you need to work with the wiring. I just have to open the closet door, walk in, and all the wiring is right where I can get at it. The closet door also enables me to lock children out."

Since construction of the audio closet was one part of a major renovation that encompassed the whole house, Bob called in an architect. "If you know exactly what you want or can see only one solution to your problems," says Bob, "you may not require an architectural consultant. However, if several options appeal to you, and you're also making changes elsewhere in your home, an architect can be extremely helpful. Most important, an experienced one can help you avoid costly pitfalls."

The Andersons also called on a professional to help with their electrical-power needs. "We ran two 20-amp circuits up to the audio closet," says Bob, "knowing that this would give us enough power for all the gear we might eventually own. We also brought up an isolated ground circuit to reduce the possibility of other electrical appliances causing noise spikes. Now the refrigerator can decide to make ice without announcing its intention through our audio system."

No provision was made for extra ventilation in the audio closet. The system is usually operated with the closet door closed, and Bob says that, while he has been keeping an eye out for heat problems, nothing untoward has developed yet. "One thing that should keep ventilation problems to a minimum," he notes, "is the amp's built-in fan. If it turns out that I do need additional ventilation, I can always cut an opening in the closet ceiling and install a whisper fan coupled to a thermal switch. It's a good-sized space, however, and I don't really anticipate any problems."

Ease and efficiency reign within the



With the assistance of an architect, the Andersons broke through the wall separating the living room and den to create a space for their rack-mounted components—a Crown preamp, power amp, tuner, open-reel recorder, and speaker-switching module along

with an Audio Control equalizer and RG dynamic range expander; a turntable and cassette deck are located elsewhere. Remote-control cables and speaker wires are concealed in the walls, providing linkages throughout the house to this musical "nerve center".



A door in the den opens to reveal the components' back panels. Cable racks on the door and a tool holder on the wall contribute to the setup's functionality.

confines of that space. Anticipating the need for adjustable shelving to support components before they could be bolted into the rack, Bob mounted shelving rails in the closet. A couple of removable brackets and a piece of plywood complete the temporary support system. A holder on the closet wall keeps screwdrivers and other tools close at hand. And extra connectors can be neatly organized thanks to two Pomona cable racks mounted on the back of the closet door.

Bob plans to buy a large-screen television and two VCRs for the downstairs family room. To get the best possible television sound, he intends to run an audio feed from the video gear to the audio closet, then back out to speakers in the family room. "A lot of cable for this was put in place during our renovation," he notes, "but some of it will be added later. In fact, in order to make it as easy as possible to pull wire from the audio closet, we decided not to line it with plasterboard and left the studs exposed. Again, planning ahead is the key, because tearing up walls later is expensive and messy."

The Andersons are full of praise for the local dealer, Kimberly Crumb of Audio Innovations in Edina, Minnesota, who helped them select their components. The heart of the setup, a Crown DL-2 preamplifier, was chosen because of its flexibility. It will handle three tape decks and has inputs and switching for two signal processors, plus three other high-level sources. It also has remote-control connectors—a feature Bob and Kay plan to take advantage of when they install loudspeakers in the bedroom, family room, den, and basement workshop.

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"Convertible" enters the VCR lexicon with the introduction by RCA of a tabletop VHS deck composed of two modular components-a tuner/timer base and a recorder that can function on its own as a batteryoperated portable. Configured for home use (with the recorder docked physically and electrically to its base), the VJP-900 is one of the most feature-laden VCRs we've ever seen. There's 21-day/8-event programmability, stereo recording capability, high-frequency noise filtration, 133-channel frequency-synthesis tuning, and five video heads for jitter-free still frame, slow motion (variable from one-fifth normal speed to stop action), picture search, frame advance, and reverse play. An infrared remote dupli-



cates all special-effects controls and most recording functions.

Finally, the machine will record for a preset interval and then switch itself off automatically without your having to go through a full programming procedure. It does this via a one-button timer control that is adjustable from thirty minutes to four hours. The VJP-900 is top of the RCA line and is priced at \$1,300.

Circle 137 on Reader-Service Card

electronic console, and vignettes for super-

Circle 139 on Reader-Service Card

imposition.

An inexpensive kit designed to repair torn or twisted videocassette tape, the Video-Mate Tape-Mender consists of a workstation to hold VHS or Beta cassettes firmly in place, plus a variety of tools and adhesive tabs to perform the necessary splicing. The workstation incorporates what looks to be a clever alignment system with clamps to hold the tape steady during the splicing procedure. The Tape-Mender is manufactured by Total Video Supply, Inc., and costs \$26.

Circle 140 on Reader-Service Card



With a horizontal resolution of 350 lines for composite video inputs and 330 lines for broadcast reception, the specifications of the C-2073US suggest an auspicious beginning for JVC's entry into the TV-receiver market. The 19-inch set is equipped with a 134-channel tuner, a full-function infrared remote control, and an automatic light sensor that adjusts brightness and contrast according to room light conditions. The receiver sells for \$750.

Circle 138 on Reader-Service Card



A special-effects system designed for home use, the Model V-0303 (\$675) from Ambico offers a relatively inexpensive way to add a professional touch to your videotapes. It enables the creative home videographer to superimpose titles on previously recorded tapes, fade from one image to another, and tint scenes in one of seven different color combinations. An audio mixer built into the effects console lets you combine prerecorded soundtracks with a mike or line input. The system comprises a black-and-white video camera, copystand,



You may no longer curse the darkness thanks to a portable video light called the Omega-reflecta Model 500P, distributed by Berkey Marketing. The unit is adjustable for full- or half-power operation (500 or 250 watts) and has controls to change the illumination pattern to suit wide-angle and telephoto work. Each of its two quartz halogen lamps is rated for fifty hours of life, and the supplied battery pack is claimed to support 300 full recharging cycles. The 500P comes equipped with a battery charger and camera bracket and costs \$500. Color- and special-effects filters are available as optional accessories.

Circle 136 on Reader-Service Card

Kloss Model One-A Monitor



Component video goes big screen with this two-piece projection system.

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.

THERE'S NO DENYING THE IMPACT of projection TV. Comparing an image that spreads six feet from edge to edge to a 19- or 25inch screen is almost like comparing stereo to mono. In fact, after watching Kloss Video Corporation's Model One-A Monitor (\$3,050), the latest version of one of the most popular two-piece projection systems, it's hard to return to a standard TV set.

The heart of the Kloss system is the Novatron projection tube, which combines all elements necessary for image creation and projection (electron gun, focusing assembly, mirror, phosphor screen, and corrector lens) in one vacuum-sealed housing. Since the relative positions of the internal elements are fixed by the construction of the tube, there is no way for the optical system to go out of alignment—unlike more conventional systems, which use cathode-ray tubes and external lenses.

There are other benefits to this onepiece tube. Since the mirror and one surface of the corrector lens are in a near-total vacuum, they never get dirty. Only the front surface of the Novatron needs an occasional dusting to restore its original optical efficiency, and even this should be required less often than with conventional sets. (The glass screen of a typical picture tube picks up a strong charge from the electron beam hitting the phosphor coating on its inner surface. The charge attracts dust, and so the tube needs frequent cleaning. The exposed surface of the Novatron, however, is less likely to accumulate a significant charge, since the phosphor screen is located toward the center of the tube.) Finally, the light emitted by the phosphor reaches the lens without first passing through intervening glass, which improves efficiency and results in an unusually "fast" (f/0.7) optical system and an image bright enough to be viewed in a well-lit room.

The One-A Monitor houses the video circuitry (sans tuner), a mono audio power amp and speaker, and three Novatron tubes (one each for the red, green, and blue components of the final color picture). The console is 18³/₄ inches high, 22¹/₄ inches deep, and 27³/₄ inches wide, and all controls are neatly arrayed in a well on the top surface.



Precise positioning of the projector and screen is crucial for sharp focus. A V-shaped alignment cord supplied by Kloss helps you achieve correct spacing while ensuring that the projector is located on the screen's central axis. A still frame from a high-quality video source provides a good visual check of alignment. "The Tubes Video," a Pioneer Artists laser disc, was the source for the screen-filling image of band member Fee Waybill (top).



A built-in test-pattern generator makes convergence adjustments simple and precise. Horizontal and vertical controls for the red and blue images are rotated until they converge with a stationary green image, creating a single white cross.

Aside from the usual knobs (COLOR, TINT. and so on), the only controls that take some getting used to are the ones that adjust color convergence and one marked DETAIL. (In future production, the console-mounted controls on the One-A Monitor will move to a wired remote control.)

The system's highly reflective screen is curved inward to concentrate the picture and to minimize the effects of off-axis room light. The screen is 48 inches high by 643/4 inches wide and is mounted on legs that lift it 243/4 inches above the floor (giving it an overall height of just over six feet). Though it comes knocked down, the screen is a breeze to assemble; the legs slide easily into place and are secured with bolts. Just as straightforward but a good deal more time consuming is the procedure you must follow to achieve correct placement of the screen relative to the console. First, the two are placed so that the distance from the rear of the screen to the rear of the console is approximately 9 feet 6 inches, with the console centered in relation to the screen. It is important that these two components be level and in the same horizontal plane: If the console were to be placed on a thick carpet, for instance, you would have to raise the screen slightly to bring it in line.

This rough positioning is then fine tuned with the aid of a V-shaped alignment cord. The two ends of the cord are looped around hooks at each side of the screen, and the center of the cord is drawn tautly back to the console. If all is well, the marker at the center of the cord will lie directly on an

firing speaker are located below

the Novatron tubes.

indicator mark on the top-front surface of the console. All that remains is to pivot the console until the picture spills off the screen to the same extent at each side. (As in conventional TVs, the Monitor is designed with a certain amount of overscan.) Adjustable feet on the console then enable you to center the picture vertically. Considering the care it takes to do all this (and it's really best accomplished by two people working together), you'd be well advised to mark the final position of the console and screen—for example, by placing tape on the floor—so that the system can be repositioned quickly if it is disturbed.

Audio and video input connections are made via RCA phono jacks located in a recess below the tubes. You can use your VCR's tuner to feed broadcast programming to the Monitor, but the unit's single set of inputs will make graceful switching between such sources as video disc and computer games impossible. The best solution would be to invest in a component TV tuner equipped with multisource switching capability.

Finally, two sets of controls let you converge the three separate color images to form a proper color picture. With the green image as the reference, one set of controls shifts the red image horizontally and vertically, the other, the blue image. Pressing TEST causes a cross to appear in the center of the picture, and the controls are adjusted until the red and blue lines overlap the green and produce a single white cross. Again, the procedure is very simple and can be



repeated whenever you think the convergence has slipped out of alignment—a condition indicated by color fringes over a substantial portion of the screen.

Correctly adjusted, the Monitor's overall convergence is quite good-comparable to that of any high-quality TV set. Color fringes are discernable only in a monochrome picture-the most critical test. Color accuracy is also very good. We learned that the red and blue phosphors used in the Novatron are similar to those used in conventional picture tubes, but that the green phosphor is quite different, producing a purer color with less of a yellow cast. Nonetheless, this advantage is partly offset by its decay time, which is greater than that of the red and blue phosphors. Thus, when there is rapid motion, the green persists as a faint ghost.

Picture resolution is quite impressive, again comparable to that of a high-quality conventional set. Rotating DETAIL softens or sharpens the picture much as a treble control does in a music system. Actually, the two are quite similar electrically: Both control high-frequency response and, with that, noise. With good source material, DETAIL can be turned up to enhance crispness, or, with poor material. it can be lowered to soften the picture and reduce the noise. With the 6½-foot (diagonal measure) curved screen, the picture has sufficient brightness and contrast for easy viewing in moderate room light.

Since our program sources for the evaluation of the Monitor were all CXencoded stereo LaserDiscs, we tended to bypass the unit's single front-firing loudspeaker in favor of our audio setup's fullrange external ones. Though we would expect most audiophiles to opt for such a stereo hookup, the Monitor's built-in amp and speaker seem far better than those found in most other TV sets. Though we didn't attempt it ourselves, the built-in speaker could be used for center-channel. fill; since its output is bounced off the screen, the effect would certainly correct the sort of audiovisual incongruities that can occur when stereo speakers are placed too far from the screen.

It's been said before, but it bears repeating: A projection TV reveals every flaw in the source material. Foibles too small to be seen on a 25-inch screen at normal viewing distance are painfully apparent on a screen ten times bigger. Of course, the farther you sit from the screen, the less apparent they become.

All in all, the One-A Monitor is one of the best projection systems we've seen. Image brightness attains a level of perfection that few other projection TVs can match. And though one could hardly call it inexpensive, the One-A Monitor is the sort of investment that pays handsome dividends in a currency that defies quantification—pure pleasure.

Circle 99 on Reader-Service Card



Phone Extortion

Let's put the screws to our phone suppliers on a terrific long range cordless phone with a novel new consumer buying tool called **GREED!**

It's a war. The major phone suppliers are each desperately trying to lock up big orders. And now, we've devised a plan to take advantage of their greed.

Together we can apply enough pressure to get you a super high quality cordless phone with a range up to 700' for just \$79. And, hopefully we'll make a good profit for ourselves. But, there's a problem.

TIGHTEN THE SCREWS

Before I tell you all about the great features and sound of the phone, let me explain just how we plan to deliver these phones for such an admittedly foolhardy price. You see, it's called extortion (legal definition please) and it works like this.

There are two large phone companies that are trying to get DAK's phone business. To be perfectly honest, the quality, guarantee and sound are so close that we couldn't decide between the two.

Even their prices are close. So here's what we did. We got quotes from both of them for 5,000, then for 50,000 phones.

And, here's what we decided. As you place your orders, we'll offer each of the two companies a check (cash in advance) for the number of phones we need.

The company with the lowest price of the day will get that day's order. You see, your orders give us incredible leverage.

Usually we buy just one phone from one supplier. Unfortunately once they have a contract with us, they have no incentive to lower our price. And, at our costs today, we really can't come out at only \$79.

SAFE INVESTMENT

Don't worry about your \$79. DAK is a large company. If this plan to sell 50,000 phones fizzles out, we'll still be OK. Plus, DAK doesn't even charge your credit card until after we ship.

And most important. Each phone will come to you in its factory sealed carton, and will be backed by the manufacturer's standard limited warranty.

Finally, you won't be getting a cheap

stripped down phone. We aren't dumb. We picked the phones we wanted before we got the quotes. So, nobody can make any changes to come out lowest.

And frankly we'll get 50,000 of you new customers (we have 225,000 now) to send our 68 page electronics catalog to. So, even if it does fizzle, we're sure to get another chance at you later.

A GREAT LONG RANGE PHONE

So, now let's see if this is really going to be a stripped down low quality phone. Remember, each and every feature I describe appears on both phones. And, if for some emotional reason you want to specify which phone you want, no problem, I've got a way for you to do that too.

Imagine walking from room to room in your home talking on the phone. You'll go out and get the mail, walk over to a neighbors or work in the yard or the garage.

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Your video questions answered

Q. My VCR is several years old and works well, but it lacks special-effects capabilities. Is there a company that offers add-on accessories that would enable it to perform still frame, slow motion, and so on?—Ralph Young, Albany, N.Y.

A The types of special effects to which you refer require changes in the VCR mechanism and so cannot be accomplished with an external "black box." If still frame, slow motion, and the like are important to you, I'm afraid you'll have to spring for a new VCR.

Q. I'm about to buy a high-gain rooftop antenna to improve reception of some distant stations. I also want to install new cable from the antenna to my three TV sets and one VCR. The antenna installer says I'll probably need splitters and a line amp. Is that true? If so, can you tell me how to wire the setup myself?—Gordon Frost, Roanoke, Va.

A. You will certainly need a splitter and probably a line amp as well. Their installation is no simple matter, however, so I would recommend getting some profes-

TubeFood

by Edward J. Foster

sional guidance. Here's why.

A splitter is a device that distributes the signal to a number of TV receivers while maintaining the proper line-termination impedance (300 or 75 ohms). It may accomplish this either by transformer coupling or by resistor coupling. (The latter approach is cheaper but wastes signal, though either way some signal loss is inevitable.) If you are in a weak-signal area, you will need a line amp to increase the signal prior to the splitter. Many line amps (also called distribution amplifiers) have a splitter built in and will drive a number of receivers (TV sets and VCRs in your case).

The best place for the line amp is right at the antenna, where it will receive the strongest, cleanest signal: If it were installed in your house, it would amplify whatever interference might be picked up in the downlead from the roof. Most antennamounted line amps come in two parts: the amplifier itself and an in-house box that contains the power supply and splitter. Power is fed to the line amp via the same cable used to carry the RF signal. The power supply/splitter can be mounted wherever it's convenient, though it should be fairly central to your various receivers.

Professional advice is particularly im-

portant in choosing the right line amp for your reception conditions. Though several distant stations may need amplification, strong local ones may not and could overload the amp, degrading its overall performance. To prevent this, you would need to buy a model with high overload margins or install a trap between the antenna and the amp to reduce the strength of certain channels. Also, if you are planning on using a combination VHF/UHF antenna designed to transmit signals down a single lead, the line amp/splitter should be capable of handling both bands. The best (and most expensive) way to go, however, involves using separate VHF and UHF antennas, along with line amps and splitters dedicated to each.

One final point: Don't buy a line amp/ splitter designed to feed more than the four receivers that you currently own. Unused outputs must be terminated with resistors, and these consume just as much signal as a TV set. If you add another receiver in the future, you can buy a passive one-in/twoout splitter to divide one of the present line amp's outputs. The two sets would receive a weaker signal than the others, but unless overall signal strength is marginal to begin with, the levels should be sufficient to yield a satisfactory picture.

New video cassette programming

FEATURE FILMS

CBS/Fox Video: Moonraker; The Pirate Movie; The Challenger; Wild Strawberries; Captin Blood; Monsignor; The Man with the Golden Gun; Marty; Grand Illusion; Knife in the Water; The Count of Monte Cristo; The Last Unicorn.

Embassy Home Entertainment: *Blade Runner*.

Media Home Entertainment: Fade to Black; Basket Case; Coach; Bruce Lee Fights Back from the Grave.

MCA Videocassette: The Black Cat; The Raven.

Monterey Home Video: Deadly Games. Paramount Home Video: An Officer and a Gentleman; Friday the 13th, Part 3; Godzilla vs. Monster Zero.

RCA/Columbia Pictures Home Video: The Way We Were; Dr. Strangelove; Jabberwocky; Thank God It's Friday; The

by Susan Elliott

Hellstrom Chronicle; Forty Carats; The French Detective; Going Places. Sony: The Hobbit.

VC 2: Under California Stars; It's a Wonderful Life; My Favorite Brunet; His Girl Friday; Dressed to Kill (1946); Private Life of Henry VIII; Angel and the Badman; Catherine the Great; Second Chorus; M; Reefer Madness; Gung Ho; Algiers; The Outlaw; Diabolique; Perils of Pauline; Rain; The Third Man; Santa Fe Trail; Meet John Doe; The Man Who Knew Too Much; Made for Each Other; A Star Is Born (1937); Night of the Living Dead (1968); The Blue Angel.

Vestron Video: What's Up Tiger Lily; For the Love of Benji; The Double McGuffin; The Greatest Adventure; Godzilla.

MUSIC/STAGE SHOWS

Chrysalis Records: Tony Basil-Word of .

Mouth.

MGM/UA Home Video: The Girl Groups; Yes, Giorgio.

Thorn EMI Home Video: The Harder They Come (featuring Jimmy Cliff).

SPORTS/INSTRUCTION

Karl Video: Every Day with Richard Simmons.

Mastervision: Basic Spanish; Basic Italian; Basic German.

Media Home Entertainment: Muscle Motion.

Star Video: Golf Lessons from Sam Snead; Tennis Lessons from Bjorn Borg; Skiing Lessons from Gene Heinz Landsmann; Bridge Lessons from Shelly de Satnick; Dog Training with the Grossmans; La Cuisine Pratique (Practical Lessons in French Cooking); The Winning Job Interview with John C. Crystal.





Tannhäuser and the guests, assembled in the Metropolitan Opera's Minstrels' Hall, again encounter irreconcilable differences.

Dutchman and *Tannhäuser* launch a discographical survey of the music dramas of this great humanist. by Kenneth Furie

SINCE WE ARE GOING to be spending a large chunk of space on Wagner, we might start by specifying the Wagner we're talking about. Everybody seems to have his own, and these myriad Wagners often have little in common. The fellow we will be concerned with, then, might be distilled as the creator of:

• the closing scene of *Die Walküre*, in which a man whose lofty ambitions have blown up in his face is compelled to take permanent leave of the daughter who has been his one source of dependable and unalloyed pleasure;

• the opening of Act III of *Die Meistersinger*, in which a man whose long life has been built on reason and compassion grapples with an accumulation of apparent proof that his world—not excepting his own behavior—is irremediably irrational;

• the scene in Act I of *Parisfal* in which another man of wide-ranging compassion unleashes his spluttering rage on the young archer who has senselessly slaughtered a swan.

Our Wagner belongs to the company of the greatest humanists. (His relationship to the biographical Wagner, who would seem anything but a great humanist, is a fascinating subject, but one that's beyond the scope of our discussion.) This Wagner created ten music dramas that explore as wide a range of universally important personal, social, and political issues as any creative artist has tackled.

To the extent that limited space permits, we're going to draw on the accumulated discography to look at how Wagner used the materials of "music drama" to explore those issues. (The first order of business, naturally, will be to establish some working understanding of "music drama.") Longtime readers will recognize the basic format from Conrad L. Osborne's discographies of Verdi (1963), Mozart (1965), and Wagner (minus *The Ring*, 1966–67): essentially role-by-role consideration, in general leaving to the reader's discretion the job of adding up and weighing the merits of competing sets.

Considering the vast quantity of Wagneriana that has found its way onto disc,

This begins a discography of truly Wagnerian proportions that will appear in more or less regularly spaced installments. The next, projected for July, will take up Lohengrin and Tristan, with later installments devoted to Meistersinger and Parsifal and to The Ring.—Ed.

what follows is necessarily selective. To begin with, there are undoubtedly worthwhile items that I haven't heard. More important, there is a large quantity of material ranging in quality from awful to notso-awful that simply doesn't add significantly to our image of the operas, although for consumerist reasons I have tried to include at least a brief note on all the principals in currently available complete recordings.

Of course defining "currently available" is no easy matter these days. While I've done my best to keep track of what can be found where, my primary discographic concern has been to provide enough information to identify recordings unambiguously. Especially with regard to excerpts, it isn't practical to attempt comprehensive documentation; my references are in general to the disc(s) I have. I'd like to thank David Hamilton and Conrad Osborne for the loan of certain recordings, and Bob Clark and Jim Oestreich for their encouragement over the life of this project. One further acknowledgment: A portion of the Tannhäuser discussion is based on a column that appeared in Keynote magazine.

For obvious reasons, we're not going to wade through the plethora of orchestralexcerpt recordings. Instead I offer the simple recommendation of Otto Klemperer's majestic Philharmonia performances, now available in Angel's Red Line series: the overtures to Rienzi, Dutchman, Tannhäuser, and Meistersinger on RL 32039; both Lohengrin Preludes, the Tristan Prelude and "Liebestod," the "Dance of the Apprentices" and "Entry of the Masters" from Meistersinger, and Siegfried's Funeral Music from Götterdämmerung on RL 32057; the Tannhäuser Act III Prelude, Parsifal Prelude, and four Ring excerpts ("Entry of the Gods," "Ride of the Valkyries," "Forest Murmurs," and Siegfried's Rhine Journey) on RL 32058.

For reasons that may be less obvious, neither are we going to consider the three operas that preceded *The Flying Dutchman*. This is not to say that they are of no interest—only that Wagner seems to me to have found his musicodramatic voice precipitately (and permanently) with the thrusting statement of the Dutchman motif which launches the mini-drama of the overture.

Following that overture, we are plunged directly into the violent storm that has suddenly swept Daland's fishing boat away from its intended (and visible) port. Here, off the Norwegian coast at Sandwike, is where our work begins.

Der fliegende Holländer

One of Wagner's least adequately appreciated accomplishments is his gallery of vividly drawn secondary characters, who not only are of potentially considerable interest in themselves but are essential to our perception of the principals. The general

Der fliegende Holländer

- Acanta (Germany). Viorica Ursuleac (Senta), Hans Hotter (Dutchman), Georg Hann (Daland), Karl Ostertag (Erik), Franz Klarwein (Steersman); Bavarian State Opera, Clemens Krauss.* HA 23.135 (1944, 3m, formerly Mercury MGL 2, also Discocorp 381, 2m).
- [DG] Heliodor (Germany, OP). Annelies Kupper, Josef Metternich, Josef Greindl, Wolfgang Windgassen, Ernst Häfliger; Berlin Radio, Ferenc Fricsay. 2701 009 (1953, 3m, formerly Decca DXP 124).
- Cetra (Italy, NR). Astrid Varnay, Hermann Uhde, Ludwig Weber, Windgassen, Josef Traxel; Bayreuth Festival 1955, Hans Knappertsbusch.* LO 51-3 (3m, also Discocorp 319).
- Turnabout. Varnay, Uhde, Weber, Rudolf Lustig, Traxel; Bayreuth Festival 1955, Joseph Keilberth.* THS 65095/7 (3s, formerly Richmond SRS 63519).
- Angel I. Marianne Schech, Dietrich Fischer-Dieskau, Gottlob Frick, Rudolf Schock, Fritz Wunderlich; Deutsche Oper Berlin, Franz Konwitschny. SCL 3616 (1959, 3s).
- London I (OP). Leonie Rysanek, George London, Giorgio Tozzi, Karl Liebl, Richard Lewis; Covent Garden, Antal Dorati. OSA 1399 (1961, 3s, formerly RCA LSC 6156).
- Philips [Festivo]. Anja Silja, Franz Crass, Greindl, Fritz Uhl, Georg Paskuda; Bayreuth Festival 1961, Wolfgang Sawallisch.* 6770 032 (3s).
- Angel II (OP). Silja, Theo Adam, Martti Talvela, Ernst Kozub, Gerhard Unger; BBC Chorus, New Philharmonia, Otto Klemperer. SCL 3730 (1968, 3s, now EMI Germany 1C 157-00104/6).
- DG. Gwyneth Jones, Thomas Stewart, Karl Ridderbusch, Hermin Esser, Harald Ek; Bayreuth Festival 1971, Karl Böhm.* 2709 040 (3s).
- London II. Janis Martin, Norman Bailey, Talvela, René Kollo, Werner Krenn; Chicago Symphony Chorus and Orchestra, Georg Solti. OSA 13119 (1976, 3s).
- Notes: Listings are current domestic issues unless indicated otherwise. OP = out of print, NR = not released in the U.S., * = live performance, m = mono, s = stereo. Recording dates, in some cases best estimates, are given for general reference only.

assumption that Daland, for example, is a money-grubbing coot peripheral to the action of *The Flying Dutchman* ignores a set of exciting performance opportunities and also makes it impossible to understand either Senta or the Dutchman.

In their different ways, both protagonists are concerned with what we might call the quality-of-life issues. To put it bluntly, Senta finds her fishing-village life boring, purposeless, who-needs-it, and I think we can all identify with her gut feeling that there must be more to life. But her spiritual restlessness is a luxury made possible by her father's attention to the bread-andbutter issues. For Daland, putting food on the table means regularly and routinely placing his life and the lives of the crewmen in his charge at the mercy of the awesome and unpredictable power of the sea.

Wagner gives us a taste of this power at curtain rise, but note that it is only a taste: What we see is the tail end of the storm that had suddenly beset Daland's ship within sight of its home port. By the time of Daland's first solo lines, in which along with getting his geographical bearings he releases some pent-up frustration and anger, his ship is safely anchored, albeit in the wrong port. Only when the Steersman reports that all is well on board does he allow himself the indulgence of reflecting on the missed connection with his daughter—the opera's first sustained singing opportunity.

Clearly some of Daland's anger is directed at himself, for having been lulled by his proximity to home into relaxing his guard ever so slightly, the sort of blunder a sea captain of his experience would find unforgivable (otherwise you don't live to be a sea captain of his experience), or perhaps just barely forgivable from the vantage point of safe harbor after you have just, as it were, cheated the devil. "Who trusts in wind trusts to Satan's mercy," he declares two and a half times, ranging down to low A and back up to high E flat, and this is of course the reality of his calling, the life that Senta finds so humdrum.

Daland's folk wisdom, of course, is the shrewdness of a man who trusts as little as possible in Satan. Need we underline the contrast with the literally daredevil school of seamanship practiced by the Dutchman? If the latter has led the more "exciting" life, you might ask yourself whose crew you'd rather serve with. This question actually is more than idle speculation, since you'll recall that in Act III we see the two crews confronting each other, in a sequence-the rousing Sailors' Chorus, the chorus of sailors and maidens, and the bone-rattling chorus of the Dutchman's crew-that often emerges merely as a series of mood pieces, filling time until we get around to pinning down the fates of the important characters.

But in a "music drama," as in any sort of drama, *everyone* has needs—preferably strong ones, the obstacles to which bring the characters into conflict with one another and with external forces. On a moment's reflection, can't we begin to hear in those Act III choral episodes the pursuit of powerful needs? In one case, those of a crew of physically vigorous young men attempting to vent stored-up energy and to correct certain hormonal imbalances resulting from their more-dangerous-than-usual recent sailing, in the other case, those of a crew locked into its reckless captain's otherworldly fate, responding to the taunting of the locals.

If we return to the opening scene, we can see that Wagner from the outset sets his characters powerfully in action, using the full resources of physical, verbal, and musical life to dramatize-not to illustrate, but to dramatize, to make happen-their past and present circumstances, their future hopes and expectations, their needs and obstacles, their relationships to all of this, and finally the actions that grow out of them. This seems to me a plausible working definition of "music drama," and it doesn't matter to me that Wagner wasn't using the term yet. (Even Lohengrin is still a "romantic opera.") In fact, this could also serve as my working definition of "opera."

To illustrate the performance implications of this definition, I offer in evidence the DG Dutchman, skipping over the scrappy overture to the fullest realization I've heard of the opening scene, from the tempest at curtain rise through the sleepy reprise of the Steersman's watch song, which sets the stage for the Dutchman's dramatic appearance. It's not that Böhm's conducting is particularly brilliant, but that: (a) the Bayreuth orchestra's playing, helterskelter though it is, at least sketches the physical reality of the storm, and (b) more importantly, the Daland and Steersman, Ridderbusch and Ek, make strong vocal actions of their music

This means, among other things, that they sing the music with reasonable fullness and beauty of tone throughout its demanding range. Listen to Ridderbusch really *sing* those declamatory early lines, and you begin to get a three-dimensional image remarkably different from the stereotype of Daland: a strong, decisive, prudent, and humane man with extraordinary leadership abilities. Once Ridderbusch makes the switch to the full-bodied legato of "Schon sah am Ufer ich mein Haus," we see also the loving father, and we get a glimpse of what it is that drives him repeatedly back into the clutches of the sea.

We then have a vastly different frame of reference for the duet with the Dutchman, which dominates (or should dominate) Act I. Knowing something of what makes Daland tick, we can appreciate the respect he accords almost automatically to another experienced sea captain ("He's a sailor, like me" is how he will introduce him to Senta in his wonderful Act II song, "Mögst du, mein Kind"), especially to one whose riches testify so loudly to his competence. We may then take a very different view of his receptiveness to the Dutchman's marriage proposal, an opportunity to provide well for his daughter's future.

Of course an important part of the reason for attending to Ridderbusch and Ek is that they're pleasurable to hear. Because Wagner's music is vocally so demanding, we don't often get to hear how beautiful it is, which means also that we miss all those dramatic circumstances that Wagner intended to be conveyed through lyric values. One of the biases running through this discography will be a premium on singing of strength and beauty, which happens to have been important to Wagner too. For some reason, though, this aspect of "the composer's intention" is rarely invoked by commentators who hold up as holy writ every last mindless doodle he left behind.

Which brings us to a second recurring bias. Since Wagner's genius was as a creative artist, and not as a stage director, critic, aesthetician, or (heaven help us) philosopher, we will be referring only to his primary texts: the ten scores themselves, wherein this passionately committed and compassionate observer of human reality

Singing of strength and beauty was important to Wagner.

set about transforming those observations into music drama.

Just recently I read in the local paper that "conductors are inevitably dominant in Wagner, given his orchestral complexities." Like so much else written about Wagner, this is dopey, but if you take out the "inevitably" it does reflect the reality of most performances. Far from being inevitable, however, this situation results from the reluctance (inability?) of singers to assert their proper identity in collaboration with equally strong-minded conductors. I stress this admittedly utopian vision in order to minimize confusion that may arise from our modus operandi, which will begin with consideration of the conductors. In part this is simply a matter of form (we have to start somewhere), and in part it enables us to establish some overall sense of the performances as a whole. But you'll notice that even in these brief sketches it is impossible to avoid consideration of the interaction between singers and conductor.

To return finally to *Dutchman*, we're already in need of a better-conducted alternative to the DG recording. The choice is between Fricsay (Heliodor) and either Knappertsbusch (Cetra) or Keilberth (Turnabout), representing highly successful realizations of the two basic approaches to the score: the one relatively quick and galvanic, the other broader and weightier. Both can be logically grounded in the opera's central physical reality, depending on whether you perceive the power of the sea in terms of its speed and volatility or of its brute force, and both approaches can be made to work.

The more difficult, but in some ways potentially more rewarding, approach is the second—more difficult in that tension is harder to maintain at the slower tempos, which also make generally greater demands on the singers. Klemperer (Angel II) illustrates both problems. I enjoy the basic weight and scale of his reading, but it doesn't always maintain forward momentum, and the already problematic cast lets him down rather consistently.

Not so in the case of the two performances from the 1955 Bayreuth Festival, which I find pretty much interchangeable from the conducting standpoint. On taking over the production from Knappertsbusch, Keilberth basically left in place all the things he had worked for, getting if anything more confident execution from his forces, or maybe it just sounds so thanks to Decca/London's more atmospheric recording. Either way, the reading has a brooding, driving power singularly appropriate to the drama.

Fricsay starts his performance at high voltage and maintains that tension level with remarkable consistency and dramatic alertness, getting the most out of what might otherwise be a spotty cast. It's hard to define what makes the performance so effective, but you might compare the purposefulness of all those small instrumental details underlining Erik's dream narrative with their correct but somehow matter-offact execution in Krauss's outwardly similar performance (Acanta).

It seems noteworthy too that, amid the general vigor of Krauss's performance, the Acanta cast's liabilities are quite prominently exhibited. By contrast Sawallisch (Philips), operating with a cast that apart from its Dutchman borders on the fierce, manages to a surprising extent to divert scrutiny to his smoothly conceived, energetic reading. Böhm (DG), as noted, has energy coming out of his ears, but the execution varies from routine to downright chaotic.

I often have a similar experience returning after an interval to Konwitschny (Angel I) or Dorati (London I). For a while, it seems that I've underrated the performance, but reality quickly sets in: Konwitschny's tendency to clunky pedanticism, Dorati's sort of gummy quality. In both cases, these qualities carry over into the disappointing work of the casts, which role for role are the least unflawed on records. At that, both of these recordings rise to the emotional climaxes of the score, unlike the hapless London II, which galumphs on and on purposelessly without any relief from singers or orchestra.

Senta has outpointed all the sopranos who have challenged her on records. The role is a killer; even Wagner, difficult as his later heroines of course are, would never again demand this combination of top-tobottom agility, strength, and liquid ease. The most stalwart challengers, to my ears, are Varnay (Cetra and Turnabout) and Kupper (Heliodor). Varnay supplies plenty of power and reasonable agility (at any rate, she negotiates the Ballad without fudging), leaving only the actual sound, which is more bearable than alluring. Kupper's lighter, marginally more mobile instrument allows for more hints of a lyric quality.

Rysanek (London II) came closer to solving Senta on other occasions. The voice tends here to unwieldiness, and this recording's curious lazy quality keeps her earthbound, although the voice's ripeness and thrust are in evidence. Jones (DG), with a voice of comparable size and even more acute handling problems, also shows the strength and intermittent beauty of a true Senta, even as we hear the voice splitting apart—compare her earlier recital version of the Ballad (London OS 25981, OP).

When Schech's voice (Angel I) isn't wilting under pressure, her Senta has attractive moments, though not as many as her earlier Elisabeth and Elsa. Martin (London II) is working hard but barely keeps her voice in balance. With Silja, we can choose between the youthful vocal jumble that would connect with a phrase every once in a while (Philips) and the more predictable squall into which her voice subsequently settled (Angel II). Ursuleac (Acanta) mostly screams.

We should take note here of the extended excerpts recorded in performance at Covent Garden, Reiner conducting, in 1937 (Rococo 1008 and Discocorp 469). Flagstad, if not temperamentally electrifying, is vocally more impressive than any of the complete Sentas. Janssen is a generally strong-voiced, sometimes eloquent, but often prissy Dutchman.

There are a number of attractive recordings of the Ballad shortened-and probably rushed-to fit onto a single 78 side, ranging from Destinn's in 1907 (in DG's two-disc "100 Years of Bayreuth." 2721 115) through Leider's in 1925 (Preiser LV 172) and on to Rethberg's in 1930 (in Victrola's German-repertory grab bag, VIC 1455, OP). Freed of time pressure, Emmy Bettendorf produced an interestingly dreamy two-sided version in 1921, the same year that she and Werner Engel recorded most of the Act II scene with the Dutchman, beginning at "Versank' ich jetzt," showing the same determination to sing rather than rant. (Both excerpts are on LV 156.)

Leider can also be heard in excellent shape in a chunk of the Act II scene with Erik, beginning at "Fühlst du den Schmerz" and running through the dream narration, recorded with Carl Günther in 1922 (on a Günther disc, LV 177). This whole scene can be heard tolerably sung by Evelyn Lear and James King on DG's mid-Sixties excerpts disc (136 425, OP) with the Bamberg Symphony under Hans Löwlein.

The outstanding recorded Dutchmen are Metternich (Heliodor) and Crass (Philips)—appropriately enough a baritone and a bass. Like Wagner's later Heldenbariton roles, if the Dutchman didn't require a full baritone top (sustained writing up around the break, with liberally sprinkled Es, Fs, and F sharps) its general range and weight requirements would probably indicate a bass. In terms of overall range, in fact, the Dutchman is hardly distinguishable from Daland, and this may explain why 1'm especially partial to Crass's beautiful, easy singing. Metternich is a pleasure to hear too, with more freedom and dash on top, where his control of dynamics makes possible an assortment of phrasing options unavailable to the other baritones in the complete sets.

The most harrowed Dutchman is Uhde (Cetra and Turnabout), producing a good weighty sound in the middle and managing

There is no other Daland in the class of Ridderbusch's.

the bottom adequately, but straining on the upward stretch. Fischer-Dieskau (Angel I), with his thinnish upper range, is straining on top too, without producing a good weighty sound in the middle. Vocally better matched to the role are the legitimate Wotans: London (London 1), who like Rysanek is below his best here (he recorded a more secure, atmospheric "Die Frist ist um" on a recital disc with Knappertsbusch, London Treasury SRS 33198, OP); Stewart (DG), who sings well enough in a rather obvious proclamatory way (he sang more tautly in the earlier DG excerpts); and Hotter (Acanta), who at this point is only beginning to show the shudder. especially on top, characteristic of his later work (like the 1958 Act II scene with Nilsson, Seraphim S 60167), but who doesn't exert much grip on the imagination.

Adam (Angel II) introduces us to the world of the Germanic lower-voice rasp, a sound that comes in assorted sizes and configurations from not-very-high baritone to not-very-low bass and is characterized by a range from no vibrato whatever to a painful wobble. The natives have historically had a high tolerance for such voices, but for those of us who haven't acquired the taste, even the higher poetic sensibilities that sometimes accompany such equipment can't make the sound itself bearable. Adam is an earnest performer who has done some honest-to-gosh singing on other occasions (we will be hearing some lovely phrases from him as, of all things, the King in Lohengrin), but here we are left with his driedout, wobbly earnestness, which still strikes me as preferable to the mashed, unfocused mumbling of Bailey (London II).

There are enough good recordings of "Die Frist ist um" that we can afford to be picky. To hear the monologue brought to life through the mature command of color, weights, and phrase shapes you'd expect from a great Italian singer, turn to Schorr's 1929 recording (LV 23; also EMI HOM 1243, with his "Wie aus der Ferne"). True, the voice weakens on top, so we should also include Hans Hermann Nissen's almost embarrassingly easy 1928 recording (LV 58) or the vocally less brilliant but somewhat better-integrated 1939 one (LV 178). For an especially lovely shaping of the quieter sections, with more freedom on top than Schorr though not as much as Nissen, there is Joel Berglund's 1946 recording (in Electrola's ten-disc Bayreuth centennial box, 1C 181-30669/78).

The rest of the role hasn't produced much of interest on records. If you have a sense of humor in such matters, though, you might try to endure Otto Helgers and Melanie Kurt for the sake of the chunks of duet they recorded acoustically with Schorr.

There is no other Daland in the class of Ridderbusch's, but there are several registering on the plus side: Greindl (Heliodor), a German rasper of the no-vibrato school, heard here in one of his better complete roles, taut and precise; Weber (Cetra and Turnabout), not quite secure on top, but otherwise reasonably hale and hearty; and Frick (Angel I) and Tozzi (London I), both with good Daland voices that tend here to heave and slurp, respectively, in ways consistent with those problematic sets.

Hann (Acanta) offers an energetic version of the wobble-style rasp, while the Talvela of Angel II is still listenable in a monochromatic, semi-wordless way. That listenability is sharply reduced by the time of London II, where there isn't enough vocal focus to produce even one color. The fiftyeight-year-old Greindl's remake (Philips) finds him in tonally coarser shape, and he is afflicted with what sounds like a case of the giggles (a tipsy Daland?). But Greindl, seasoned pro that he is, doesn't stop the performance from happening.

"Mögst du, mein Kind" is the one chunk of the role recorded with some frequency. The one performance that can stand up to Ridderbusch's is Kurt Moll's recent recital version (Orfeo S 09 821), which is even fuller in sound at both top and bottom. Will we get to hear him in the complete role?

Poor Erik doesn't get much respect, and the recordings don't provide much ammunition for a defense of the opera's one wholly land-oriented character. (He's a hunter.) I find both scenes with Senta fascinatingly written, and the cavatina potentially a lovely piece. Liebl (London I) and Schock (Angel I) make the best case for the role, singing with reasonable measures of security and mellifluousness. Windgassen can't maintain as firm a line but still sings moderately well in Heliodor, less well in Cetra, though he's manifestly better than Lustig, the only cast change in the Turnabout performance.

Kozub (Angel II), Uhl (Philips), and Esser (DG) have voices of generous size for Erik, but the voices are a mess. Kollo, who recorded a functional account of the cavatina in his early two-disc Wagner compendium (CBS Germany 77283), should be able to make something of the role, but his singing in London II is hardly preferable to the provincial bawling of Ostertag (Acanta) and Lustig (Turnabout).

Instead of learning some of Erik's music for records, Melchior left us a bizarre edition of the Steersman's song (Victrola VIC 1500, OP), in which each stanza is followed by a refrain of the Act III Sailors' Chorus. This really isn't easy music for Melchior, and we can hear him laboring up top, but the sound is pretty extraordinary.

For the complete role, there are distinguished performances by Ek (DG) and Wunderlich (Angel I). Ek gives the livelier account, but Wunderlich's remarkable tonal effusiveness is something to behold. There are less distinctive but still pleasing performances by Häfliger (Heliodor), Traxel (Cetra and Turnabout), and Lewis (London I), in something like descending order. Unger (Angel II) and Krenn (London II) could surely have sung this music better on other occasions but here just don't maintain a controlled line. Klarwein (Acanta), drab and colorless, is saved from the distinction of World's Worst Steersman by Paskuda (Philips), whose ugly sound is made worse by the fact that it's loud.

The small character of Mary rarely comes out as more than an elderly kvetch. Sieglinde Wagner, although herself perhaps too elderly by the time of DG, makes quite a strong impression in Heliodor and Angel I. Though light-voiced, Rosalind Elias (London I) and Isola Jones (London II) sing the music attractively enough.

Some small textual notes: Cetra, Turnabout, Angel I, London I, DG, and London II present the opera's three acts without separation, in line with Wagner's original intention. The Philips performance is somewhat ambiguous, with Acts II and III beginning new sides; some minor textual variants are also incorporated here, notably a stephigher key for Senta's Ballad.

Tannhäuser

It no longer strikes me as accidental that three Wagner characters consistently tap the vein of the composer's most beautiful music. In the cases of Hans Sachs and Gurnemanz, this may be explained in terms of the ripe wisdom of mature age, but what then would we make of Wolfram von Eschenbach?

What the three seem to me to have in common is a high degree of empathy. For reasons no one has really doped out, some people have response mechanisms that spontaneously embrace the world around

Tannhäuser

- EMI (Germany). Maria Müller (Elisabeth), Ruth Jost-Arden (Venus), Sigismund Pilinsky (Tannhäuser), Herbert Janssen (Wolfram), Ivar Andrésen (Landgraf); Bayreuth Festival 1930, Karl Elmendorff—abridged. 1C 137-03130/2 (3m, formerly Columbia 78s).
- [DG] Heliodor (Germany, OP, NR). Trude Eipperle, Aga Joesten, Günther Treptow, Heinrich Schlusnus, Otto von Rohr; Hessian Radio, Kurt Schröder. 89 633/6 (1950, 4m).
- Acanta (Germany). Marianne Schech, Margarete Bäumer, August Seider, Karl Paul, Von Rohr; Bavarian State Opera, Robert Heger. HB 23.129 (1951, 4m, formerly Urania URLP 211 and Vox OPBX 143-4).
- Angel. Elisabeth Grümmer, Schech, Hans Hopf, Dietrich Fischer-Dieskau, Gottlob Frick; Deutsche Oper Berlin, Franz Konwitschny. SDL 3620 (1960, 4s).
- Philips [Festivo]. Anja Silja, Grace Bumbry, Wolfgang Windgassen, Eberhard Wächter, Josef Greindl; Bayreuth Festival 1962, Wolfgang Sawallisch.* 6770 026 (3s).
- DG. Birgit Nilsson, Nilsson, Windgassen, Fischer-Dieskau, Theo Adam; Deutsche Oper Berlin, Otto Gerdes. 2711 008 (1968, 4s).
- London. Helga Dernesch, Christa Ludwig, René Kollo, Victor Braun, Hans Sotin; Vienna State Opera Chorus, Vienna Philharmonic, Georg Solti. OSA 1438 (1971, 4s).

them while other people remain protectively contained within compact emotional bubbles. That these categories aren't immutable is approximately the subject of *Parsifal*, whose protagonist is "made wise through compassion." But the gulf that normally separates these categories is one of Wagner's pervasive themes. Note how incomprehensible (and infuriating) it is to Gurnemanz that Parsifal, first, is capable of gratuitously slaughtering the swan and, second, is incapable of identifying with Amfortas' suffering.

When it comes to identifying with suffering, Wolfram yields to no one. No matter what happens, and often at no little personal cost, he's there for both Elisabeth and Tannhäuser-ready to assist, support, console, forgive, pray, you name it. By way of reward, he gets from Elisabeth in Act III a stiff-arm worthy of Earl Campbell when he has the temerity to interrupt his silent vigil over her to ask whether he mightn't accompany her. The radiant beauty of those not quite forty bars between this question and Wolfram's "Wie Todesahnung" recitative, scored entirely for flute-dominated woodwind ensemble until finally Wolfram sounds his harp, are usually associated with Elisabeth, but it seems to me that they have at least as much, and possibly more, to do with Wolfram's despair over both Elisabeth and the absent Tannhäuser.

Oh sure, Wolfram can be a pain, but this happens only when he turns into Mr. Principles: his pompous response to Tannhäuser's Song Contest "blasphemy," "O *Himmel, lass dich jetzt erflehen*"; and that brief moment in Act III when he believes that the newly returned, bedraggled Tannhäuser has once again been misbehaving. But the moment passes quickly, and as always he forgives and understands, and Tannhäuser seems almost to resent him. How can a properly self-pitying person work up a good head of righteous indignation against someone who is always so confoundedly understanding?

It's important to appreciate that the difference between Tannhäuser and Wolfram isn't good vs. bad or creative vs. dull. Wolfram after all is no slouch as a singer. Just listen to Schorr's "*Blick' ich umher*" (LV 23 and EMI HQM 1243), and hear how easily and confidently he commands his listeners' attention and then holds it with an un-self-conscious poetic vigor that requires no macho swagger. And then compare the contest song with which Walther von der Vogelweide follows it.

Especially in as lovely a performance as Wunderlich's (Angel), we can hear that Walther's romantic clichés are manipulated with skill and charm, but that they remain a tissue of clichés. However sanitized Wolfram's vision of love may be, it at least springs in part from real experience. No wonder Tannhäuser becomes progressively more upset with Wolfram's and Walther's songs, or that he is driven completely berserk by that crude blowhard Biterolf, whose idea of an appropriate token of love is a sword dripping with blood.

Undoubtedly there are differences of sensitivity and skill among the six minnesingers we meet. But let's consider them as a microcosm of Thuringian society. Instead of dismissing Heinrich der Schreiber and Reinmar von Zweter as merely a second tenor and a bass inserted to fill out the ensemble, we can take their relative lack of assertiveness as character traits, features of the minnesinger pecking order. How then might we distinguish them?

The most obvious issue, one familiar from Dutchman, is social conformity, the willingness to accept uncritically the conventions of their society. What distinguishes Tannhäuser from the others isn't necessarily that he's smarter or better-looking or wittier or more athletic. Mostly, he's more suspicious, and perhaps more honest. If we have at one extreme that thoroughgoing establishment stooge Biterolf, at the other extreme is Tannhäuser, who by temperament won't accept anything he's told without independent verification, and who won't accept that the only correct solution for dealing with those nasty physical urges he has is the Thuringian Way, which consists of singing poetic songs and taking many cold showers.

Tannhäuser refuses in general to accept that something is frue because everyone says it is, and refuses specifically to believe that sex can be hygienically separated from love. Naturally this gets him into trouble, constantly. But just as naturally it makes him the most conspicuous, interesting, and sought-after member of his community. For evidence of the acute social breakdown that has resulted from Tannhäuser's absence (of which Elisabeth's refusal to set foot in the Minstrels' Hall is only the most visible manifestation), listen to the Entry of the Guests, and its sense of spontaneously rekindled spirits. What's suggested is that societies are kidding themselves when they imagine that conformity is socially healthy. The Thuringian reality, at least, is quite different. Irritating as Tannhäuser's presence may be to the community, his absence is simply intolerable.

There is irony here. Both Tannhäuser and his community discover that they can't get by without each other, and they can't get along with each other. An insoluble problem, right? And yet, when you get right down to it, how much difference is there? While Tannhäuser won't be told what to think and how to feel, what he in fact thinks and feels turns out to be amazingly consistent with the thoughts and feelings of the society that shaped him. Which may be why life in the Venusberg simply isn't a realistic option for him.

The opera contains another, more personal and poignant irony. On the surface, the conflict between Tannhäuser and Wolfram over the nature of love is a conflict between reality and intellectual abstraction: While Wolfram sings to Venus the evening star, Tannhäuser searches out Venus in the flesh. But who is it whose love is always given freely, instinctively, and without expectation of return?

When Tannhäuser returns from the Venusberg in Act I, who persuades him to stay? Only Wolfram thinks of the one name that grabs him: "Bleib' bei Elisabeth."

This is an incredibly beautiful line, of course, breaking off the minstrels' ensemble so starkly. But it's also a line that can embody tremendous anguish. Think of the internal struggle that must precede it. With Tannhäuser away, Wolfram is by default No. 1 in town, and he may even entertain hopes of someday winning Elisabeth's love. He knows, or has a pretty good idea, that he can get Tannhäuser to stay, but at the cost of abandoning his social preeminence and romantic hopes. Neither Elisabeth nor Tannhäuser seems ever to appreciate what Wolfram does for them, and for Wolfram it seems never to matter. To the end, he will be there watching helplessly over Elisabeth, and he will be there to receive Tannhäuser the failed penitent.

Tannhäuser hasn't had an easy time on records. Portions of the score, in fact, have never had adequate commercial representa-



Wolfram (Victor Braun) holds his audience with a poetic if sanitized view of love.

tion—there are probably many Wagnerians to whom it has never occurred that Tannhäuser's writing in the Venusberg scene (Dresden or Paris version) can actually be *sung*. In this discographic context, the London set takes on particular importance simply for its consistent orchestral and choral quality and its overall cast competence.

Solti's contribution consists primarily of keeping the show moving and letting his able associates do their jobs. And let's face it, when we think of, say, the antiphonal horns heralding the Landgraf's hunting party in Act I, it's the Vienna Phil we want to hear, right? In terms of active conductorial contributions, though, more respect may be due Sawallisch (Philips) and Konwitschny (Angel).

Sawallisch's Tannhäuser is my favorite of his three Wagner recordings. Here his sometimes finnicky predilection for continuously tinkering with the line results in real continuity (this strikes me as one of the "alivest" live Bayreuth recordings), and that continuity somehow carries along a cast distinctly on the ragtag side. Konwitschny can't do much about the downs in his cast, but he provides lovely support for the stronger cast members and is also able to fashion some rousing climaxes. Listen in the first instance to what Frick and Grümmer do with the brief Landgraf/Elisabeth scene in Act II, one of the score's most treasurable small moments, and then listen in the second to the grand climax to which the Entry of the Guests builds.

The DG recording, by contrast, has a cast that on paper looks as if it might be able to produce something, and yet it comes up curiously empty. Unlike Konwitschny, or such other conductors of the Old German school as Heger (Acanta) and Artur Rother (in the two discs' worth of 1943 Berlin Radio excerpts from Acts II and III on Acanta 22.119), Gerdes is constantly doing something: trying to make lyrical phrases a shade more lyrical, crescendos a bit more crescendo-ey, big moments a hair bigger. To his credit, he doesn't overshoot, but neither does his nudging take hold. All of his "imagination" sounds grafted on from the outside, and the effort might better have been directed toward figuring out how these principals' limited but real virtues might be forged into a Tannhäuser. Everybody has a phrase here and there that holds out momentary promise, only to dissipate harmlessly.

Heger's work has many of the same attractive qualities as Konwitschny's, scaled down to the lower level of the forces at his disposal. I'm fond of Rother's Acanta excerpts (Elisabeth's arias, the whole of the Song Contest, the Evening Star song, and the whole final scene from Tannhäuser's entrance), which are impressive for both coherence and lift, a category that might be extended to include Elmendorff's abridged 1930 recording (EMI) and the 1909 recording of Act II (Preiser CO 340), about which more shortly.

Schröder (Heliodor) probably wouldn't merit a mention if not for the feeling that this cast, unprepossessing though it be, has potential strengths that are being undercut rather than assisted by the slack, pokey conducting.

Let's start by getting the most troublesome roles, Tannhäuser and Venus, out of the way.

The closest vocal match for the title role is Treptow (Heliodor), whose midrange is a forceful, juicy Heldentenor, but (Continued on page 88)

Haydn Symphonies: Authenticity Comes of Age

L'Estro Armonico extends its series in brilliant fashion as two other groups (one American) enter the lists. Reviewed by John W. Barker



James Bolle: an overlooked American musical treasure

ONCE A BANDWAGON gets going, it really rolls—so it seems at least in the record industry. Serious attention to Haydn's symphonies on the part of original-instrument ensembles was long in coming. It began in earnest only recently, with the circulation of two British sets on the Saga label featuring Derek Solomons' L'Estro Armonico (Haydn 1, 2, October 1982). In their wake, all of a sudden, a lively trend has opened up, and we can probably look forward to a steady flood of "authentic" recordings of these scores from now on.

Significantly, Solomons and his group remain squarely in the lead. Once again with the enlightened underwriting of the Martini and Rossi distillery, but this time under the auspices of CBS, L'Estro Armonico offers another half-dozen symphonies. After the pair of Saga albums, the rationale here is, to be sure, a little obscure. Those sets presented Haydn's initial symphonies for his first employer, Count Morzin, in apparent order of composition. From a "let's start at the beginning" approach there, we suddenly leap into an unexplained scattershot venture. Once again, H.C. Robbins Landon provides annotations, but only for the individual works recorded here, with no background discussion of why these six were chosen. According to a prefatory statement, "The works are here recorded for the first time in their chronological order on original instruments and with the correct size band." OK on the last two counts, but not on the first. We don't know the precise date of each and every one of these six, and even what little we do know is not respected in the discs' arbitrary sequencing. The album bears the title "Sturm und Drang," a label borrowed from contemporaneous literary movements and frequently applied to Haydn's output in the 1770s and even earlier. But that term, often inappropriately used, is not equally germane to all six of these works; the current convention in recording is to dub Nos. 44-49 the Sturm und Drang Symphonies, but that is no more reliable. All we have, then, are six symphonies, mostly composed in the late 1760s, strung together in no certain chronological sequence. Why this segment of the symphonic output was picked as against some other, especially the commencement of the Esterházy phase, remains unclear, and whether this is an isolated venture or part of some still-projected and more comprehensive series is likewise not explained.

Those mysteries noted, one can go on only in admiration. As applications of the earlyinstrument approach to Haydn's symphonies, the two Saga albums were (and remain) stimulating and valuable, but the new one is exciting to the point of being sensational. If anyone thinks that authenticity of playing style and medium necessarily entails sacrifice of musical value, these performances should convince him otherwise; their vitality and exuberance are irresistible. I am not sure what accounts for the extra musical thrust: growing ease on the part of Solomons' band with period playing style, somewhat more mature and interesting musical material, or just the richer scoring of these works. Whatever the reason, the CBS set is a revelation and will have to be explored by anyone at all interested in Haydn and his era.

The ensemble sound itself is enough to command notice. Two of the slow movements, in Nos. 35 and 58, use strings (with harpsichord continuo) alone, and, especially in the first, one can hear the full impact of the vibratoless string ensemble as applied to Haydn's early writing: Once the adjustment is made, the pungent sound fits and satisfies. But, for the rest, it is Haydn's progress, in his maturing style, with the use of winds in orchestral texture that comes through so vividly. All six works require at least pairs of oboes and horns. Number 39 calls for four horns, providing a coloristic and harmonic sonority that made a deep impression at the time and won imitation from Mozart, among others. Two works involve the horns *in alto*, a thrillingly stratospheric effect that never fails to raise hairs on the back of my neck and here comes off stunningly: No. 59 uses the horns particularly brilliantly, and No. 38—a rarely recorded and neglected work, the real sleeper of this group—is one of those C major knockouts with the high horns joined by clarino trumpets and timpani to dazzling effect.

Rectified balance with the softer and reduced strings, of course, allows Haydn's bolder wind writing to be heard in clearer perspective. But the beautiful detail and tangy flavor are aided here in no small measure by the recorded sound. Saga's sonics, though clear, were just a bit dry and pinched compared with CBS's richer sound, even though the same producer (Martin Compton) oversaw both ventures. The engineering presents the ensemble fairly close, and in good detail and directional spread, but also in a subtly warm and comfortable ambience that frames the music without distracting from it. 1 am no automatic dupe of the hucksterism currently pushing the digital process-what I like to call "digitalis"-but this is the kind of achievement that can, after all, give digital recording a good name.

Yet, beyond matters of pure sound, what makes me most enthusiastic about this set is the interpretive level it reaches, even higher than in the Saga albums. Solomons' performances hold their own against all current competition—admittedly, altogether patchy. There are, of course, recordings of all six works in the complete series, Ernst Maerzendorfer's for Musical Heritage Society and Antal Dorati's on London, the latter, at least, presenting generally adequate if not always outstanding readings. Among individual recordings, Nos. 38 and 58 have never really been decently done. The two best versions of No. 39, Raymond Leppard's sonorous one (Philips) and David Blum's more slashing one (Vanguard), are out of print, as are the latter's No. 59 and an earlier Dorati counterpart (Mercury); the commanding No. 59 is Neville Marriner's recent account (Philips 9500 159). Leslie Jones has made variously adequate recordings of Nos. 39, 35, 49 (Nonesuch H 71096, 71131, and 71032). Most recorded, of course, is the powerful No. 49, the leading contender now probably being Marriner's new edition (Philips 9500 199), with some competition from Daniel Barenboim (DG 2530 708). One of the most memorable performances of No. 49 among past casualties, however, is the late Max Goberman's in his Library of Recorded Masterpieces Haydn series (HS 11), which also offered a No. 35 (HS 15).

Of course, the "original-instrument" dimension of Solomons' set makes his recordings sui generis, hard to compare directly to modern-instrument performances. Even the knowing stylishness of Marriner's St. Martin's Academy in Philips' glowing recording sounds like bigorchestra Strauss by comparison, and Solomons' renditions will be mandatory for any Haydn collector regardless of past recordings. Still, it is important to recognize that these interpretations require no apologies. No. 49 is a perfect illustration: The performance makes this intense score's point with every bit as much musical and emotional meaning as virtually all rivals, and I must reach back to the lamented Goberman for such a combination of gutsy energy with probing feeling.

In sum, I have no qualms about recommending this set, even more than its Saga predecessors, as one of the major, prizeworthy, and sensational issues of 1983.

Turning to the other two releases makes one that much more impressed with Solomons' achievement, though this is not to denigrate these records. Indeed, it is enlightening to hear the original-instrument efforts of other relatively new ensembles, in two other countries, as they enter the scene.

Helmut Müller-Brühl has been around for some time, of course, even if his Schwann recordings have achieved only sporadic circulation here, through either MHS domestic issue or direct import. He has, in fact, already recorded Symphonies Nos. 6-8 on Musica Mundi (VMS 2007), using his veteran ensemble, the Cologne Chamber Orchestra. (That recording, curiously, jostled the numbering to 6, 8, 7, disrupting the programmatic effect for no apparent reason.) Those earlier performances, elegant and effective, differ in more than just the obvious ways from his work with his new "historical-instrument" ensemble, the Capella Clementina. Here the tempos are more widely contrasted, with almost pushed speed in outer move-

These releases open a great new chapter in Haydn appreciation.

ments and a slowness in inner ones sometimes close to plodding. The string ensemble is also a bit rough, lacking the fullthroated eloquence that Solomons has developed in his players. On the other hand, the early wind instruments do sound very charming in their quaint programmatic and coloristic effects, and the performances as a whole are attractive alternatives.

But, unlike Solomons, Müller-Brühl does not offer musical substance to match the best of his rivals in this oft-recorded music. For me, the old Goberman recordings (HS 2, HS 3) remain special standards in heartiness, while, among current versions, I have always liked Karl Ristenpart's amiable renditions in the bargain Nonesuch release (H 71015). Bernhard Klee's DG release from Prague was short-lived, so the preferred edition on conventional instruments is clearly the recent Marriner (Philips 6514 076), a succulent serving in juicy digital sound. This is the one to get for full justice to the scores' musical content, but Müller-Brühl's is a nice second recording to add historical/sonic perspective, at the least

James Bolle is one of our overlooked musical treasures, having developed, first in his Musica Viva years and now with his Monadnock Festival in New Hampshire, one of the better traditions in the U.S. of sensitive, musical, yet musicologically stylish performance of neglected eighteenth-century music. His splendid recordings, first on Monitor and currently on MHS, have tended to be overlooked, and his reputation is nothing like what it deserves to be, though critical notices of his

HAYDN: Symphonies (6), 1766-68.

L'Estro Armonico, Derek Solomons, cond. [Martin Compton, prod.] CBS MASTERWORKS I3M 37861 (three discs, manual sequence). Tape: I3T 37861 (three cassettes). [Price at dealer's option.]

Symphonies: No. 35, in B flat; No. 38, in C; No. 39, in G minor; No. 49, in F minor (*La Passione*); No. 58, in F; No. 59, in A (*Fire*). HAYDN: Symphonies: No. 6, in D (*Le Matin*); No. 7, in C (*Le Midi*); No. 8, in G (*Le Soir*).

Capella Clementina, Helmut Müller-Brühl, dir. [Andreas Beutner, prod.] SCHWANN MUSICA MUNDI VMS 2085, \$11.98 (distributed by Germain News Co., 220 E. 86th St., New York, N.Y. 10028).

HAYDN: Symphonies: No. 42, in D; No. 43, in E flat (*Mercury*).

Monadnock Music, James Bolle, dir. [Ralph Dopmeyer, prod.] TITANIC TI 101, \$10. Festival are beginning to catch up with him. Thus, it is a delight to receive this album, entitled "Haydn: The Symphonies. Vol. 1." Again one is baffled by the initiation in medias res with these particular works, but one can only rejoice at the prospect of a continuing series, especially in the hands of Ralph Dopmeyer, one of the most enterprising and dedicated recording impresarios active. This release also gives us a chance to hear for the first time on records the results of Bolle's work with his earlyinstrument orchestra.

In all, the results are impressive. Never one to let authenticity of approach get in the way of musicality. Bolle treats these symphonies not as antiquarian oddities, but as works of substance, and offers unusually serious renditions. No. 42, which has never had much attention on records on its own, emerges as a very convincing work of unexpected imagination and diversity. No. 43 has fared better: Marriner offers the best current version (Philips 9500 159, with No. 59), and collectors may recall its noble recording debut in a treasurable early LP from the Haydn Society (HSL 1041) under the late Mogens Wöldike; more superficial is Jones's recording (Nonesuch H 71131). Bolle's interpretation is equal to the best of these, making this a more sober and moving experience than one would at first have expected.

His players seem fully in command of their instruments, and the carefully considered decision not to use harpsichord continuo is softened by the uncanny hint, in the tangy string sound, that the harpsichord's ghost might almost be lurking. What is a little disappointing is that the recording was made in a very resonant setting, with the miking a little distant, so that the pungency and clarity resulting from the altered sounds and balances of this kind of period orchestra are somewhat blunted, dragging us back to a big-orchestra effect. The overall sound still shows a good huskiness and an even rawness, but it is too overall, losing some of the gutsiness of strings and pointing of winds. This is such a good start that one earnestly hopes the recording techniques will be reconsidered for the future releases-which we can only anticipate with high expectations.

It was a good thirty years ago that record collectors were given the first opportunities to explore the full scope of Haydn's symphonic output with the Haydn Society's early recordings of such musical novelties as had never been heard. Those ventures were a bit crude then and seem much more so now, but who could have imagined that we would go so far so quickly in digesting this repertory as to have multiple recordings of virtually all these symphonies and be able, further, to rediscover their authentic period sound? The present releases open up a great new chapter in the appreciation of Haydn and the music of his age. HE

CLASSICAL Reviews



Hans Pfitzner: an afterglow of the Romantic German Lieder tradition-See page 65.

BACH (arr. Benítez): Suite for Lute, in E minor, S. 996. D. SCARLATTI (arr. Benítez): Sonatas for Keyboard (5).

Baltazar Benítez, guitar. [Alex Weissenburger, prod.] NONESUCH H 71404-1, \$5.98. Tape: 71404-4, \$5.98 (cassette).

Sonatas: in E minor, K. 5 (L. 367); in E minor, K. 77 (L. 168); in E minor, K. 292 (L. 24); in A minor, K. 476 (L. 340); in A minor, K. 481 (L. 187).

BACH (arr. Barrueco): Suites for Lute: in C minor, S. 997; in E, S. 1006a.

Manuel Barrueco, guitar. VOX CUM LAUDE VCL 9023, \$8.98. Tape: VCS 9023, \$8.98 (cassette).

BACH: Lute Works (2). SOR: Guitar Works (2).

Göran Söllscher, guitar. [Lars Finnström, prod.] DG CONCOURS 2535 011, \$6.98.

BACH: Prelude, Fugue, and Allegro, in E flat, S. 998; Fugue in G minor, S. 1000. SOR: Sonata in C, Op. 15; Morceau de concert, Op. 54.

BACH: Suites for Lute: in G minor, S. 995; S. 996. Prelude, Fugue, and Allegro, S. 998.

Hopkinson Smith, lute. [Michel Bernstein, prod.] ASTRÉE AS 61, \$13.98 (distributed by AudioSource, 1185 Chess Dr., Foster City, Calif. 94404).

Bach's "lute" works, some musicologists now believe, may not have been written for the lute at all, but for the *Lautenklavecimbel* (lute-harpsichord). However that may be, they have become central to the guitar's transcription literature. There are seven works in all—four suites (two adapted from solo works for violin and cello, two original); a brief, simple prelude, and the Prelude, Fugue, and Allegro (both also known to harpsichordists); and a lone fugue (from the First Violin Sonata)—ascribed to the lute because manuscripts (or copies) exist in tablature rather than standard notation.

Time was when young guitarists would hold back from these fearsome works; but these days, more and more players are committing their Bach interpretations to disc early on, and often doing extraordinarily well with them. The guitar discs here include nearly all the lute works played by relative newcomers.

Baltazar Benítez, an Uruguayan guitarist whose disc debut provided one of the more interesting and beautifully played Latin American guitar discs in the catalog (Nonesuch H 71349), is somewhat less successful in the E minor Lute Suite. What he lacks is not originality, but restraint. In the Prelude, his rolled chords and his use of unequal notes in passages of straight sixteenths promise an interesting interpretive departure, and the clarity he brings to Bach's contrapuntal strands is certainly impressive. By the time he gets through the Allemande, however, his penchant for dotting rhythms begins to lose its charm, and his use of added ornaments is not always consistent. His embellishment in the Courante, on the other hand, is quite likable, and he brings a nice improvisatory feeling to the rhythms of the Sarabande-an effect he carries to excess in the second half.

The treatment of the five Scarlatti sonatas that fill out the disc, though less eccentric, is not particularly memorable. Apparently playing with longer fingernails Reviewed by: John Canarina Scott Cantrell Kenneth Cooper R. D. Darrell Peter G. Davis Kenneth Furie Harris Goldsmith Matthew Gurewitsch David Hamilton Daile S. Harris R. Derrick 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

than most of his colleagues, Benítez produces a bright sound, sometimes percussive, sometimes brittle, but always clean and clear.

If Benítez' ornate style and crisp timbres emphasize the music's delicate side, Manuel Barrueco conveys strength and rocklike solidity in his more straightforward performances of the C minor and E major Suites. Like Benítez, Barrueco maintains tight control of the voicing, and by clipping the bass lines in the Prelude of S. 997, he gives the voices even greater independence. His interpretations are fairly straightforward, and such ornamentation as he applies is well conceived and tasteful. Note particularly his variation of the ritornello in the Gavotte en Rondeau of S. 1006a and the more aggressively ornamented repeats in that suite's Minuets.

The disc's sole shortcoming is its combination of a nonresonant studio and an ungratefully dry-sounding guitar, which prevents this impeccable player's performances from ringing out as freely as they do in concert.

Göran Söllscher, a young Swedish guitarist making his disc debut in DG's Concours series (having won the Paris International Guitar Competition in 1978), plays his Bach-and apparently all lute music-on an eleven-string guitar, reserving the standard instrument for later music. Here he approaches the S. 1000 Fugue and the Prelude. Fugue, and Allegro with unusual gentleness that at times borders on the clinical. Yet if his approach seems square at the start, by the time he gets through each movement he has presented a vision of structural logic, precision, and clarity, to which his expanded instrument contributes a rich bass underpinning. His Sor (the early Op. 15 Sonata and the Op. 54 Morceau de concert), though equally fastidious, shows a touch more fire-something I hope he will eventually bring to his Bach.

Strangely, what with all the recordings of Bach lute works on guitar, there have been precious few on the lute; and of those that have been released—selections by Eugen Dombois (ABC, deleted) and Walter Gerwig (Nonesuch, various), a complete traversal by Narciso Yepes (Archiv 2708

030)-none is fully satisfactory. Hopkinson Smith goes halfway toward correcting this deficiency with a first volume of lute works, played on a thirteen-course instrument. His approach is easygoing and relaxed, but by no means flaccid, even in the quicker movements. In his ornamentation, he avoids ostentation in favor of simpler, fully logical embellishments, thriftily applied; and he manages to apply doubledotting without sounding eccentrically jumpy. This fine, confident performance is, furthermore, favored with some of the warmest recorded lute sound I've heard. I eagerly await the next volume. AK

BERNSTEIN: Orchestral Works.

Israel Philharmonic Orchestra, Leonard Bernstein, cond. [Hanno Rinke*, Günther Breest[†], and Hans Weber[†], prod.] DEUTSCHE GRAMMOPHON 2532 052, \$12.98 (digital recording[†]). Tape: 3302 052, \$12.98 (cassette).

Divertimento[†]; A Musical Toast[†]; Slava!*; Facsimile[†]; On the Town: Three Dance Episodes[†].

With one exception, these are minor chips from the workbench—though no less appealing for that. In contrast to recent releases, they show Leonard Bernstein at his most lighthearted. The 1980 Divertimento was written to celebrate the centennial of the Boston Symphony Orchestra, which played an important part in Bernstein's early career and with which he has maintained a continuing relationship. Whereas other composers, such as Roger Sessions and Peter Maxwell Davies, wrote extremely serious scores to mark the occasion, the eight brief movements of Bernstein's piece remind one that the Boston Pops is an integral part of the orchestra's operation.

The two works that follow on Side 1 are in the same vein and could easily be thought of as ninth and tenth movements of the divertimento. A Musical Toast, written in memory of André Kostelanetz, is rhythmically based on the syllables of his name. It's far from solemn, and "Kosty" would no doubt have loved it. Though the liner notes don't say so, Slava!, dedicated to Mstislav Rostropovich, consists of material recycled from the composer's unsuccessful musical about life in the White House, 1600 Pennsylvania Avenue—hence the subtitle. "A Political Overture." Rowdy and vulgar (in the best sense), it's marvelous fun, much of it written (like A Musical Toast) in what seems to be Bernstein's favorite meter, 7/8. A brief interlude, optional in the score, features taped voices of political candidates spouting clichés.

The jazzy "Dance Episodes" from On the Town are well-known, and Bernstein has recorded them before (CBS MS 6677, MG 32174, and M 30304, in various couplings). The third one, "Times Square: 1944" is based on the show's hit song, "New York, New York, It's a Wonderful Town."

The exceptional work noted above, also previously recorded by Bernstein (CBS MS 6792 and MG 32174), is the haunting "choreographic essay" *Facsimile*, the second of his collaborations with Jerome Robbins. Not one of Bernstein's more brilliant or splashy pieces, this lyrical, moody work, concerned with human relationships and loneliness, is infrequently played (even by him); I've never encountered it in the concert hall. Its introspection is quite poignant, however, and it certainly deserves to be better-known. It has its lively moments too, and there is an important part for solo piano.

As it has throughout this distinguished series, the Israel Philharmonic sounds quite at home in this repertory—though it must be said once again that the New York Philharmonic displays a bit more élan and feeling for the jazz elements.

Bernstein the composer could not ask for a better interpreter than Bernstein the conductor, but let's hope this doesn't deter others from performing, and recording, this engaging, delightful, and, in the case of *Facsimile*, touchingly beautiful music. J.C.

CESTI: Orontea.

CAST: Silandra Isabelle Poulenard (s) Tibrino/Amore Cettina Cadelo (s) Giacinta Jill Feldman (s)



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Critics' Choice

The most noteworthy releases reviewed recently

BACH: Goldberg Variations. Gould. CBS IM 37779 Jan

BEETHOVEN: Fidelio. Báthy, Rösler, Klemperer. HUNGAROTON LPX 12428/9 (2), April. BERNSTEIN: Dybbuk Suites Nos. 1-2. New York Philharmonic, Bernstein, DG 2531 348, Jan.

BRAHMS: Paganini Variations. PROKO-FIEV: Piano Sonata No. 6. Faerman. DG CON-COURS 2535 013, March.

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

COPLAND: Orchestral Works. Atlanta Symphony, Lane. TELARC DG 10078, April.

FRANCK: Symphony in D minor. Liège Philharmonic, Bartholomée. RICERCAR RIC 009, Feb

GRANADOS: Danzas españolas (12). De Lar-

Helga Müller Molinari (ms)
Andrea Bierbaum (a)
René Jacobs (ct)
David James (ct)
Guy de Mey (t)
Gastone Sarti (b)
Gregory Reinhart (bs)

Instrumental ensemble. René Jacobs, dir. [Klaus L. Neumann, prod.] HARMONIA MUNDI FRANCE HM 1100/2, \$35.94 (digital recording; three discs, manual sequence). Tape: 40.1100/2, \$29.94 (three cassettes). (Distributed by Harmonia Mundi U.S.A., 2351 Westwood Blvd., Los Angeles, Calif. 90064.)

One of the most successful operas of the seventeenth century, Pietro Antonio Cesti's Orontea was produced in over a dozen Italian cities in the twenty-five years following its 1656 premiere in Innsbruck. As might be expected, arias were added, parts rearranged or transposed, and other alterations made to suit the immediate circumstances of these performances. This attractive and entertaining recording is based on a Venetian production that Cesti himself supervised in 1666, including the interpolation of four arias salvaged from his L'Argia (1655). For his musical text, René Jacobs relies chiefly on a manuscript now in Magdalen College, Cambridge, England.

Modern audiences will recognize in Orontea the sort of romantic comedy prevalent in Hollywood movies of the 1940s and '50s. The plot, though not particularly sensible, moves along quickly and affords a number of talented performers opportunities to shine in a series of amusing encounters. The title character, a role worthy of Katherine Hepburn, is a strong-minded woman who claims to have forsworn love but immediately falls for the first intinerant charmer to arrive. This Alidoro, in fact, is so irresistibly attractive (Cary Grant?) that all the available women are equally overcome, and he bounces among them like a Ping-Pong ball until everything is happily

rocha. LONDON CS 7209. Feb.

HANDEL: Messiah (excerpts). U. of Michigan Early Music Ensemble and Ars Musica, Parmentier. SCHOOL OF MUSIC SM 0017, Feb.

HILDEGARD OF BINGEN: Sequences and Hymns. Gothic Voices, Page. HYPERION A 66039, April.

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

MAHLER: Symphony No. 7. Chicago Symphony, Levine. RCA RED SEAL ATC 2-4245 (2), March.

MOZART: Piano Concertos Nos. 20, 27. Curzon; English Chamber, Britten. LONDON CS 7251, April.

POWER: Masses and Motets. Hilliard Ensemble, Hillier. EMI ELECTROLA RÉFLEXE IC 069-46402 March

Philadelphia, Muti. ANGEL DS 37776, Feb.

certgebouw, Ashkenazy. LONDON LDR 71603, March

resolved. Orontea and Alidoro join in a

final quartet with second lead Silandra and

her faithful boyfriend, Corindo. One char-

acter is left hanging: Giacinta, a girl who arrives disguised as a boy commissioned to

kill Alidoro, but who eventually succumbs

to his charm. This part (for a young Jean

Arthur?) was enlarged in the 1666 produc-

tion from marginal status to a supporting

lead, but after her big third-act aria, simply

plies numerous stock characters, undoubt-

edly played brilliantly by repertory per-

formers of the time. The comic nurse Aris-

tea, the drunken buffoon Gelone, the bright

young page Tibrino, and the old philoso-

pher Creonte have far more than walk-on

roles and account for some of the opera's

easily in and out of "half-arias" and more

formal numbers in graceful triple meter.

The writing is both simpler than that of

Monteverdi's operas of a generation before,

with their brilliant technical display, and

less pretentious and formal than that of later

baroque opera, with its grandiose da capo

arias. The characters seldom sing together

(the final quartet sounds monumental when

it appears), engaging instead in brisk repar-

tee. Emotions range widely; tenderness,

despair, rage, exuberance, and awakening

love are all sensitively portrayed. The

booklet's excellent English translation of

the libretto makes the work's appeal all the

typical three-part texture, two violins

(sometimes doubled by flutes) and contin-

uo, occasionally expands to four or five

voices with one or two violas. For the

recording. Jacobs adds some brief contem-

porary sinfonias and ritornels at the begin-

Cesti's orchestra is also modest; the

Musically, Cesti's work is flexible and varied; quick, sculptured recitative moves

In addition, the supporting cast sup-

left in bit player's limbo.

brightest scenes.

more immediate.

SCHUBERT: Piano Sonata, D. 960, Richter. EURODISC 86 222, Feb.

SCHUBERT: Songs (93). Various. EMI RLS 766 (8), April.

SHOSTAKOVICH: Unpublished Works. Rozhdestvensky. Vox CUM LAUDE VCL 9035, April

VERDI: Aida. Ricciarelli, Domingo, Abbado. DG 2741 014 (3), Feb.

WAGNER: Tristan und Isolde. Price, Kollo, Kleiber. DG 2741 006 (5), Feb.

BERLIN PHILHARMONIC: 100 YEARS.

EMI ELECTROLA 1C 137-54095/9 (5), Dec. BERLIN PHILHARMONIC: 100 YEARS, VOL. 2. Furtwängler. DG 2740 260 (6), Dec. JÓZSEF GREGOR: Great Buffo Scenes. Savaria Symphony, Pál. HUNGAROTON SPLX

OFRA HARNOY: Arioso. DISCOPAEDIA MBS

EGON PETRI IN RECITAL. Dell'ARTE DA

2013. March.

9009. March.

12359. March ELMER ISELER SINGERS: Spectra. CEN-TREDISCS CMC 0281, April.

PROKOFIEV: Romeo and Juliet Suites (2).

RACHMANINOFF: Symphony No. 2. Con-

ning of acts and scenes to divide the work aurally in place of the missing stage action. He also takes advantage of stereo separation, using a double continuo; one ensemble, for serious characters, includes a lute, the other, a more popular-sounding guitar.

The burgeoning interest in baroque opera, and early music in general, over the past twenty years has produced a new generation of remarkably capable singers completely at home in the requirements and style of this writing. With the possible exception of Jacobs himself, there are no big names in this cast, yet the singing is of consistently high quality. Helga Müller Molinari's warm but regal mezzo is perfectly suited to the queenly Orontea; the high sopranos, Isabelle Poulenard (Silandra) and Cettina Cadelo (Tibrino), are bright and attractive (Poulenard's coloratura is particularly striking); Jill Feldman makes a touching Giacinta. Andrea Bierbaum (Filosofia), joined by Cadelo (here as Amore), supplies some brilliant virtuoso singing in the prologue.

The vocal expectations of the time called for heros to sing in the alto register; here the male lovers Alidoro and Corindo are sung by countertenors Jacobs and David James. Jacobs, more a French hautecontre, producing a blend of chest and falsetto registers, is especially fine. Old nurses in baroque opera are frequently tenors; Guy de Mey is marvelously funny as Aristea, never falling into overstatement. Like Monteverdi's Seneca, the philosopher Creonte is a bass and an occasionally tendentious character, a role Gregory Reinhart fills well. The only singer with whom I have any quarrel is baritone Gastone Sarti; not that he does not sing well-quite the contrarybut he is simply too elegant to capture the lurching ribaldry of the drunk Gelone.

It must be unusual for so complex a production as Orontea to be directed by one of the singers. Apart from Alfred Deller's, no such attempts come to mind. Yet one of the best things about the performance is its pacing. Particularly in this style of fluid recitative, with its witty exchanges and rapid shifts in tone, the ever changing movement of the music requires the utmost control in order to seem natural. To Jacobs' credit, *Orontea* seems as brisk and as much fun as a Hollywood comedy.

The recording quality is excellent, with sound—intimate rather than spectacular—that befits the scale of the work. It is a pleasure that the clearly produced but unobtrusive digital sound and the excellent pressing allow Cesti's *Orontea* to shine for itself. S.T.S.

GILBERT and SULLIVAN: Patience*; The Gondoliers (excerpts)[†].

CAST—Patience:				
Patience			Winifred Lawson (s)	
Lady Jane			Bertha Lewis (a)	
Duke of Dunstable		ble	Derek Oldham (t)	
Reginald Bunthorne		orne	George Baker (b)	
Archibald Grosvenor		enor	Leslie Rands (b)	
Colonel Calverley		ey	Darrell Fancourt (bs)	
CAST—Gondoliers:				
Gianetta			Muriel Dickson (s)	
Tessa			Beatrice Elburn (ms)	
Duchess	E	ssie Ac	kland/Nellie Walker (a)	
Marco			Derek Oldham (t)	
Duke of Plaza-Toro George Baker (b)				
Giuseppe Leslie Rands/Leonard Hubbard (b)				
Grand Inquisitor Sydney Granville (bs-b)				
Other soloists chorus orchestra Malcolm				

Other soloists, chorus, orchestra, Malcolm Sargent, cond. ARABESQUE 8095-2L, \$16.96 (mono; two discs, manual sequence). Tape: 9095-2L, \$16.96 (two cassettes). [From HMV/ VICTOR originals, recorded September 1930* and March-May 1931†.]

The Patience is the most interesting performance to surface among these prewar D'Oyly Carte reissues, which is surprising in that the singing level is modest even for this series and Patience normally withers under such conditions. But this is also a score imbued with a special quality-"aristocratic" is the best description I can think of-and Sargent is as sensitive to it here as in the beautiful recording he made three decades later (now available as EMI SXDW 3031). In addition, the 1930 recording has more snap and crackle in the military music, qualities more normally associated with Isidore Godfrey as in the D'Oyly Carte's last Patience (London OSA 1217, with spoken dialogue).

The men are okay, if nothing special. (The Major Murgatroyd, incidentally, is the young Martyn Green. He's okay, but nothing special.) Apart from Bertha Lewis, whose contralto remains impressive even though not really settled here, the women are mere wisps. All the same, the performance holds its own against both stereo recordings: the Sargent/EMI, with its imposing cast, especially on the female side; and the Godfrey/London, weakish on the female side but quite rousing on the male, what with Donald Adams' Colonel and Kenneth Sandford's Grosvenor. For Patience herself, even Sargent's lovely Elsie Morison can't match the indomitable Margaret Mitchell in the D'Oyly Carte's postwar mono set, formerly on Richmond.

The Gondoliers excerpts, not to be confused with the differently cast 1927 complete recording conducted by Harry Norris (Arabesque 8058-2L), comprise something under half the score, concentrating on the gondoliers themselves and their wives. I prefer the excerpts to the complete recording. They're performed with agreeable spirit, if again without much vocal distinction, one exception being the fine "Rising early in the morning" (Leonard Hubbard? it doesn't sound like Leslie Rands). K.F.

HAYDN: Symphonies (11)—See page 58.

LEONCAVALLO: La Bohème.

CASI	
Mimì	Lucia Popp (s)
Musette Alex	andrina Milcheva (ms)
Eufemia	Sofia Lis (ms)
Marcello	Franco Bonisolli (t)
Gaudenzio	Friedrich Lenz (1)
Durand	Norbert Orth (1)
Il Signore del primo pian	o Albert Gassner (t)
Rodolfo	Bernd Weikl (b)



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CLASSICAL Reviews

Schaunard Visconte Paolo Gustavo Colline Barbemuche Alan Titus (b) Jörn W. Wilsing (b) Raimund Grumbach (b) Alexander Malta (bs)

Bavarian Radio Chorus, Munich Radio Orchestra, Heinz Wallberg, cond. [F. Axel Mehrle, Dieter Sinn, and Diether G. Warneck, prod.] PANTHEON ORFEO S 23 823 (digital recording; three discs, manual sequence) [price at dealer's option] (distributed by Pantheon Music International, Inc., 211 E. 43rd St., New York, N.Y. 10017).

The big La Bohème rivalry was a hot subject of gossip in Milan cafés during the early 1890s, and to this day no one knows for sure who hit on the idea first. Leoncavallo always claimed that he saw operatic potential in Henri Murger's 1848 novel of bohemian life in Paris long before Puccini; he even once offered to write a libretto on the subject for his erstwhile friend, who airily dismissed the whole notion. Shortly after Leoncavallo began to write the music himself, he learned that Puccini had embarked on his own version, which, still worse, beat Leoncavallo's to the stage by fifteen months. Not surprisingly, the two composers never spoke to each other again. By the time La Bohème No. 2 saw the light, it was too late; Puccini's opera had already begun an international career that quickly left Leoncavallo's earnest effort far behind.

Every now and then Leoncavallo's setting does turn up-Orfeo's new recording is the third, if you count a live 1958 performance from Naples currently circulating on Melodram (MEL 021)—and with it some fascinating comparisons. The two operas treat the material so differently that both could conceivably have led independent lives, rather like the Puccini and Massenet Manons, had Leoncavallo's vision not outstripped his resources. The "other" La Bohème tries valiantly to re-create a much fuller, more faithfully rounded picture of Murger's hyper bohemians: Schaunard, for example, becomes a major character with a girlfriend of his own, Mimi's viscount admirer turns up to seduce the poor girl during an ensemble in Act II, while a great many minor characters come and go to fill out the bustling milieu.

The dramatic emphasis is also entirely different. Marcello (tenor) and Musette (mezzo-soprano) occupy center stage, with Rodolfo (baritone) and Mimì (lyric soprano) treated as almost episodic characters. Beyond that, Leoncavallo divides the opera into two very distinct parts. Acts I and II concentrate on la vie de bohème with a gay abandon that borders on frenzy; both Musette and Mimì have charming specialty numbers with a distinct French music-hall lilt, Schaunard delivers a delicious Rossini parody, and nearly everyone on stage seems determined to have a good time no matter what the cost. In Acts III and IV, the tone suddenly turns intensely melodramatic as the two couples quarrel and separate with a sordid viciousness that Puccini never even

hints at—Marcello attempts to strangle Musette at one point. Perhaps Leoncavallo was trying to emphasize a point about young life styles that get out of control: Unrestrained adolescent frivolity in the face of misery can last only so long: there is a terrible price to pay at the end of the road.

It's an interesting idea, but unfortunately Leoncavallo's craftmanship, not to mention the quality of his lyrical invention, never quite measures up to the challenge, and one soon begins to long for Puccini's less ambitious but more masterful blend of comedy and pathos. The lighthearted music early in the opera is pleasing enough, although the frantic divertissements tend to outstay their welcome; the later scenes of violence vacillate uneasily between Wagnerian chromaticism and sweeping, grandiose, often banal diatonic tunes. In fact, the

Leoncavallo always claimed that he got the idea for *La Bohème* first.

whole score leaves the impression of a somewhat disorderly pastiche. Nor is the dramatic dichotomy presented with the brilliant assurance that makes Pagliacci such a surefire piece. Mimi's protracted death scene is a particularly bad miscalculationthere seems no special reason why this shadowy presence should suddenly command center stage. Despite its inconsistencies, Leoncavallo's La Bohème remains a provocative failure, and, if nothing else, a sympathetic listener has to admire the composer's adventurous spirit. Moreover, many individual moments are handled with genuine theatrical flair, and the singers all have generous opportunities to show off their voices.

Orfeo's handsomely engineered digital recording definitely lays the inadequate old Cetra performance to rest, even if this cosmopolitan cast may not be the last word in idiomatic italianità. I especially enjoy Alexandrina Milcheva's smoky mezzosoprano as Musette, delightfully insinuating in her waltz songs yet powerful and biting when she lets loose in the heated arguments of Act III. Her Marcello, Franco Bonisolli, smooths out the leathery texture of his tenor more successfully than past recordings would have led one to expect, and he, too. sings with passionate conviction. No one could mistake Bernd Weikl for an Italian baritone, but he makes an urgent, imaginative Rodolfo. Lucia Popp's fragile Mimì is a piece of luxury casting in a thankless role, and Alan Titus turns in a lively job as the bluff bohemian ringleader, Schau-

nard. The supporting artists are expert German character singers, and for better or for worse they sound it.

Heinz Wallberg, who has conducted many wonderful recordings of obscure German operas on discs for EMI, leans on the music rather too heavily, although the Munich Radio Orchestra plays ardently for him and only a churl would complain. I marginally prefer the less polished but more abandoned live performance on Melodram, but anyone with a burning curiosity to discover Leoncavallo's flawed alternative to Puccini's masterpiece should find this deluxe production more than satisfactory. P.G.D.

MOZART: Sonatas for Piano: in A minor, K. 310; in A, K. 331; in D, K. 576.

Andras Schiff, piano. [Michael Haas, prod.] LONDON CS 7246, \$10.98.

Volume 2 of Andras Schiff's unfolding Mozart sonata cycle is bound to have widespread appeal, since it comprises three of the composer's strongest and most popular works in the genre.

As I noted when the first installment appeared (CS 7240, August 1982), Schiff is an extremely cultivated and sensitive musician, an extraordinary pianist, and an interpreter who conveys both a sense of joyous communication and an awareness of style. He does not ornament this music as freely as he does Scarlatti and Bach (and Mozart concertos, where he plays continuo and decorates fluently). And here again, the playing is well served by London's colorful yet compact sound.

Schiff applies a kind of drypoint to all three sonatas, with clearly etched, often *détaché* articulation, but exploits the full resources of a modern grand. And his use of spacious rubato—his expansively vocal style—has an unhurried eloquence all too rare among modern instrumentalists.

Curiously—and this more by way of observation than of fault-finding—Schiff finds less stylistic diversity here than in the earlier record. In K. 331, the lyrical emphasis works splendidly: The variations exude charm and color, the central Minuet is vigorously expansive, and the *Alla turca* takes its time yet remains rhythmic and swaggering in this bracing, vital performance. The broadish tempos throughout make the music sound unusually ample, though never pretentious.

The same containment and elegance in K. 310 produce a lovely, sensitive account, if one a little short on the demonic energy (e.g., in the first movement and the central part of the Andante) that makes this work unique among Mozart's keyboard sonatas. (It was composed in the aftermath of his mother's sudden passing.) Schiff's long appoggiaturas in the opening theme typify his "mellowed-out," slightly scaled-down approach (somewhat reminiscent of Lipatti and Gieseking). While I disagree with those

appoggiaturas, I applaud Schiff's choice of E flat rather than E natural in the trill at bar 39 of the Andante.

In K. 576, Schiff again gives a songful, inflected, and *gemütlich* account that sounds eminently stylish but perhaps slightly mutes the clarion ring that gives this sonata its nickname, *Trumpeter*. It sounds a bit Romanticized alongside Gieseking's colder, jewel-like 1944 account (recently issued by Discocorp, IGI 272) or Perahia's very similar interpretation (he has performed the work often, but has not yet recorded it).

Most, but not all, repeats are taken, and the pressing is first-rate. H.G.

PFITZNER: Songs (17).

Dietrich Fischer-Dieskau, baritone; Harmut Höll, piano. [F. Axel Mehrle, Dieter Sinn, and Diether G. Warneck, prod.] PANTHEON ORFEO S 36 821 (digital recording) [price at dealer's option] (distributed by Pantheon Music International, Inc., 211 E. 43rd St., New York, N.Y. 10017).

Ist der Himmel darum in Lenz so blau, Op. 2, No. 2. Es glänzt so schön die sinkende Sonne, Op. 4, No. 1. Wasserfahrt, Op. 6, No. 6. Sehnsucht, Op. 10, No. 1; Müde, Op. 10, No. 2. Ich und du, Op. 11, No. 1; Ich aber weiss, Op. 11, No. 2. Leierkastenmann, Op. 15, No. 1. An den Mond, Op. 18. Zwei Lieder, Op. 19: No. 1, Stimme der Sehnsucht; No. 2, Michaelskirchplatz. Tragische Geschichte, Op. 22, No. 2; Schön Suschen, Op. 22, No. 3; Gegenliebe, Op. 22, No. 4. Abendrot, Op. 24, No. 4. Gebet, Op. 26, No. 1; Mailied, Op. 26, No. 5.

PFITZNER: Songs (15).

Robert Holl, bass-baritone; Konrad Richter, piano. (Jürgen E. Schmidt, prod.) PREISER SPR 3331, \$9.98 (distributed by German News Co., 220 E. 86th St., New York, N.Y. 10028).

Der Gärtner, Op. 9, No. 1; Im Herbst, Op. 9, No. 3. Zum Abschied meiner Tochter, Op. 10, No. 3. Die Nachtigallen, Op. 21, No. 2. Die stille Stadt, Op. 29, No. 4. Eingelegte Ruder, Op. 32, No. 3. Sechs Lieder, Op. 40: No. 1, Leuchtende Tage; No. 2, Wenn sich Liebes von dir lösen will; No. 3, Sehnsucht; No. 4, Herbstgefühl; No. 5, Wanderers Nachtlied; No. 6, Der Weckruf. Drei Sonette, Op. 41: No. 1, Auf die Morgenröte; No. 2, Der verspätete Wanderer; No. 3, Das Alter.

Hans Pfitzner's 107 published songs burn at a low temperature, a warm afterglow of the now extinct Romantic German Lieder tradition. Though few singers investigate them nowadays, they nonetheless constitute a distinguished contribution to the literature. For sheer consistency and musical quality, I would rank them higher than the more frequently programmed favorites by Richard Strauss, Pfitzner's exact contemporary. With a few notable exceptions, Strauss's songs rarely seemed to engage his full attention; in fact, most of them were rather idly tossed off while Strauss waited impatiently for the next opera libretto to materialize. Pfitzner, on the other hand, never touched a poem unless it stirred him to the marrow, and he was far more discerning in his choice of texts.

Not surprisingly, Dietrich Fischer-Dieskau has championed Pfitzner more than has any other singer of recent years; the Orfeo disc brings his present recorded total up to forty-two individual songs. I have no idea how many of the baritone's earlier performances remain in print, but this recital makes a fine introduction. Not one selection, most of them written during the composer's early years, from 1888 to 1916, betrays a careless note or a tepid response to the poetry, verses that for the most part reflect Pfitzner's slightly melancholy if not downright pessimistic view of life. In general, the style builds on late-Romantic harmonic language as received from Wagner, but Pfitzner is no slavish imitator. He masterfully evokes exactly the right mood and develops ideas with a voice of his own—the ferociously pounding piano figures that depict unfulfilled love in "Gegenliebe," for example, or the magical whole-tone descent of moonlit rays in Goethe's transfigured poem, "An den Mond." Perhaps the lack of really memorable melodic material keeps these songs out of the standard repertory, but attentive listeners should find much to engage the ear in the exquisitely fashioned piano parts and

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in the vocal line's unusual expressive twists. Fischer-Dieskau was in optimum condition when he recorded this disc in June 1982, and his firm, supple, imaginative interpretations seem just about ideal. Ditto for Harmut Höll's characterful piano accompaniments and the sensitively balanced recorded sound.

Robert Holl's second Pfitzner recital (the first is still available on Preiser SPR 3294) concentrates primarily on the last songs composed in 1931. By then Pfitzner was entering the final unhappy years of his life; his wife had died, his health was failing, and his income had been greatly reduced, although he managed to struggle through a marginal existence during the Nazi years until his death in 1949. These austere songs are unremittingly gloomy, yet the disciplined formal procedures and searchingly introspective tone create an impact not dissimilar to, or unworthy of, that of Brahms's *Vier ernste Gesänge*. Holl's buttery bass-baritone tends to spread a bit, and he lacks Fischer-Dieskau's ability to animate the texts, but his conscientious, somewhat foursquare performances have their own solid musical integrity.

The presentation of both records leaves much to be desired for American listeners. Orfeo offers only the original German texts, and Preiser's label copy contains just a note on the composer, also untranslated. Anyone who wishes to explore Pfitzner's Lieder at greater length should search out two additional items, both indispensable: a 1979 recital of the orchestral songs sung by Fischer-Dieskau (EMI Germany 065-45616), and a Preiser reissue (LV 208) featuring Gerhard Hüsch with the composer at the piano, recorded in 1938– 39. P.G.D.

PUCCINI: Tosca.

CAST:		
Floria Tosca	Renata Tebaldi (s)	
Shepherd	Peter Mark (boy s)	
Mario Cavaradossi	Richard Tucker (t)	
Spoletta	Alessio de Paolis (t)	
Scarpia	Leonard Warren (b)	
Cesare Angelotti	Clifford Harvuot (b)	
Sciarrone	George Cehanovsky (b)	
Jailer	Calvin Marsh (b)	
Sacristan	Fernando Corena (bs)	
Metropolitan Opera Chorus and Orchestra,		

Nicholas Nickleby: A Humble Souvenir of a Grandiose Spectacle Reviewed by Matthew Gurewitsch

NICHOLAS NICKLEBY. The novel! The blockbuster!! The TV miniseries!!! And now: the original television soundtrack. A Beckettian declension.

The Royal Shakespeare Company's two-part, eight-and-a-half-hour Dickens dramatization, one of the costliest and most ambitious projects in its history, was launched under the threat of bankruptcy. Despite a few cavils in the press, the show's appeal to the popular imagination did not fail, and triumph was snatched from the jaws of ruin. If report is to be credited, Nickleby held Londoners under a spell that was all but narcotic. Tears flowed, they say, at the closing night of the British run, and spectators who had suffered their hero's life and adventures as many as a dozen times on home ground vowed to see his virtue rewarded once more on the occasion of the New York premiere.

Exported to America, what had been designed as a first-class entertainment for all had to be offered exclusively to a moneyed elite. In London, the tickets were priced a whisper above prevailing standards, but at the box office customers could exercise some real choices: where to sit, how much to pay, whether to see both parts or only one, how to space their visits if attending both. In New York, there was just one decision to make: to go or not to go. The two parts were not offered separately, but as a marathon package. Whether you took the one-day or two-evening option, the experience would set you back one crisp C-note per happy customer. The promoters suggested bringing the whole family. They called it an investment, which for them is what it was.

From the artistic standpoint, it shouldn't matter that *Nickleby* was shaped, from the first and to a dangerous degree, by economic considerations. But when the convergence of talent, shrewdness, and maybe some dumb luck unleashes such a hurricane of media attention as the one that raged around the play (a designation that *Nickleby*'s reliance on straight narration made questionable), the hurricane takes on a life of its own, and tangled questions arise that have to do not with art alone, but with the interplay of art and commerce.

For a host of secondary businesses, Nickleby on Broadway was a windfall. During the brief intermissions in each of the show's two parts, street vendors administered to fatigued patrons with pricey soda pop and pretzels. Restaurant owners on the block of the Plymouth Theater devised strategies for feeding the hungry multitudes who flew in between the matinee and the evening installments on Wednesday, Saturday, and Sunday, thus adding three quick killings a week to business that was otherwise unaffected. Booksellers did a brisk trade in a classic it cost them not a penny to advertise. Not to mention the thriving Tshirt concession and the pins that proclaimed, "I've been NICKED!"

But all this was small change compared to the tremendous undertaking of transplanting *Nickleby* from the Thames to the Hudson. The American producers (Nelle Nugent and Elizabeth McCann in cooperation with the powerful James M. Nederlander and the Shubert Organization) would have the public believe that they did it all for love, to give New Yorkers, native and transient, a turn to witness at first hand a show that demands to be named among the most daring, and in its way extravagant, of the twentieth-century British stage. In letters to the *Times*, New York viewers thanked them for this unprecedented display of public spirit, and climbed on soapboxes to call for government support for a national American theater, which, they said, properly nurtured and tended, would in time bring forth a breed of practitioners of all the arts and crafts of the stage as brilliant in their own way as the RSC folk are in theirs.

Amid all the zeal and cant, there drifted a few shreds of hard financial data. They were instructive. The producers set the cost to show *Nickleby* in New York at a cool \$4 million. Not a penny to be made here, they said, even if the box office went clean every performance. They'd be lucky to break even. On the other hand, the total capacity of the house for the run was 55,000. At \$100 a head, any schoolchild could chalk up gross receipts of \$5½ million—with profits coming to \$1½ million. All of us should break so even on a fourmonth investment.

Not all the potential receipts were realized. Before the press opening, *Nickleby* tickets moved sluggishly, and even after the stunning reviews, Wednesday sales for a while remained soft enough for the theater to offer student admissions at "only" \$60 for that day. Maybe Nugent, McCann, Nederlander, and the Shuberts did just about break even in the end. Who can blame them for trying to do better? They are in business to make money. But the Santa Claus act they played for their prospective customers was a little hard to take.

And the show itself, at the eye of the hurricane? In Shakespeare's Danish tragedy, Hamlet speaks of a masterpiece of poetic theater that did not please the common crowd as "caviar to the general." *Nickleby* was more like popcorn for the elite—popcorn beyond Orville Redenbacher's wildest dreams, but popcorn all the same.

Even after the four-part miniseries in

Dimitri Mitropoulos, cond. MET 10 (mono; two discs, manual sequence) [recorded in performance, January 7, 1956]. Available with a contribution of \$125 to Metropolitan Opera Fund, P.O. Box 930, New York, N.Y. 10023.

"Qual occhio al mondo," from the Act I love duet, seems to have become our Cavaradossi test phrase. Carreras (DG 2707 121, November 1980) mangled it; Domingo (Angel DSBX 3919, March 1982) sang it very attractively; now we have Tucker really encompassing it, turning on the juice as the phrase rises over the break to build to a tingling climax, while retaining enough to produce an even grander tingle on "occhio all'amor soave." There are things that only a voice of this size can do in this music, and Tucker does more of them than Del Monaco

January (minimally but as skillfully as possible adapted to the limitations of the small screen), the Dickens scenario may not have imprinted itself permanently on the viewer's mind. It tells, of course, of young Nicholas Nickleby and his sister Kate, whose goodness shines like a candle in a naughty world. Their family's fortunes ruined, their father dead, their mother takes them from home in Devonshire to London. where she throws herself on the mercy of her flinty brother-in-law, Ralph Nickleby, who places his unwelcome nephew in the service of Squeers, the sadistic master of a country boarding school, and dangles his lovely niece as bait for scoundrelly creditors. Nicholas breaks free from the Squeers hellhole, in the process rescuing the pathetic halfwit Smike (henceforward his companion), and falls briefly into the benign hands of the wandering theatrical troupe of Mr. and Mrs. Crummles, who launch him as their new matinee idol. Before the story's many strands ravel into their concluding tight and pretty knot, the young Nicklebys have confounded evil and reaped rich rewards of friendship, wealth, and love. At the eleventh hour, a favored few cast off their baser natures and are gathered into the fellowship of the happy ending. The remaining dozens of characters (and it seems not one was too slight to have been overlooked in the adaptation) receive their just deserts: happiness to the fortunate and virtuous, tears to the virtuous but less fortunate, ruin and despair to the wicked.

For helpless addicts, the entire ninehour miniseries as seen on television is available on cassette, but an original soundtrack was in the cards, too, as a lesser souvenir. Without dialogue (for which there could be no market), a *Nickleby* album could hardly amount to much. The show did pretty well without music. Stephen Oliver's incidental pieces, songs, two grand finales, together with a little operatic pastiche in Italian, run a total of under thirtysix minutes. At that, the "Farewell Waltz" is heard in three versions: first, as a daintily sentimental instrumental number, then as and Corelli in their recordings. Yes, the sob pokes through occasionally, along with some other artificial overemphases. But the rest of the music, whether gentle or vigorous, rings freely and honestly.

Tebaldi is in fine shape too, with the voice sounding closer to the free ring of her first commercial Tosca than to the more labored stereo remake. Temperamentally, Tosca's uncomplicated devotion to her lover, her art, and God make this one of her most congenial roles (as long as she's not trying to "act," that is), and it's good to have a recording that catches her in such good voice (except at the very top, where she doesn't quite make it up to pitch) and presents her with such worthy collaborators.

one of two themes underlying the mechanical bustle of "The Milliners' Sewing Room," and finally as the aria and ensemble "Mrs. Grudden's Good-Bye," led by that paper-voiced relic of gentility, Rose Hill. The "Patriotic Song" that brought the first part of the stage production to so rousing a close (on television, it came at the end of Part Two) is meaningfully recycled as the second theme of the aforementioned sewing-room presto agitato, transforming inspirational pomp into the buzz of activity that sustains it. Prosperity and industry are heard to walk hand in hand in the instrumental sequence, just as the lyric of the song says they do.

The "Patriotic Song" stands out for another reason, too: It captures a brief but key moment from Lila Kaye's performance as Mrs. Crummles, the rollicking, defanged gorgon of the provincial stage. The full presence of the company is felt in the ensuing chorus, as it is (but less happily) in the "Journey to Portsmouth," a chanted setting of a not terribly remarkable passage of narrative adapted (not quoted!) from the novel's twenty-second chapter; and in the last-act finale, the lugubrious "Christmas Carol," which in fact is "God rest you, merry gentlemen" tricked out with some canonic folderol meant to make it monumental. On stage, these numbers were performed by the actors; for television (and thus the album) there was reinforcement. quite unnecessary, by the John McCarthy singers. (The television chorus for the "Wedding Anthem," ordinary Sunday-service stuff, is the underemployed St. Paul's Cathedral Choir.)

Most of the rest of the score is thematic material tied to places or people. The "Overture/London" section reflects the shallowness of city life in a fairground tune. "Home in Devonshire" starts nostalgically with a muted horn and continues with village-square harmonies and timbres that are very peaceful. (I suspect we hear more of it on the album than we did on television.) Dotheboys' Hall, the Squeers establishment, is evoked in nasty dissonance; the Warren is disappointing, but there's something luxurious about being able to pooh-pooh such work. This was his first season in the role, and we know from the RCA recording made several years later that even then he wasn't very comfortable in it. There just doesn't seem to be much in Scarpia's writing that his voice can really land solidly on, so that much of his singing has a tentative, quavery quality.

Except for De Paolis, whose shrill Spoletta I don't much care for, the supporting cast is strong, and Mitropoulos' conducting has a combination of unforced power and lyrical impulsion comparable to De Sabata's celebrated Angel recording (BL 3508). The sound is reasonable for the vintage. K.F.

triviality of Kate's first employer, Mr. Mantalini, in forced high spirits.

Of the characters given a musical signature, the knave and bully Sir Mulberry Hawk has the best: an insinuating, syncopated waltz, played with a leer by the saxophone, then elegantly by the violin. The prosperous, kindly Tweedledum and Tweedledee of London affairs, Ned and Charles Cheeryble, are exalted in an anthem for brass choir that is repeated far beyond its merits. The pampered flibbertigibbet Mrs. Wititterly lends her name to the gavotte that is the score's most intricately wrought composition, complete with a beginning, middle, and end. "At the Opera," meant as background, diminishes with greater prominence. The lines, a string of clichés, may for all I know be authentic; and the setting cleverly mimics and spoofs lyric conventions. But, out of context, the squawking of actors John Woodvine, Sharon Bowers, and Andrew Hawkins is hard to countenance. (They probably can't dance, either]

Nicholas Nickleby, in all of its RSC incarnations, offered a richly varied, superlatively executed spectacle that in the end was not profound, and whose afterglow faded in an instant. Oliver's score met the theatrical requirements to perfection, but is hardly penned for the millennia. If the cuts on the soundtrack are to be thought of in terms of musical forms at all, most are simple rondos whose variety comes mostly from scoring (just as in Ravel's Bolero). In the show, music had its privileged moments yet was by the nature of the enterprise a handmaiden to the larger pageant. The album shows fine craftsmanship, but does not elevate Oliver's contribution from its consitutionally humble status. HF

NICHOLAS NICKLEBY: Original television soundtrack recording.

Composed by Stephen Oliver: Royal Shakespeare Company production cast. orchestra, Harry Rabinowitz, cond. [Stephen Oliver and Keith Grant, prod.] DRG SBL 12583, \$9.98. Tape: SBLC 12583, \$9.98 (cassette).

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ROSSINI: Stabat mater.

Katia Ricciarelli and Lucia Valentini-Terrani, sopranos; Dalmacio Gonzalez, tenor; Ruggero Raimondi, bass; Philharmonia Chorus and Orchestra, Carlo Maria Giulini, cond. [Günther Breest and Hans Weber, prod.] DEUTSCHE GRAM-MOPHON 2532 046, \$12.98 (digital recording). Tape: 3302 046, \$12.98 (cassette).

Catherine Malfitano and Agnes Baltsa, sopranos; Robert Gambill. tenor; Gwynne Howell, bass; Maggio Musicale Fiorentino Chorus and Orchestra, Riccardo Muti, cond. [John Mordler, prod.] ANGEL DS 37901, \$12.98 (digital recording). Tape: 4XS 37901, \$9.98 (cassette).

If austerity be the badge of truth in sacred art, the theatrical flamboyance of Rossini's Stabat mater must arouse distrust, and all the more because its splendors are framed by solemnity. The introduction and finale (the "Stabat mater" and "Amen," Nos. 1 and 10), not to mention the central chorus and recitative ("Eja, mater," No. 5), conform to the bleak grandeur of the poem, and the valedictory movement bears the authenticating seal of fugal stricture. The rest flows with melody puritanical souls cannot reconcile with the serious business of theology. But what of them? All honor to the ethereal Palestrina, and Luther with his homespun hymnal, but why must devotion strip away all the color and romance of creation to contemplate the creator? Who can't see the spirituality in (not even behind) the sensuous surfaces of Raphael or the metaphoric ingenuity of Crashaw will not hear it in the lyricism and drama of Rossini (or the Verdi of the Requiem for that matter). Rossini deploys his expressive means within the grand design of the Stabat mater with perfect balance. If the musical inspiration moment to moment in the inner movements does not arise immediately from the particulars of the text, there is still in its variety and fullness nothing meretricious.

Both the Philharmonia Orchestra and Chorus under Carlo Maria Giulini and the Chorus and Orchestra of the Maggio Musicale Fiorentino under Riccardo Muti give detailed, spacious, orchestrally sumptuous readings of the score, but in spirit the two are very different. Giulini's performance proceeds with classical reserve. Muti's aspires to and achieves a freer sublimity.

By comparison with Muti's, Giulini's tempos are often slow. Numbers do not tell the whole story, but in four of the movements (Nos. 2, 4, 5, and 10), Muti's timings run longer than Giulini's, but only in one case ("Eja, mater," which Muti brings in at 5'55" as against Giulini's 4'49") does the difference come to as much as ten seconds. In the other six, Muti gains far more than he ever lost. In the glorious quartet "Sancta mater" (No. 6), he picks up over two minutes. He drives through the blazing "Inflammatus" (No. 8) in 4'14", against Giulini's 5'16". And in the a cappella "Quando corpus" (No. 9), Muti's soloists linger almost a minute less than Giulini's chorus. (On what authority these differential assignments are made is unclear, but the solo treatment, superbly executed by Muti's quartet, forms the far more convincing contrast with the choral finale.)

More important than tempo per se is metrical flexibility. Within a movement, Giulini's beat fluctuates slightly, if at all, while Muti broadens and hastens the time with great freedom. In the bass aria "Pro peccatis" (No. 4), Muti's ritard lends the repeat of "Vidit suum dulcem natum" a majesty and grandeur Giulini's playing does not attain. But Muti applies such variation with care. In the duet for two sopranos, "Quis est homo" (No. 3), parallel melismas unfold briskly in tempo until a final moment of descending scales, taken diminuendo and rallentando to most gracious effect. The conductors differ similarly in their phrasing and placement of accents. Giulini's periods are deliberately

Why *must* devotion strip away all the color and romance of creation?

plain and minimally inflected. The brass punctuation in the "Quis est homo" falls with a strangely blunt accuracy in his performance; Muti's defter, lighter treatment is more telling.

Muti has the further advantage of superior soloists. Catherine Malfitano's freshness and immediacy are a joy throughout, especially in the "Inflammatus," in which she rises intrepid against the chorus. Second soprano Agnes Baltsa's dusky sound makes an exciting foil to Malfitano's brightness, and their alert styles mesh beautifully in their duet. Baltsa on her own does handsomely by the cavatina "Fac ut portem" (No. 7), managing the sudden downward leaps smoothly. Once or twice, she bites off a terminal consonant too hard (as in "amorem"), but the damage is fleeting. Tenor Robert Gambill delivers the martial "Cujus animam" (No. 2) with equal parts of grace and brio, never punching out the precisely observed dotted rhythms. There is in his timbre the hint of baritonal darkness, and he encompasses the low passages of his part easily, but his instrument is also free and open in the upper reaches, and his guick vibrato conveys engagement without ever shading over into throbbing. Gwynne Howell's lean, muscular bass anchors the fourpart harmonies strongly, and handles well in his solos.

Giulini's first soprano, Katia Ricciarelli, sings feelingly and with characteristically mellow but now frazzled sound, and her articulation of passage-work is becoming approximate. In the second-soprano part, Lucia Valentini-Terrani performs honorably, though her low notes seem interpolated by another voice. Nor does the dreary pace Giulini sets in the cavatina help her show to best advantage. Though tenor Dalmacio Gonzalez is not so comfortable with the vaulting cadenza of the "Cujus animam" as Gambill in the Muti recording (Gonzalez' climactic D flat is courageous but not lovely), he gives a stirring account of his music, particularly in leading off the "Sancta mater" quartet. Bass Ruggero Raimondi's loftiness of phrase and manner makes its mark even in the heights, where he must reach, and in the depths, where he is rough.

The Maggio Musicale Chorus sings as clearly as the reverberant environment of the Palazzo Vecchio will allow, with softly sculpted phrasing and alert attack. Curiously, the Philharmonia Chorus goes in for a far more elaborate presentation. In " E_{ja} , mater" (the only movement over which Muti lingers significantly longer than Giulini), the Philharmonia basses affect a thrusting marcato without correspondence in the Maggio Musicale performance; and in the "In amando Christum Deum" passage-the dollop of honey amid the gall of the movement's asceticism-the Philharmonia Chorus' scalloped phrases smack of rococo. The Maggio Musicale's simplicity is far more affecting. In the orchestras, the relative positions are reversed, but within a narrower range, with Giulini's Philharmonia more spartan, Muti's Maggio Musicale more sculpted and incisive, though never mannered.

Both performances were recorded in churchlike acoustics that the engineers must have thought in keeping with the sacred character of the music. Such "atmosphere" in general flatters the singers, but there are patches on both albums where it is paid for in lost orchestral transparency and detail. M.G.

SCARLATTI, D. (arr.): Sonatas for Keyboard (5)—See Bach.

SCHUBERT: Lazarus, D. 689*; Salve Regina, in A, D. 676†.

Edith Mathis, soprano*†; Cornelia Wulkopf, mezzo-soprano*; Hanna Schwarz, alto*; Werner Hollweg and Horst Laubenthal, tenors*; Hermann Prey, baritone*; South German Radio Chorus*, Stuttgart Radio Symphony Orchestra*†, Gabriel Chmura, cond.*†. PRO ARTE 2PAD 203, \$19.96 (digital recording; two discs, manual sequence). Tape: 2PCD 203, \$19.96 (two cassettes).

Now that Schubert's only oratorio, *Lazarus* (1820), has been "discovered" (though available in the old Breitkopf edition for almost a hundred years!) and made known to the public by Erato (STU 71442, May 1982), it is to be expected that competitors will bestir themselves. Here is the first rival, a performance superior in every way to the very good "first" one. As noted in

my earlier review, this magnificent masterpiece, though unfinished, has enough splendid music to fill almost four sides, and happily, no attempt has ever been made to complete the torso. Once again, I'm deeply impressed by Schubert's dramatic skill, curiously missing in his operas, and by the glow and flow of the music. No one else active in 1820 could compose such a truly dramatic musical fabric in which the orchestra is an integral part of the proceedings, never given a subordinate role. Everything is here that we are wont to ascribe to the innovations of Weber (the deep sonorities in Freischütz) or to Wagner (the diaphanous whispers in the highest regions in Lohengrin). There are no real "numbers," because the work is largely through-composed, and Schubert moves with freedom and naturalness in and out of aria, arioso, and accompanied recitative. The melodic invention is inexhaustible, the large orchestra brilliant and full of color. Note especially the beautiful writing for woodwinds and horns; those little clarinet solos really get to you.

Pro Arte's performance is worthy of the great work. Edith Mathis (Martha) and, presumably, Werner Hollweg (Lazarus) emerge in full artistic cry. (Though the sleeve does not connect them to their roles, I recognize Mathis, and Hermann Prey as Simon.) Mathis' handling of the often high tessitura is like playing on a glockenspiel;

she is ineffable in quiet passages, but her outbursts are equally impressive and always under control. Tenor Hollweg has a wide vocal and expressive range, from lyric to Heldentenor; he phrases intelligently and has a fine sense of timing and pace. Prey, well-known as a Lieder singer, proves just as effective in dramatic music. The lesser roles are all well served. Conductor Gabriel Chmura is new to me. To judge from his picture, he is young, but he conducts with the aplomb of a veteran, intimately at home with the orchestra and the theater. Always in full command, he never permits the slightest stylistic faux pas, has a secure feeling for tempo and its necessary alterations, and knows how to utilize pauses for dramatic ends. I particularly like the attention he gives those orphans of the orchestra. the violas. The playing is first-class, pliable, precise, and warm. In a word, cheers!

This most engaging performance is presented in a shoddy package (made in this country) that does not reach even the minimal requirements a purchaser would expect. The two discs are squeezed into a standard one-record jacket that bursts the first time one attempts to put them back. Though the oratorio is sung in German, the original text is not given—only an English translation printed in microscopic type on a flimsy sheet. The singers' names and pictures appear on the sleeve but, as men-

tioned, remain unconnected to their respective roles; no biographical sketches are given. To further bedevil matters, the portions sung on each side are marked on the label in German, so that the listener cannot find them in the English text. A brief "essay" on Lazarus proffers such analytical/historical gems as this: "[Lazarus'] rudimentary steps toward leitmotif technique make it unique: a milestone in music history." Ever hear of Méhul, or Cherubini, or Spohr? Wagner did not know Lazarus, but he certainly knew Cherubini's operas-as did Schubert. And what about Weber's sensitive description of the leitmotifs in Spohr's Faust ("like a red thread they are woven through the whole work''), four years before Lazarus' "unique historical milestone." The Minneapolis shop of Pro Arte had better repackage this fine property into a small album and, like Erato, engage someone who can do a proper job of guiding the public. P.H.L.

SCHUBERT: Sonata for Piano, in B flat, D.960—See page 70.

SCHUMANN: Symphony No. 3, in E flat, Op. 97 (*Rhenish*); Manfred Overture, Op. 115.

Los Angeles Philharmonic Orchestra, Carlo Maria Giulini, cond. [Günther Breest and Hans Weber, prod.] DEUTSCHE GRAMMOPHON 2532 040, \$12.98 (digital recording). Tape: 3302



CLASSICAL Reviews

040, \$12.98 (cassette).

Schumann's *Rhenish* Symphony was one of the first works Carlo Maria Giulini recorded, so it's good to have his latest thoughts on the subject—particularly given results as fine as these. Recent excellent accounts of the Third by James Levine (RCA ARL 3-3907, October 1981) and Wolfgang Sawallisch (Arabesque 8102-3, July 1982) are available only in three-disc sets of the composer's four symphonies. No such consideration applies here, for Giulini seems never to have performed any other Schumann symphony. Predictably, Giulini eschews the propulsiveness of Levine and Sawallisch in the opening movement, giving a warm, songful, yet surging account that achieves a feeling of spaciousness and majesty without loss of momentum. He takes the same approach in the Scherzo, appropriately moderately paced. The intermezzo is simple and touching. The somber fourth movement is brisker than usual, but, of course, the heading *feierlich* (solemín) is not a tempo marking at all, and Giulini captures the mood perfectly. The finale's opening, à la Toscanini, is a bit more dolce than neces-

H.G.'s Schubert: Critic as Artist and — Dare One Say It? — Pedagogue

Reviewed by R.D. Darrell

POPULAR WISDOM HOLDS, with Shaw, that "He who can, does. He who cannot, teaches." And even many cognoscenti probably share James Russell Lowell's certainty that "Nature fits all her children with something to do:/He who would write and can't write can surely review." There is some truth here, of course, but as a not disinterested reviewer myself. I prefer to think that my colleagues and I are not so much frustrated as discreet; most of us indeed once endeavored to compose and perform but wisely decided that our true métier lay elsewhere, yet close.

In any case, there always are exemplary exceptions: Berlioz and Schumann; more recently, Virgil Thomson and Charles Rosen. And in the recording field, there are at least two familiar names notable for both performance and commentary of genuine distinction: harpsichordist Igor Kipnis and pianist Harris Goldsmith.

By chance and because of my preoccupation with recorded tapes, I've missed hearing any of my HF colleague's earlier recordings, so I've been extremely curious to hear at first hand how well he maintains the critical standards he applies so consistently to other pianists. But I might have known what to expect-if not from the analytical lucidity evident in Goldsmith's own liner notes for this release, then from the very qualities reviewer H.G. has most admired in D. 960 interpretations by others: Michèle Boegner (Musical Heritage MHS 1042), "crystalline . . . intelligently organized''; Gabriel Chodos (Orion ORS 75179), "elaborately pointed detail . . . yet a pervasive directness''; and Clifford Curzon (London CS 6801), "mobile and poignantly sustained."

Like most of the pianistic younger generation, Goldsmith eschews the flam-



Goldsmith: high fidelity to the (s)core

boyant grand manner of older virtuosos not excluding the supreme Schubertian, Schnabel—avoiding their rhetorical excesses even at the occasional cost of their dramatic power. Like Richard Goode's B flat (HF, May 1982), Goldsmith's is essentially a *classical*/Romantic reading, scrupulously detailed and proportioned, yet by no means lacking in radiant warmth and infectious zest. It also shares the technological excellence of real-time processing on superchrome tape and the matchless production/engineering skills of Max Wilcox and John Kilgore.

Yet these recordings differ markedly, not only in the pianism and personality of the artists, but also in the tonal qualities of their instruments: Goldsmith plays a slightly brighter- and sweeter-toned American Steinway, Goode, a somewhat fuller-, richer-toned Hamburg Steinway. Goode is just a bit the more commanding concert virtuoso, while Goldsmith seems to aim at sary, but that passes quickly; Giulini imparts an infectious lilt to the movement, songful again, yet dancelike too. His treatment of the superb coda harks back to the first movement and rounds off the symphony beautifully.

Textual revisions appear to be confined mainly to doublings of some horn parts and emendations in the timpani writing. Those horns, incidentally, are absolutely spectacular, with many of their passages given soloistic prominence. In fact, the Los Angeles Philharmonic as a whole gives one of its very finest performances on

more intimate personal communication. His consistently crystal-clear articulation (which often makes this sound more like a digital than an analog recording) and his high fidelity to the score (which, if lost, could easily be reconstructed on the basis of this performance) are the hallmarks of a fastidious craftsman as well as of a genuine . . . well, "pedagogue" is perhaps too pejorative a term nowadays, but it shouldn't be. Let's be fancy and suggest instead a stimulatingly heuristic preceptor, or even exegete!

The very virtues of attempting such a paradigm performance inevitably entail certain handicaps: at times, a sense of considerable nervous tension, even excessive carefulness; more rarely, overinsistent italicization ("Be sure you don't miss this!"). But such reservations apply less to the sonata than to the "encore" impromptus and Allegretto, especially in contrast to Goode's more relaxed treatment. No matter, one can't hear any of Goldsmith's Schubert without experiencing the shock of recognition-perhaps for the first time-of the crucial significance not only of certain details (like the sonata's first-movement exposition repeat), but also of the composer's vaulting overall design.

Charter partisan of tape though I may be, it strikes me as ironic, if not unjust, that two such provocatively rewarding, arrestingly individual versions of a Schubert masterpiece should be available only in musicassette format. Now it's the turn of discophiles to howl, "Unfair!" Nevertheless, I can't help wondering whether any domestic or foreign disc processing can ever match the absolute background silence or glowing sonic luminosity of either the AAG or the Desmar tape.

SCHUBERT: Piano Works.

Harris Goldsmith, piano. [Max Wilcox, prod.] AAG A 014, \$14.98 (superchrome cassette) (available only by mail; add \$1.50 for shipping; AAG Music. Inc., 200 Varick St., New York, N.Y. 10014).

Sonata in B flat, D. 960; Allegretto in C minor, D. 915; Impromptus: in G flat, D. 899, No. 3; in A flat, D. 935, No. 2.

COMPARISON—D. 960, 915. 935/2: Goode Desmar SRB 6002
records to date.

The great Manfred becomes a fullfledged Romantic tone poem under Giulini's baton. After the accelerando at the end of the introduction, the new tempo is held back ever so slightly. In general, Giulini's approach is very free, with abrupt and drastic changes of tempo. While it's tempting to liken his conception to those of Bernstein and Furtwängler, their recordings adhere more to a basic tempo than does Giulini's. Actually, the first conductor 1 thought of who might have taken similar liberties was Stokowski, whom Giulini is known to have admired. (See Oliver Daniel's recent biography of the late maestro) Giulini reaches the heart of this score as have few others, in a reading of absolute conviction, steeped in the spirit of Romanticism-both Byronic and Schumannesque. The entire disc represents profound and inspired music-making at its best. J.C.

SOR: Guitar Works (2)-See Bach.

TCHAIKOVSKY: Symphony No. 2, in C minor, Op. 17 (*Little Russian*) (orig. version).

London Symphony Orchestra, Geoffrey Simon, cond. [Brian Couzens, prod.] CHANDOS ABRD 1071, \$13.98 (digital recording) (distributed by Harmonia Mundi U.S.A., 2351 Westwood Blvd., Los Angeles, Calif. 90064).

Geoffrey Simon raised some evebrows with his earlier London Symphony anthology of unknown Tchaikovsky (Chandos DBRD 2003, June 1982), especially the 1869 first version of Romeo and Juliet. This account of the Second Symphony in its original 1872 version, previously unrecorded, will probably prove less startling. For unlike the 1880 final version of the fantasy overture, the revised Little Russian is only moderately hackneyed. And since judicious cuts are fairly common even in performances of the later version (e.g., in Giulini's deleted Angel recording, through which I came to know the work), it is harder to pinpoint all the differences of content and instrumentation here than it is in Romeo-until one consults the 1880 printed score.

As Edward Johnson mentions in his thoroughgoing notes, the first movement underwent the most substantial alteration, the other three differing only slightly in detail. In essence, Tchaikovsky retained his original introductory idea (including that opening chord, à la Beethoven's Seventh) but rewrote the body of his sonata form. What we know as the first theme nowhere occurs in the 1872 text; in its place appears an earlier, more serious (read "diffuse." even "longwinded") form of what later became the second theme. In the development section, it is interwoven with strains of the introduction (shades of Beethoven's *Pathétique* Sonata), and, as in the 1880 version (and, again, the Beethoven sonata), the introductory material returns at the end of the movement.

Understandably, the Chandos liner mentions that several Tchaikovskiansfriend Nicholas Kashkin, pupil Sergei Taneyev, and biographer David Brownprefer the earlier work. To my ears, it has all the familiar sequential clichés of later Tchaikovsky, with few of the structural saving graces. Even allowing for the later version's advantage of greater familiarity, 1 second Tchaikovsky's excellent judgment in rejecting this "first draft"; his later effort vielded a first movement of significantly greater cohesion and lucidity. One suspects that the intervening years had given him greater perspective on himself and his music; in the beginning, he was understandably striving for a big utterance, but by 1880—with the mighty Fourth Symphony already behind him-he could afford to relax a bit, with profit.

Of course, in a recording such as this, one pays greater attention to the music itself than to the performance. But, certainly, Simon draws vital playing from the London Symphony, and Chandos contributes a spacious, clean ambience, with wide dynamic range and good instrumental definition. An unusually engaging document. H.G.





CLASSICAL Reviews Recitals and Miscellany

NICHOLAS NICKLEBY: Original television soundtrack—See page 66.

RANSOM WILSON: Flute Recital.

Ransom Wilson, flute; Tom Raney. percussion*; strings[†]. [Patti Laursen, prod.] ANGEL DS 37340, \$12.98 (digital recording). Tape: 4XS 37340, \$9.98 (cassette).

BECKER: Stonehenge.* DEBUSSY: Syrinx. GLASS: Façades.† JOLIVET: Ascèse No. 1. REICH: Vermont Counterpoint.

At first glance, these works seem uncomfortably thrown together. What, after all, do ruminative French solo pieces by Debussy and Jolivet have to do with American minimalist ensemble scores by Reich, Glass, and Becker? Actually, this turns out to be a rather nice—and certainly unusual—twentieth-century flute recital, boasting a bit of the familiar amid a healthy serving of the new. The solo works, interposed between the minimalist essays, serve almost as intermezzos, setting apart the major offerings and infusing the proceedings with a touch of chromaticism.

Not that there is any danger that the minimal scores would run together in the mind of the listener. They are cut of different fabrics—all flute timbres in the Reich, flutes and strings in the Glass, and flute, percussion, and synthesizer in the Becker—and diverge widely in temperament.

Steve Reich's Vermont Counterpoint, composed for Wilson in 1982, is the most abstract of the three. Timbres aside, it has much in common with Reich's earlier (pre-Octet and -Tehillim) music. Its progression stems from a slowly unfolding series of lines, a texture in which simple figures are introduced, and then elongated or otherwise altered upon the introduction of more voices. Here, the impression of very gradual change is illusory: The entire work runs less than nine minutes, and, deliberate as the movement seems at the start, it is no time at all before the textures become quite dense and-within a mechanistic overall rhythm-the internal rhythms, rather complex. Eventually, even the larger rhythm evolves into something smoother-for a while, anyway; it returns at the end, as in old-style tripartite form. In his melodies, too, Reich edges toward the traditional, implanting long lines here and there, and even a bird song in one of the piccolo parts

An almost narcissistic exhibition of multitracking, *Vermont Counterpoint* is scored in eleven parts—piccolos, flutes, and alto flutes, three each, backing two "solo" lines that involve all three instruments. Wilson, the notes say, recorded the

ensemble and one of the solo lines first, then added the other solo part "live"—at least at the work's premiere, in Brooklyn. But, of course, the explanation sounds a little silly in its LP application, since the second line was played live against the prerecorded first, the third against the first two, etc., ultimately yielding eleven tape tracks that, so far as the home listener is concerned, form a recorded unity.

Frank Becker's Stonehenge is more overtly picturesque, representing the passage of the sun from dawn to dusk over the prehistoric British landmark. Apparently, this work takes on another dimension when seen on stage: The setup requires four speakers, arranged to suggest Stonehenge, within which the flutist and percussionist symbolize "the observer witnessing the passage of the sun through the Stonehenge megaliths at the summer solstice." Even so, on record the picture is vivid: At the start, the synthesized tape provides predawn wind effects and drones, which give way to an arpeggio figure doubled by the live players. This evolves à la Reich, building in complexity, but with a far more colorful and attractive combination of timbres. Ultimately, an abrupt switch to a rapid tempo marks the work's climax-noonwhence begins a reversion to the opening material, winds and all. There is more giveand-take between the various instrumental parts here than in many minimalist pieces; although the three voices are undoubtedly equal on paper, one senses a shifting of emphasis among flute, tape, and percussion at different points.

Philip Glass's Façades is a lovely, elegiac piece that previously appeared as part of the composer's Glassworks (CBS FM 37265, July 1982), where it is heard to much better effect. Wilson's version drags: Whereas the Glass Ensemble reading takes just over seven minutes, Wilson's lasts nine and a half, losing both the sharpness of accentuation within the accompanying string parts and much of the sense of motion conveyed in the original. I don't really mind the transcription of the solo part for flute (with second flute, also played by Wilson, toward the end), but the Glass Ensemble's soprano sax gives the line a firmer shape than does Wilson's limpid flute.

Debussy's Syrinx and the first of Jolivet's five Ascèses are beautifully played and nicely shaped. Syrinx, omnipresent as it is on flute discs, can grow tiresome, but Wilson's version is more animated than many. The Jolivet, less catchy and hence less famous, offers welcome variety; here it is performed with sharp-edged exuberance. A.K.

CLASSICAL The Tape Deck

Critiques of new cassette and open-reel releases by R.D. Darrell

Catching Up

So many and so varied are tape releases nowadays that it becomes ever harder to keep up, let alone organize them into familial groups for commentary. Hence, I'll curb my taxonomic urges for a couple of months and fall back on quick surveys of active producers' most promising offerings (cassettes unless noted otherwise).

• AAG (real-time/superchrome, \$14.98 each). Brand-new-in addition to Harris Goldsmith's Schubert, discussed elsewhere in this issue-is pianist David Burge's Janus-like program of music by William Albright (A 008): three delectable Dream Rags, and five more "serious" Chromatic Dances, all in spectacularly realistic sonics. Invaluably resurrected are two 1976 programs: William Hamilton's superb "Bohemian French Horn" (A 006; originally Sonar quadriphonic, August 1976 "Tape Deck"), works by Haydn, Punto, and Reicha, with the Music Company strings; and conductor James G. Chapman's fascinating "Vermont Harmony" (A 002; originally Philo), early Americana by Ingalls and Moors, enthusiastically sung by the University of Vermont Choral Union, unaccompanied. (Add \$1.50 for shipping; by mail only, from AAG Music, Inc., 200 Varick St., New York; N.Y. 10014.)

• Angel (\$9.98 each). Everyone to whom Bruckner's symphonic greatness was first revealed by Eugen Jochum will find Jochum's new Dresden series not only more authoritative than ever, but more impressive sonically. Witness his third and finest Ninth, apparently the first recording to avoid a side break in the Scherzo (4XS 37700). Neville Marriner fans will particularly relish the gleaming transparency of the first digitally recorded set of Mozart overtures (nine) in invigorating performances by the St. Martin's Academy (4XS 37879). And two Britten repertory gaps are filled at last by Uri Segal and the Bournemouth Symphony with spirited digital versions of the Gloriana Suite and Norman del Mar's arrangement of the Prince of the Pagodas Prelude and Dances (4XS 37882). Here, however, perfectionist audiophiles may well want the EMI chrome taping (TCC ASD 4073, \$11.50, via International Book and Record Distributors, 40-11 24th St., Long Island City, N.Y. 11101). It has the advantages of printed notes and excellent (rather than only good) Dolby B noise reduction, as well as at least marginally

sharper-focused sonics.

• Arabesque (\$7.98 each). "Bach Meets Chopin" (9132-2, two cassettes) documents the stunt concerts in which pianist João Carlos Martins and Arthur Lima interleave twenty-four preludes of each composer. This provocative if musically pointless endeavor, predoomed for me by the intolerable mannerisms of Lima's earlier, digitally recorded Chopin preludes 7506, \$9.98), is not saved by Martins' electrifyingly virtuosic albeit heavily Romanticized Bach playing. But I find both unexpected personal delight and unique historical value in Paul O'Dette's inspired resurrections-straight from the pages of Gustave Reese's Music in the Renaissance-of Venetian lute pioneers Joan Ambrosio Dalza, Vincenzo Capirola, and Francesco Spinacino (9131).

• Argo. Marriner's Academy again, here with an anthology (KZRC 945, \$10.98) of British favorites first issued in other contexts: Butterworth's Green Willow, Delius' Cuckoo, Elgar's string serenade, Vaughan Williams' Tallis Fantasia, and—most captivating of all—Warlock's spicy Capriol Suite.

• Barclay-Crocker. Shifting gears from cassettes to open reels, I salute the specialist firm's novel audiophile demo tape: a "unidirectional" reel edition of Seiji Ozawa's 1980 Boston recording of Stravinsky's Sacre (Philips/B-C H 9500 781, \$11.95). One-way processing permits higher modulation levels with no risk of reverse-channel spillover. And while I retain reservations about Ozawa's reading, there's no denying that the superb orchestral playing and ultravivid recording are more spectacularly reproduced than ever before. (Barclay-Crocker, 11 Broadway, New York, N.Y. 10004.)

 CBS Masterworks (price at dealer's option). Two of the last musicassettes CBS released before it decreed all-chromium tapings with printed notes are nonetheless rewarding-especially a timely program that enables Mozart's bête noire, Antonio Salieri, to speak for himself. In Zoltán Peskó's stolidly routine performances with the London Symphony, Salieri's Venetian and Name Day Sinfonias seem merely run-of-the-mill late-eighteenth-century utilitarian fare; but the extended Folia Variations are arrestingly colorful-whether the scoring felicities be Salieri's own or those of editor Pietro Spada (MT 37229). Franck's more familiar piano quintet is none too well represented nowadays, and Jorge Bolet's version with the Juilliard Quartet (apparently the only available taping) would be unusual anyway for its intense fervency and rich sonic warmth —characteristics less well suited to Wolf's *Italian Serenade*, with which the Juilliard fills out the second side (MT 36701).

• Deutsche Grammophon (digital/ chrome, \$12.98 each). A ripely mellowed octogenarian, Rudolf Serkin returns to the scene of earlier recording triumphs in the first of a new Mozart piano concerto series with Claudio Abbado and the London Symphony: infectiously zestful, superbly recorded versions of Nos. 12 and 20, K. 414 and 466 (3302 053). And even Herbert von Karajan, at seventy-five, tempers his usual vehemence at times-as he does in what may well be the most enthralling entry yet in his acclaimed Bruckner symphony series: the relatively neglected, here persuasively eloquent Second, in the most luminous sonics imaginable (3302 063). But another cult-hero conductor. Carlo Maria Giulini, leading his Los Angeles Philharmonic, will shock some Schumanniacs with a Rhenish Symphony and Manfred Overture that seem sluggishly labored as well as inexplicably thick for digitalism (3302 040). A more pleasant surprise awaits Berliozians in a two-for-one program that not only runs to double-play length, but also features two of today's most bewitching sopranos: Jessye Norman in the scena Cléopâtre and Kiri Te Kanawa in the betterknown song cycle Nuits d'Été, both with Daniel Barenboim leading the Orchestre de Paris (3302 047).

• Eurodisc. Still too little-known in this country, David Geringas is one of the most poetic of present-day European cellists. His chamber-scaled versions, with the RIAS Sinfonietta under Leopold Hager, of familiar Boccherini, Haydn, and Vivaldi concertos (57 094, \$9.98) contrast refreshingly with the usual more overtly bravura "concert" treatments of most recording virtuosos.

• Hungaroton. At the opposite extreme from Lima's pretentiously mannered Chopin preludes are the bright, light, straightforward versions by gifted young Dezsö Ránki (MK 12316, \$9.98; Op. 28 plus the two noncanonic preludes). On a larger scale is the Prestige Box of Corelli Op. 6 Concerti grossi (MK 12376/8, three cassettes, \$29.94), with concertmaster János Rolla leading the Liszt Chamber Orchestra. This modern-instrument version (except for harpsichord and organ continuo parts), though occasionally a bit overenthusiastic, is always deft and spirited. **HF**

BACKBEAT

Sonny Rollins: "I'm Still Reaching"

...and still surprising his audiences. by Crispin Cioe



"I'm not playing every influence I hear. I'm really just trying to express myself."

APART FROM THE MORE obvious reasons-a unique tonal concept on tenor saxophone, truly awesome yet highly personalized technical prowess, three legendary sabbaticals from public performance and recording-Sonny Rollins has stayed his thirtyyear course as a living jazz great by dint of his unparalleled ability to make music that sounds excitingly and freshly invented. And since that's what great jazz improvisation has always been about, it's no wonder that he continues to top the polls year after year, his regenerative powers bringing in young audiences while still surprising the old. But his impact extends beyond his work on saxophone; like John Coltrane and Miles Davis, he has over the years changed and expanded his musical concept in ways that have directly influenced the artistic community around him.

Rollins grew up in New York City in a musical family. He started on alto sax as a child, switched to tenor in high school, and upon graduation in the late '40s jumped right into the thick of New York's teeming bebop scene. As a young man he worked with most of the established masters-Davis, Coltrane, Thelonious Monk, Clifford Brown-and soon developed his own burly tone and sophisticated rhythmic personality. From the mid-'50s on, he led his own small groups, and it was in this role that he came to international renown. On such albums as "Worktime" and "A Night at the Village Vanguard," which he recorded in minimalist splendor with just bass and drums, he spearheaded the so-called hardbop movement with his advanced playing techniques and now-aggressive, nowtender approach that darted at will among steamy bop runs, clever musical quotations from standards or even nursery rhymes, and jazzy calypsos like his own St. Thomas.

Rollins' sabbaticals—the first one began in the late '50s and the last ended in '72—included trips to India and Japan to study philosophy and yoga, and a legendary

stint in the late '50s when he practiced his horn daily, sitting under New York's Williamsburg Bridge. The albums he recorded in the '60s concentrated on avant-garde concepts and open-ended compositional forms. It was in the '70s, when his current association with Fantasy records began, that his eclecticism started to emerge. Indeed, he must have surprised many of his fans by adding, among other things, modern rhythm & blues grooves to his alreadyfertile field of playing and compositional styles. For example, on his straight-ahead modal jazz tune McGhee (from his most recent disc, "Reel Life"), he interrupts the middle of a blistering sixteenth-note solo run by suddenly sliding up to a perfectly in-tune high G, two-and-a-half octaves above middle C. It's the kind of note you would expect r&b-rock sax men like Jr. Walker or King Curtis to reach for.

The other side of Rollins' music is, of course, the intensity and scope of his live performances. I once saw him open a gig in Boston by walking around the club playing an unaccompanied, swirling, cadenzafilled solo, stopping to do a few bars for the amazed patrons at each table. Always in peak physical condition from his years of yoga exercises, Rollins is the epitome of the musician who projects vitality with each note.

I talked with Rollins recently, just before his tour of Japan. Concerns about new band members and rapidly diminishing rehearsal time were weighing heavily on his mind, but he was nonetheless a warm and thoughtful conversationalist. He and his wife/manager/coproducer Lucille live in the country a few hours north of Manhattan, where he "works and relaxes—that's what it's all about for me—work in a relaxing way." He has built a small studio on his property, mostly for practicing and composing.

Backbeat: Ever since 1981's "No Problem" you've been producing your own records. How did this come about? Do you like producing?

Rollins: Well, Lucille has been managing and booking me for a while. As we did more of the business ourselves and my career progressed, the opportunity to produce arose when Orrin Keepnews, my former producer at Fantasy, left to do other projects.

It has been a good experience for me to get involved in every single aspect of the album-making process. It provides me with more of a challenge. I'm a little bit more worn-out at the end, but then I'm always worn-out at the end of an album. Producing was a mountain that was there to be climbed, so I did it. And, although it's a remote possibility, if I ever wanted to produce other people, I would know something about it.

Backbeat: What was your basic production strategy on "Reel Life"?

Rollins: 1 wanted to do it as a "live" jazz album in the studio—1 think the only overdub was one guitar solo. I was very comfortable with the band [Bob Cranshaw on bass, Bobby Broom and Yoshiaki Masuo on guitars, Jack DeJohnette on drums] since we'd been working together live for some time. Jack had been playing particularly well for me; he was very inspiring. I knew the line-up would change after the album, what with other commitments and so forth, and I really wanted to make a statement of our work together. So the LP was a culmination of our experience.

Backbeat: What about the poem on the back of the album? ["I once saw a light, shining bright, deep brass and gold, both

I leave the mixing to Lucille—she has the right touch.

young and old, dark and light, gold and bright . . . and then it flickered back out of sight."]

Rollins: That came to me just prior to making the LP, when I was struggling to conceive it.

Backbeat: How did you decide on the material for "Reel Life"?

Rollins: I wrote all but two of the songs. *McGhee* is based on a line that Howard McGhee, the trumpet player, used to play when we worked together years ago. *Rosita's Best Friend* is one of my calypsos, and the title track is a little r&b kind of pocket. Masuo wrote *Sonny Side Up* for the album. *My Little Brown Book* is an old Billy Strayhorn number that John Coltrane recorded once with Duke Ellington on piano. and even further back, Herb Jeffries used to sing with Duke's band.

Backbeat: How do you handle mixing an album?

Rollins: I leave that to Lucille, because I get very uptight listening to myself in playback. You know, I'm always thinking, "Gee, I should have done this," or "I wish I'd done that instead." So I just let her do it. She has the common touch that's necessary for mixing; she hears things the way a lot of people would hear them, in terms of sounds, levels, and so on. I might have sat in a couple of times during this album, but as a rule I stay away.

Backbeat: One thing that has always fascinated me is your choice of cover material. You always seem to come up with interesting, often surprising tunes to play on. For instance, for "No Problem" you did *Here You Come Again*, Dolly Parton's first big pop hit.

Rollins: That one I always just liked a lot, from the minute I heard it on the radio. I think that we hear songs in their complete

form—melody, harmony, rhythm, lyrics—but of course, playing a horn, l guess I'm drawn to a melody line at first.

Backbeat: On that same album you covered a relatively obscure ballad called *Illusions*. How did you hit on that one?

Rollins: When I was growing up, the big thing was going to the movies on Saturday. *Illusions* is from one of my favorite old films, *A Foreign Affair*. Marlene Dietrich sang it. In fact the whole score of that film was great. The guy who wrote it, Friedrich Hollander. is one of my favorite composers. I used to play another one of his songs a long time ago, around the time when 1 first met and played with Miles. It is called *This Is the Moment*, from a Betty Grable film.

l heard a lot of great movie music when I was young, so it has always seemed natural to cover it.

Backbeat: You seem to genuinely relate to all kinds of pop music, from various eras and styles.

Rollins: Well, I have a high respect for any good music. I'm not an elitist who says ''I only play jazz,'' although I understand people who do feel that way. Music is something beyond what any human can really own. It's either good or bad—it's not a thing that belongs to any one group.

Backbeat: Are there any current pop groups that have caught your ear?

Rollins: You know the group Devo? I like them. They have a great posture; they've put a lot of thought into their sound and attitude.

Backbeat: J read in an interview that you were a fan of the great '30s and '40s r&b-film star Louis Jordan.

Rollins: Oh yes, definitely. I grew up in Harlem, and there was a cabaret/nightclub in my neighborhood called Baron's, adjacent to my grade school. Louis Jordan used to play there, and on the way to school I'd see these eight-by-ten glossies of him in the window with his King Zephyr alto sax. I really liked the look of that, and it stuck in my mind, always. I must've first seen those pictures when I was eight. A couple of years later, I had his early Decca sides around the house, like *Knock Me a Kiss* and *Five Guys Named Moe*. I loved his tone, his whole sound.

Actually, the first little bands I was involved in during high school were made up of me and my friends trying to play bebop. By that time, Jordan was really part of my roots. It was the early '40s, and Charlie Parker's first date as a leader, those Savoy sessions, had been released. That was also Miles Davis' debut—the sessions that included *Billie's Bounce*. Those sides had a big influence on us. My classmates in those bands included Jackie McLean, Arthur Taylor, Kenny Drew, and Andy Kirk, Jr.

Backbeat: What other influences come to mind?

Rollins: I must say that Coleman Hawkins



"Music is something beyond what any human can really own."

remains one of my main people, although I've learned from a lot of guys. But he was the first guy I got involved with listening to closely. As you know from his early solos on *Body and Soul* and *Sweet Lorraine*, he was the first sax player to put the instrument on the map, because he introduced so much harmonic development and movement to the music. His accomplishment was a tremendous challenge and something to strive for.

So I kind of went from the easy feeling of Jordan in the rhythm & blues pocket, which is still important to me, to playing more with chord changes and harmonies the aspects I heard in Coleman's playing. He really brought the tenor sax out front, though; those old sides where he does the fast tonguing—that's some wild stuff! And another thing I got from him was his energy, the real enthusiasm that he brought to his music, and which I hope I bring to mine. Looking back, I'd say I tried to emulate him in that department, for sure.

Backbeat: You played with Clifford Brown in the '50s. He's a trumpet player whose influence seems to grow every year, despite his tragic early death in 1956. **Rollins:** Yes, a lot of really fine, established players today still hold him up as an idol, like Freddie Hubbard and Donald Byrd. He had a beautiful lyricism and was a truly great all-around musician. He was a tremendous reader and played the piano wonderfully. But you know, I was so close to him that even talking about what he actually did is strange for me. He was a beautiful human being, very humble, and a nice guy. He affected me tremendously.

Backbeat: Your tone has grown and changed over the years. I occasionally hear you using some of that r&b-style raspiness that people like Jordan pioneered. And you seem to be using more high harmonics. Sometimes on those high notes I think I even hear a nod toward players like Jr. Walker.

Rollins: I love Jr. Walker's playing! When I first heard *Shotgun* in the mid-'60s, I was very impressed. There hadn't been anybody whose sound knocked me out like that in a long time. He's a good musician, period. Anything he does would be good.

But I first started using high harmonics back in the early '60s, on an album I did with Coleman Hawkins [''Sonny Meets Hawk!,'' available as a reissue on RCA]. In those days, I was mostly overblowing to get the high notes; today, I'm trying to utilize set fingerings for the extreme highs. It's a matter of prehearing the notes on the horn: Once you start to hear up there, you can go for the notes and hit 'em. I've been working on these things for a few years.

Backbeat: Has the experience of live performance changed for you in recent years?

(Continued on page 90)

Rollins on Record: A Selected Discography

FANTASY REISSUES:

- TWO-DISC COMPILATIONS Vintage Sessions. Prestige P 24096. Sessions from 1951-54, culled from various LPs with Thelonious Monk, Kenny
- Clarke, and others. Saxophone Colossus and More. Prestige P 24002; 1951-56.
- Taking Care of Business. Prestige P 24082; 1955-56.
- Sonny Rollins. Prestige P 24004; 1951-56. Freedom Sulte Plus. Milestone M 47007; 1957-58.

FANTASY REISSUES: RIVERSIDE/PRESTIGE SESSIONS

Fantasy, Inc., has been re-releasing Rollins' Riverside/Prestige catalog under the Original Jazz Classics umbrella. Released in their original form, these classic '50s sessions feature him as a leader of small combos playing extended improvisations. Following are listed with their original recording dates.

Sonny Rollins with the Modern Jazz Quartet. Original Jazz Classics OJC 011; 1953.

Jazz Classics. Prestige P 7433; 1954.

- Worktime. Original Jazz Classics OJC 007; 1955.
- Sonny Plays for Bird. Prestige P 7553; 1956.
- Tenor Madness. Prestige P 7657; 1956, with John Coltrane on title track.
- Three Giants. Prestige P 7821; 1956, with Clifford Brown and Max Roach.
- Sound of Sonny. Original Jazz Classics OJC 029; 1957.
- Blues for Tomorrow. Original Jazz Classics OJC 030; 1957.

OTHER NOTABLE RELEASES

Great Moments with Sonny Rollins. MCA 2-4127. A panoramic best-of compilation from Rollins' '60s Impulse years, this two-disc set includes the lovely, Oliver Nelson-arranged Alfie's Theme and East Broadway Run Down, with Freddie Hubbard, Elvin Jones, and Jimmy Garrison.

Sonny Rollins, Vol. 1: The Bridge; Vol. 2: Sonny Meets Hawk! RCA 741074/075. Vol. 1 contains Rollins' first recording after his hiatus under the Williamsburg Bridge; Vol. 2 was recorded with Coleman Hawkins.

- Clifford Brown/Max Roach—Pure Genius. Musician E 1-60026. Recently rereleased private session that includes Rollins in a famed Brown-led quintet.
- A Night at the Village Vanguard. Blue Note BST 81581; 1958.
- The Standard Sonny Rollins. RCA LSP 3355. An exceptional all-ballad studio LP recorded in 1965 with small combos.

CURRENT CATALOG

Next Album. Milestone M 9042; 1971. Horn Culture. Milestone M 9051; 1972. The Cutting Edge. Milestone M 9059;

1973. Nucleus. Milestone M 9064; 1974. The Way I Feel. Milestone M 9074; 1976. Easy Living. Milestone M 9080; 1977.

- Don't Stop the Carnival. Milestone M 55005; 1978. A live recording with Tony Williams and Donald Byrd.
- Don't Ask. Milestone M 9090; 1979

Love at First Sight. Milestone M 9098; 1980.

No Problem. Milestone M 9104; 1981. Reel Life. Milestone M 9108; 1982.

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Lee (left) represents the country side of rock; Clapton's best album in years finds him still firmly rooted in the blues.

Dueling Guitars: Eric Clapton and Albert Lee

Reviewed by Steven X. Rea

Eric Clapton: Money and Cigarettes Tom Dowd, producer Duck/Warner Bros. 23773-1 Albert Lee Rodney Crowell, producer Polydor PD 1-6358

Eric Clapton and Albert Lee are both English, they're both accomplished guitarists, and they both love American music. Clapton kicked off his career playing the blues, wrenching taut, repetitive three-chord progressions from his instrument, rocking those chords up for the Yardbirds and loping them out for John Mayall's Blues Breakers. Two decades later, he's still immersed in this singularly American music. Clapton has got the blues, or, more accurately, the blues have got Clapton.

Lee is more prone to the country side of rock. He has had some good teachers, notably Emmylou Harris and her cohorts Rodney Crowell and Hank DeVito. As part of Harris' Hot Band, he dished up swift, plucky musical flurries that twanged and spinned with authentic American rhythms. So authentic, in fact, that when Dave Edmunds—the most American Britisher to ever holler a Carl Perkins song—needed a guitarist to muster up some Yankee-style sounds, he turned to Lee. He has also played with Nick Lowe and with Clapton himself on his current LP and tour.

Of their two new albums, Clapton's comes as more of a surprise. "Money and Cigarettes," which features Lee on keyboards as well as guitars and guitarist Ry Cooder, is easily his best in years. It's as though "Slowhand" Clapton, long willing to record laid-back, bluesy albums that lull you into a mental fog, finally woke up. Though still firmly rooted in the blues (he leads off with a Sleepy John Estes cover), his music is vibrant and quick in a way that it hasn't been since his Derek and the Dominoes days.

The songs, too, display a newly found sense of purpose. There's nothing heavy about rockers like *Slow Down Linda* or *I've Got a Rock 'n' Roll Heart*, but there's nothing pretentious about them either. Clapton, who wrote half of the tunes, is reveling in the sheer exuberance of rock, in its power to make you feel—and feel good. "Money and Cigarettes" is blues as rock & roll, with the guitars of all three masters flying all over the place in tasteful, energetic fits.

Lee's collection of honed-down rockers, written by John Hiatt, Don Everly, Crowell, Lee, and *Queen of Hearts* DeVito, sounds like a dead cross between an Edmunds record and a Crowell record. His voice isn't imbued with a lot of character and style, but it's assured and earnest and strong. And his guitar work is simply astounding. Lee has the ability to cram more notes into a measure of music than one would think humanly possible, but his playing goes beyond technical prowess. He

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knows when less is more, as in his graceful embellishments to Everly's So Sad (to Watch Good Love Go Bad) and in the sublime rhythms he brings to DeVito's On the Boulevard. His covers of Hiatt's Pink Bedroom and Radio Girl are superb. Where Hiatt brings a screwball edginess to his songs, Lee flattens them out, making them pliable and pretty in a way that doesn't undermine their creator's sharp, acerbic intentions.

Crowell, who has proven himself to be as good a producer as he is a songwriter, has assembled a topflight band: Larry Londin on drums, Vince Gill on rhythm guitar, Emory Gordy on bass, and John Hobbs and Bill Payne on keyboards. There are no gimmicks, no tricks—just crisp, clean arrangements filled with subtlety and style. Indeed, there's nothing fancy going on in either of these two discs. The music Clapton and Lee make is disciplined and smart, but it's also heartfelt and alive.

Richard Barone, James Mastro: Nuts and Bolts

Richard Barone & James Mastro with Mitch Easter, producers Passport PB 6021 (Jem Records, 3619 Kennedy Rd., South Plainfield, N.J. 07080)

The songs on "Nuts and Bolts" have elements that put them just on the fringe of familiarity, just beyond pinning down. You pick out a certain tone in a vocal, a brief harmonica solo, some chords strummed on dual acoustic guitars, a mordant string arrangement, and it's as though Richard Barone and James Mastro were trying to reconstruct, from faulty memory, songs they heard on the radio in 1966. For Barone and Mastro, who are in their twenties, that's the music of their childhood, and the LP does have a feeling of pop innocence, which is very difficult to pull off without sounding out of touch or stodgily derivative.

"Nuts and Bolts" is divided into our side apiece for Barone's and Mastro's songs-their only joint songwriting effort is the sprightly opening track, I've Got a Secret. It was recorded in North Carolina while the two men were on a break from their Hoboken, N.J., based band the Bongos, whose "Drums Along the Hudson'' was one of last year's most invigorating debuts. (Mastro joined after the album's tracks were recorded.) Barone's songs on that LP revealed an unconventional approach to the conventions of pop, and that off-center inclination is even more evident on this more experimental collaboration. The lyrics of Flew a Falcon, Five Years Old, Lost like Me are at first hard to fathom-almost evasive-but Barone is such an insinuating singer, and the acousticbased arrangements (Barone, Mastro and coproducer Mitch Easter play all the instruments) are so filled with invention that the



Earth, Wind & Fire: With less time in the studio, the flab would melt away.

songs take hold and stay with you.

Using elusive sleight of hand, this duo comes at melodic pop-rock from new angles, capturing a style that is cleverly Beatles-ish, with folky undertones and touches that are unexpected. (A percussion break on My Sin has a clatter reminiscent of Santa's elves at work.) The tendency of Barone's tenor to get too creamy is counterbalanced by the tension in his lyrics; booming drums come in to give some crunch to the prettier tunes; Mastro's No One Has to Know is a gray, sexy ballad, while his Time Will Tell manages to suggest both the fluff of the Beach Boys and the spine of the Rolling Stones. It's the ability to keep juggling all these textures and influences, while applying them to well-made, catchy songs, that makes "Nuts and Bolts" such a captivating album.

MITCHELL COHEN

Berlin: Pleasure Victim Daniel R. van Patten, producer Geffen GHS 2036

Pleasure Victim, the title track of this seven-song EP, effectively encapsulates Berlin's theme of sex as double-edged. Where Soft Cell, another synthesizer-based group, dealt with *Tainted Love* like hungry voyeurs, Berlin doesn't feign distance from its subject. While bassist John Crawford's writing does explore the existential distance that gnaws at the romantic heart, this trio also captures the juicy joys that keep the wounded warriors coming back for more. Lead vocalist Terri Nunn drives this duality home as if it were a poisoned arrow from Cupid's bow: Maddeningly sexy, she fits into these songs like a velvet glove yet manages to emerge more madonna than object of desire.

"We touched," begins Pleasure Victim, "there was temperature. I'm not the same." Openly acknowledging the power of love, Berlin takes apart sexual role models without denying the confused passions that keep them so entrenched. Sex (I'm a .) is an alluringly thumping piece that builds a brick wall between the sexes that is nonetheless porous when the blood begins to flow. Nunn, responding to the repeated declaration of "1'm a man," assumes every variety of feminine role, from virgin to slut, from teaser to dream divine. On The Metro, a housebound loner imagines exotic trips that end just like love, and on Tell Me Why an affair ends with laughing, crying, and an unending silence.

The music of "Pleasure Victim" is snappy synthetic pop spiced with bursts of lead guitar and some substantial melodies. And while one suspects that these songs would benefit from fuller instrumentation, they stand as a compelling opening salvo from a group with great potential. The listener emerges dazed, as if from a first date,



Faithfull: suicide, synthesizers, choppy rhythms, cracked singing

and anxiously awaits the next encounter. JOHN MILWARD

Earth, Wind & Fire: Powerlight Maurice White, producer Columbia TC 38367

Earth, Wind & Fire is so consistently competent that sometimes you wish it would just cut loose and let the sparks fly naturally. "That's the Way of the World," from 1975, remains the state of the band's art, an album-long groove-a-thon of bumping basses and crackling horns that moved from snappy funk (*Shining Star*) to sweet falsetto soul (*Reasons*). EW&F has recorded a parcel of notable tracks since then, but for the most part, thé group has cloaked its punch in polished professionalism.

"Powerlight" is a seamless piece of studio craft that is faultless in its specifics but hollow at its core. Leader Maurice White is a master of the smooth groove, which can be compelling when applied to the right melody or leave one thinking about doing the laundry when used with lesser material. It takes more than a few listens for the LP's highlights to emerge, and while they're fine, they're not any more so than their precursors. Fall in Love with Me is a low-key Let's Groove, with meringue-light ensemble singing and a guitar solo that stings like Santana. Philip Bailey's falsetto sends Straight from the Heart right where it's intended, and while this midtempo ballad is certainly no *Reasons*, anything in the same ball park is bound to be a hit. Though a notch lower on the qualitative scale, *The Speed of Love* moves along at a rhythmically buoyant pace.

Much of the rest, however, is aimless and average, from the bourgeois funk of Spread Your Love to the thin politics of Freedom of Choice, which makes Devo sound profound. The singing's nice, the guitars cook, and while the horns sound a bit more sluggish than usual, the arrangements are stone solid. Missing is material that matters. White aims to create songs of hope for people on very mean streets, and the world could use more artists with his generosity of spirit. The problem is that his music has lost its street smarts. Swaddled in limitless studio time, he polishes his soul to such a luster that it all but disappears. I suspect that if EW&F gave itself thirty days flat to cut an album, the flab would peel away like a sunburn. JOHN MILWARD

Marianne Faithfull: A Child's Adventure Wally Badarou, Barry Reynolds, & Harvey Goldberg, producers Island 90066-1

Anxiety, alcohol, gloom, and violence flow through "A Child's Adventure," an album that begins in New York City, where pistols are packed in suitcases, and ends with the contemplation of dissolution and suicide. In between, there's blood in Ireland and longsuppressed statements that spill out with the ease of "poison taken in extreme despair." Marianne Faithfull's new LP, the third since 1979's startling comeback, "Broken English," is grim; it's also musically vivid, with metallic guitars, swirling synthesizers, and choppy rhythms, encasing Faithfull's harsh, weary voice.

Her cracked singing on "Broken English" came as a shock. In the first stage of her career, when Mick Jagger and Keith Richards wrote As Tears Go By for her to sing, her voice was a cool and lanky thing, so still it was barely a breeze. Now we've gotten used to the torn-up quality; its actressy expressiveness-an odd combination of Bette Davis and Marlene Dietrich-is what holds "A Child's Adventure" together. It doesn't work well for the poem-rap The Blue Millionaire, a strange recitation over a funky backdrop, but on Falling from Grace and Running for Our Lives her singing has a compelling eeriness. "How long can we keep escaping into another prison?" she sings, and with the music rumbling alongside her, a real claustrophobia is conveyed.

With emotions left so raw and close to the surface, melodrama is bound to creep in. There are too many self-pitying questions ("Shall I feel warm again?"), too many reaches for the liquor bottle. She's Got a Problem, the closing track, plunges into the depths of torch-song solitude. Left by her lover, the singer wonders if she'll succumb to impersonal sex and brain-dulling drink: "Will I hiccup and jabber/Saying things I never meant?" Finally, she wonders what the world will say about her after she takes her "last ride." But even this maudlin song (one of only two that Faithfull didn't have a hand in writing) is partially redeemed by guitar playing that stings, and by the ravaged sorrow in Faithfull's voice. Not the least of this album's assets is Marianne's gift for steering herself through treacherous waters; "A Child's Adventure" is a continuation of her trip down the emotional rapids. MITCHELL COHEN

Buddy Holly:

For the First Time Anywhere Norman Petty, original producer; compiled by Steve Hoffman MCA 27059

In 1956, nineteen-year-old Buddy Holly traveled to Norman Petty's sound studio in Clovis, New Mexico, and recorded some songs. Twenty-seven years later those songs have turned up on "For the First Time Anywhere," an album that can stand with the best work he ever recorded. Reportedly, these tracks—four Holly originals and six covers—were thrown in a vault at the now-defunct Decca records long ago, only to turn up last year when MCA

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records executive Steve Hoffman was rummaging through stacks of old masters. What a find.

"For the First Time Anywhere" is Buddy Holly pure and simple, before producer Petty put echo on or strings under his voice. Gliding from bass to falsetto and back again, Holly exudes a chirpy, childlike enthusiasm while his band—guitarist Sonny Curtis, bassist Don Guess, and drummer Jerry Allison—lets loose vigorous gusts of rhythm. This is rockabilly in its most powerful and primitive form—spry and passionate and fun.

Apart from an early, wonderfully quirky version of *Maybe Baby*, the selections here are mostly obscure. Holly gives a goofy reading of Chuck Berry's *Brown-Eyed Handsome Man*, yelping out the lyrics over a fast surge of sound; *That's My Desire* is slow and gushy in a way that only an innocent teenager could pull off; *Changing All Those Changes* features Holly's trademark hiccup vocals and a clear, chiming guitar solo from Curtis.

All of these songs have been released in punched-up, Petty-produced versions before. What's different is their sparse, pristine quality. The vocals are keen and feverish, the musicianship buoyant and controlled. (Allison's shuffling, stick-on-ashoebox drumming is so basic that it sounds complex.) And, with the exception of *Bo Diddley*, the sonic quality of the recordings is astoundingly good.

This is, to put it simply, great stuff. No matter how hard rockabilly revisionists like the Stray Cats and the Blasters might try, they'll never achieve the level of intensity or the aura of beauty and unabashed romanticism that Buddy Holly did. Never.

STEVEN X. REA

The King of Comedy: Original Soundtrack Robbie Robertson, producer

Warner Bros. 23765-1

In the years since John Travolta cocked his hip, sneered, and pointed skyward as if to forecast the ticket and album sales of *Saturday Night Fever*, the commerical wisdom of mating established musical stars with screen action has proven itself time and again. Conventional blends of orchestral scoring and brassy main title themes have been overrrun by grab-bag soundtracks of chart darlings performing new songs—collections cut as much to radio's interests as those of the moviegoer.

Robbie Robertson's score for *The King of Comedy*—Martin Scorsese's somewhat controversial portrait of an obsessive celebrity worshipper and the talk-show host he shadows—is indeed varied. Yet the pop, rock, and blues performances the former Band songwriter and guitarist has assembled are intended as incidental detail, not as grand statement, achieving their own, unforced coherence through mood and



Willie: an eccentric western folk fable

musicianship. A quick glance at the liner notes assures the latter: Ray Charles, Bob James, Rickie Lee Jones, B. B. King, Van Morrison, Ric Ocasek, the Pretenders, David Sanborn, and Talking Heads. Robertson turns in a rare vocal solo on Between Trains, a stately yet conversational reminiscence that fits comfortably within the narrative and musical traditions of the Band. That track and his other most obvious foray into outright arranging here, Van Morrison's Wonderful Remark, may be as familiar as they are persuasive, but otherwise his choices pointedly ignore the usual assumptions about what's hip and what isn't.

In the process, Robertson creates some atypical performing contexts. Tom Waits's *Rainbow Sleeve* is given a trembling reading by Rickie Lee Jones who boldly shifts from whisper to cry; B. B. King is featured as vocalist more than guitar legend in an ebullient version of '*Tain't Nobody's Bizness (If I Do)* punched up with surging brass choruses; Bob James's facile keyboard skills and lyrical pop composing instincts are reined to a more laconic, yet rhythmically tense rock sensibility on the title theme, laced by Garth Hudson's typically slippery keyboard figures.

Add a taut Talking Heads song as close to John Fogerty's old bayou visions for Creedence Clearwater Revival as it is to the post-punk aesthetic, along with a Donald Fagen instrumental that tips his hand as closet romantic (courtesy of David Sanborn's featured role on alto sax), and *The King of Comedy* looms as easily the classiest screen sampler in recent memory. That seems in keeping with Robertson's standards as a producer and Scorsese's proven acuity in selecting source music (*Mean*

Streets, Alice Doesn't Live Here Anymore, New York, New York, and Raging Bull).

Even the two performances released prior to this album—the Pretenders' Back on the Chain Gang and Ray Charles's classic reading of Come Rain or Come Shine stand easily on their own merits. The jury may still be out on the film itself, but Robertson's musical vision is a triumph.

Willie Nelson: Tougher than Leather Willie Nelson & Bee Spears, producers. Columbia QC 38248

After many years of recording other people's material, Willie Nelson has finally sat down and written some songs of his own again. "Tougher than Leather" is a concept album that recalls his great Old West saga of 1975, "Red Headed Stranger," in that its interrelated tunes are steeped in the cowboy mythos: There are gunfighters and senoritas, cow towns and sundowns, and townsfolk who stand idly by while two macho men shoot it out on Main Street over questions of honor and pride.

Also like ". . . . Stranger," the new tale is set in a spare, understated, suitably twangy musical framework. Old Willie sounds like he's crooning around a campfire beneath the desert skies. It's hard to get a piano and drums out there on the prairie, but that's the feeling this eccentric western folk fable conveys. Nelson's marvelously tinny, Django Rheinhart-inspired guitarplaying carries along the simple melodies (at times so simple they seem to float off into blissful nothingness). Adding low-key embellishments to his tumbleweed warblings are guitarists Grady Martin and Jody Payne, harmonica man Mickey Raphael, bassist Bee Spears, fiddle and mandolin king Johnny Gimble, drummer Paul English, and pianist Bobbie Nelson.

"Tougher than Leather" is about reincarnation and justice. Through a series of recurring song fragments-the mournful My Love for the Rose, Changing Skies, and Somewhere in Texas-Nelson links the past with the present, chronicling the adventures of a "tougher than leather" trigger-happy shootist and a modern-day Texan who gets fingered for a holdup and murder he didn't commit. As Willie sees it in Little Old Fashioned Karma (an old hippie singalong) and Nobody Slides, My Friend, you can never escape from your crimes, even if the punishment takes more than one lifetime to catch up with you. Thus, the seemingly innocent hero of Side 2 is sent to jail and ultimately executed for his wrongdoings in a previous incarnation-namely as the gunslinger on Side 1.

Somehow, Nelson ties all this together with metaphors about rose petals and love—which makes a lot more sense when he sings it. In fact, that seems to be his stock-in-trade: Whether he's interpreting timeworn gems like *Stardust* and *Moonlight* in Vermont or concocting some convoluted concept album of his own, the man has such an easy, forthright charm that you buy every wavery word he sings.

STEVEN X. REA

Nile Rodgers: Adventures in the Land of the Good Groove Nile Rodgers, producer Mirage/Atlantic 90073-1

Guitarist Nile Rodgers knows a good groove when he finds one, and his first solo album boasts the same sort of skeletal funk featured on Chic's "Real People" and "Take It Off." As a member of that group and half of its production team with bassist Bernard Edwards, Rodgers has forged a style of cool funk distinguished by its crystalline sound and honed-to-the-beat arrangements. While the style is defined by Chic and the other acts produced by the duo (including, most memorably, Sister Sledge and its single We Are Family), it has also influenced such black hit makers as Kool and the Gang and Slave. Not one to be left out in the cool, David Bowie hired Rodgers to produce his new album.

Rodgers' guitar style is as crisp as a potato chip. The chiming rhythm guitar on the title song stands out like a signature: Clean as a whistle and sharp as a tack, it is in a league with Steve Cropper's work on such Stax/Volt classics as Soul Man. Even when Rodgers gets trickier, as on Get Her Crazy, where lead lines spin off a rhythm pattern reminiscent of Chic's Good Times, he sticks to the beat with treble-toned temerity. Similarly, on the mellower It's All in Your Hands, the heavily reverbed chords serve as the song's sonic hook. Both as an instrumentalist and a producer, Rodgers says what he has to say, says it well, then tastefully shuts up.

Rodgers is a competent but hardly distinguished vocalist, which doesn't much matter, since most of his songs are smooth urban scats laid atop good grooves. As such, My Love Song for You is the vocal highlight, with Sarah Dash singing alternate verses and thereby conjuring the malefemale mix of Chic. Really, it's only semantics that distinguishes this album from a Chic record. Freed of the gaffes that marred the group's last LP, "Tongue in Chic," Rodgers' solo debut approaches the cool majesty of the aforesaid two discs. The title, "Adventures in the Land of the Good Groove," says it all, and the album delivers nothing more, and nothing less.

JOHN MILWARD

Hank Williams Jr.: Strong Stuff

Jimmy Bowen & Hank Williams Jr. producers, Elektra 60223-1

The "tough-skinned son of a legend" routine of Hank Williams Jr. is getting tired. Can even he believe, after establishing himself as a consistent hit maker on his own



Rodgers: crisp as a potato chip

merits, that this perpetual confrontation with his father's ghost has anything new to offer, or does he just churn out songs such as A Whole Lot of Hank because he thinks they're expected of him? It gets even more awkward when he invites his superstar pals to get into the act. When Waylon Jennings, on Leave Them Boys Alone (an outdated tribute to country-music "outlaws"), sings a verse about Hank Sr. not showing up for a concert in Lubbock, Texas, the anecdote has no point. Maybe, he suggests, all the people who expected Williams to perform 'should've left him alone to sing his songs." Well, maybe. And maybe, since Williams virtually drank himself to death at twenty-nine (he didn't, contrary to what his son says on this LP, expire of "the lovesick blues''), Hank Jr. shouldn't spend so much time plugging Jim Beam.

On 1981's excellent "The Pressure Is On," with the songs A Country Boy Can Survive and All My Rowdy Friends (Have Settled Down), Williams Jr. managed to deal with his legacy and at the same time turn it outward, expand on it. The songs on "Strong Stuff" lean toward defensive narcissism. That's a shame, because the music is crisp and rowdy, and the singer demonstrates a gritty affinity for rocky Southern boogie and blues, borrowing such songs from ZZ Top and Lynyrd Skynyrd as La Grange, Made in the Shade, and Blue Jean Blues. As he indicates at one point on the record, those are the type of spontaneous jams that he and his band might strike up on the tour bus. They're Williams with his guard down, and they're the album's only surprises.

The rest is marred by his compulsion to puff himself up, by sentimentality (The Homecoming Queen is a shameless paean to the woman who puts up with his intransigent ways, greeting him at the door when he comes stumbling home), and by clumsy songwriting. On The Girl on the Front Row at Fort Worth, a trivial song about a postconcert liaison with a silk-bloused outlawette, he goes so far as to boast about his box-office take. Most singers would be content to let the sexual conquest stand; Williams first tells us he sold ten thousand tickets. He needs to have everything both ways: the Fort Worth fling and the homecoming queen who's the mother of his children; the "outsider" stamp that gives him his rugged-rebel self-image, and Ernest Tubb's vocal assurance that his "daddy would be proud." If he could, Hank Williams Jr. would slap his own back.

MITCHELL COHEN

Art Lande, David Samuels, Paul McCandless: Skylight Manfred Eicher, producer ECM 1208

azz

A recent shift toward more emphatic Third World influences in its recordings may have suggested that Manfred Eicher's ECM label was moving away from the distinctively European chamber atmosphere of its early catalog. But a new arrangement bringing the German label's previously unreleased projects to these shores via PolyGram Special Imports argues that ECM's American arm has simply been tailoring its schedules to market tastes. All of the recent German ECM recordings available through Poly-Gram owe more to formal compositional goals and classical technique than to the Afro-American source points and improvisational bent of homegrown jazz.

This trio collaboration underscores that point. "Skylight" is more accessible than anything yet released here under the new import scheme, and it benefits as well from the greater recognition factor afforded by its players. (Pianist Art Lande's solo



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recordings and ensemble outings with his own Rubisa Patrol were produced by Eicher in the mid-'70s and reedman Paul McCandless plays with the group Oregon.) At the same time, however, these delicately lyrical performances epitomize the ethereal, introspective style that became a stereotype and a critical mixed blessing for Eicher and ECM by the late '70s. For traditionalists who want their music to swing, "Skylight" will prove frustrating in its measured poise.

Which is by no means an outright dismissal. What the trio offers in lieu of rhythmic drive and dynamic abandon is a rich impressionism that may be harmonically distant from blues roots but boasts its own kind of charm. The pieces, alternating between the three as composers, typically use Lande's clean, rippling attack to outline chordal boundaries for McCandless' pristine reeds, which here include English horn, bass clarinet, and wood flute as well as soprano sax and oboe. Samuels' mallet instruments provide shimmering accents to complete a bejewelled ensemble style.

Such instrumental combinations are not unusual among younger American musicians building their own hybrids of jazz, folk, and classicism for originally folk-based labels like Rounder, Flying Fish, and Windham Hill. Here, however, Eicher is working with three mavericks who have long plied this rather tranquil, if occasionally dour aesthetic. His production is typically spacious, and the import pressing, like most of those from ECM's founding company in Germany, is excellent.

SAM SUTHERLAND

Marion McPartland Trio: Personal Choice

Carl E. Jefferson, producer Concord Jazz CJ 202

Pianist Marion McPartland has been leading her own small groups for over thirty of her forty years in the profession. Like most successful jazz musicians, she arrived at a level of excellence fairly early in her career. Unlike most of her peers, however, she has recently broken through to a new level of excellence, and the evidence is clear from "Personal Choice."

In his liner notes, Doug Ramsey quotes the pianist as saying, "I think I'm getting better and I want to keep on getting better." From almost anyone else that might sound arrogant. But Marion is notably level-headed; if she thinks she is getting better, she probably is. She has trimmed away the needless decoration that sometimes floated around the edges of her performances and let that open space speak for itself. Her statements are lean, positive, and full of rhythmic intensity. Her slower pieces, such as I Hear a Rhapsody and When the Sun Comes Out, have an inner drive that keeps them from the soggy fate of many slow ballads.

She gets some superb backing from bassist Steve La Spina and drummer Jake Hanna. The former, who succeeded Brian Torff three years ago, is the latest in the long line of brilliant bassists she has brought into her trio; Hanna is an old McPartland-ite who was in her trio twenty years ago. Their presence is particularly effective on *Meditation*, where La Spina's throbbing bass line gives McPartland ample fuel, and on an unusually swinging *I'm Old Fashioned*. Here, they churn up a rousing propulsion while the pianist punches out chords that give off swirling runs.

JOHN S. WILSON

The Vaughn Nark Quintet: Cutting Through

Vaughn Nark, producer Lavenham LVH 8103 (10604 Democracy Lane, Potomac, Md. 20854)

This album stuns and surprises at every turn. On the first cut, trumpeter and flugelhornist Vaughn Nark reveals himself to be an explosive mix of Dizzy Gillespie and Maynard Ferguson; on subsequent cuts, Nark and his quintet show a range and depth that go well beyond that initial impression, taking them through a wide swash of the contemporary jazz mainstream.

Up until two years ago, Nark was buried in the Air Force Jazz Ensemble known as "The Airmen of Note." I say "buried" because, despite the fact that he is the Airmen's lead trumpet and primary soloist, the group gets little media attention and its records have not been distributed commercially.

Then, in September of 1981, Nark sat in with Dizzy Gillespie at Blues Alley and was so encouraged by Gillespie's response that he formed his own quintet with fellow Airmen Pete BarenBregge on flute and saxes, Tom Williams on bass, ex-Airman Dave Palamar on drums, and pianist Stef Scaggiari.

The Quintet opens its debut album with Nark's own Cutting Through, which does just that. It's a dazzling display of Gillespie-styled trumpet work accompanied by quite substantial contributions from the rest of the group. On Gordon Brisker's charming Runaway, Nark plays a warm, full, easy flugelhorn in tandem with BarenBregge's flute. Gerry Mulligan's early Line for Lyons catches the loping Mulligan pace with BarenBregge on baritone sax and Palamar shifting to light, dancing drumming. Jack Walrath's Blues in the Guts shows Nark to be an amazingly rugged and fluent valve trombonist and BarenBregge a consummately swinging alto saxist. And Night in Tunisia is played with such flair and energy that one would think the Nark Ouintet had just invented it.

The entire album has this feeling of freshness, of enthusiasm combined with virtuosity. For a high-note trumpeter, Nark (Continued on page 87)

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BACKBEAT REVIEWS

(Continued from page 84)

avoids the usual excesses, makes all his notes count, and shows a sensitivity to the other end of the scale on his calm, probing *Alone*. "Cutting Through" impresses because Nark and his group are consistently brilliant through a broad range of material. JOHN S. WILSON

Fats Waller: Oh, Mercy! Looka Here Jack Towers, Jerry Valburn, & Will Warner, producers Honeysuckle Rose HR 5000-3 (three discs) [Marlor Productions, P.O. Box 156, Hicksville, N.Y. 11802]

This three-disc set consists of two Fats Waller sessions, one from 1935, the other from 1939. They were made for Associated Transcriptions and, at the time, were available only to radio stations.

In the first session Waller, playing piano and singing alone except for four brief appearances by clarinetist and alto saxist Rudy Powell, plays thirty-one tunes timed in ten ten-minute segments. Apart from showing him to have incredible stamina, these miniprograms are an interesting insight into Waller as a radio personality. He took care of everything—timing, introductions, programming performance, and verbal commentary. The second session consists of seventeen tunes, performed with his regular quintet.

Both sets are replete with Waller compositions, some played quite differently from his commercial recordings. The 1935 track of the bright and striding Zonky is the only one he ever made. Also included are his only recordings of California, Here I Come, which is full of vocal byplay, and You're the Top, on which Waller completely ignores Cole Porter's clever lyrics to concentrate on the usually forgotten beauties of the melody.

That both sessions are complete and in their original order suggests that in the earlier one Waller missed only one cue. On the tenth and last program he inadvertently starts playing How Can You Face Me. which was at the beginning of the set, and switches casually in midchorus to Blue Turning Grey over You. On the quintet session, there is one false start (with muttered Waller comment) and three songs of which the group does two takes. On the first take, the musicians run through the tune to sort out what they are going to do. On the second, everything, including sound balance, falls into place, and the difference is startling

This package is an excellent summation of Waller as a composer, pianist, and exuberant, high-spirited energizer of an instrumental group. It also reveals—in a few piano solos tacked onto the later session—that his grandiloquent concepts of concert-style performance were kept under wraps for good reason. JOHN S. WILSON

WAGNER RECORDINGS

(Continued from page 57)



the pushing he has to do to get up and over the break can sound painful. Hopf (Angel) puts out plenty of sound, and it's fairly consistent from top to bottom, but the sound is unremittingly thick and strenuous. One trick you might try is to listen to him from the next room, where you'll hear the ring of the voice but less of its actual sound. Pilinsky (EMI), with a voice that also appears to have good size, approaches most of the role lightly, a choice that doesn't yield much listening pleasure but is understandable when we hear the yawp he produces at full volume.

This leaves Windgassen (Philips and DG) and Kollo (London), both of whom get through the music by means of a persistent squeeze that excludes any lyric possibilities. Kollo manages a conscientious noterendering-no fun to listen to, yet not crippling to the performance going on around him. Windgassen sounds more relaxed under DG's studio conditions than in Philips' live performance, but, perhaps in part due to Gerdes' laissez-faire environment, his singing hasn't much emotional focus here-or indeed much focus of any sort on top, where he is mostly wailing. His voice is under better physical and emotional control with Sawallisch.

Melchior's Tannhäuser excerpts are of obvious importance, and the pity is that they cover so little of the role. What we have begins with two versions of the same Venusberg extract, a splice of the first and third songs to Venus ("Dir tone Lob" and "Stets soll nur dir"), from 1929 (LV 11) and 1940 (Victrola VIC 1500 and RCA CRM 3-0308, both OP). Then there is the Act II duet ("O Fürstin") with Bettendorf, from 1924 (LV 11). And finally there are complete Rome Narratives from 1924 (Heliodor 2548 749 and DG's "100 Years of Bayreuth," 2721 115) and 1940 (numbers as above), plus a composite complete performance: the two-78-side version made in 1930 plus a 1926 "Als ich erwacht"" (complete on LV 11, the 1930 sides only in Seraphim IB 6086).

The 1924 Rome Narrative, almost ostentatiously "straight," should please listeners offended by the "liberties" of Melchior's later live performances. It is quite remarkably sung, but not very exciting. The other Twenties excerpts find him in prime form, with the voice at its freeringing-est. The 1940 excerpts, despite Edwin McArthur's laborious accompaniments and the more muscle-bound condition of the voice, are still pretty exciting and are of course noticeably better recorded.

This leaves us with nothing from the Song Contest, a gap that is partially filled from a surprising source: the 1909 Berlin Act II noted above. Fritz Vogelstrom takes an almost Mozarteanly lyrical approach, faltering only in Tannhäuser's more heated expostulations. The rest of the cast—which includes the first Elektra, Annie Krull, as Elisabeth, Léon Rains as the Landgraf, and Hermann Weil as Wolfram—also sings with care and dignity, making the recording as a whole noteworthy for more than its mere existence.

Tannhäuser was one of Max Lorenz' major roles, but most of his commercial excerpts-notably the 1943 Acanta excerpts-represent the kind of vocal squeeze we hear from Windgassen and Kollo, although with a good deal more tonal heft, especially on top. Of more interest is an intense 1933 complete Rome Narrative (in Telefunken's two-disc ''Famous Wagner Interpreters," KT 11017) with a good deal more singing quality in the voice, if not always under full control. Noteworthy for the consistent application of singing tone are modern versions by King (London OS 26039, OP) and McCracken (London OS 25948, OP). The latter would later sing the complete role with success in the first season of the current Met production.

Turning to Venus, there's no point complaining that Ludwig (London) is lightvoiced for the role, since she actually *sings* it all, attractively and committedly. Her nearest competitor is Bumbry (Philips), who really isn't a direct competitor since Ludwig is singing the more elaborate Paris version while she is singing Dresden. (The Philips performance switches from Paris to Dresden after the Bacchanale.) Bumbry certainly sings the music well enough, but I'm put off by a certain wispy quality in her work.

Jost-Arden (EMI, Paris) sings moderately well, as long as she doesn't have to force, and much the same is true of Schech (Angel, Dresden), recognizably a major artist but through much of the Venusberg scene sounding just not quite enough there. Nilsson (DG, Dresden) presents the opposite situation: plenty of sound, but not exactly seductive in quality. Joesten (Heliodor) shows some solid tones in the middle that suggest she might have managed a more credible Venus under better circumstances.

There is a generous-voiced but occasionally wobbly recital performance of Venus' "Geliebter, komm" by Eva Randová (Supraphon 1116 2696). Since her dramatic mezzo is well suited to the role, and I have heard her sing more steadily on other occasions, let's hope this serves as a sample of better things to come.

Elisabeth has fared a great deal better. Vocally speaking, Dernesch (London) would be hard to top. This recording is probably the best place to hear what her voice was meant to do, and might have gone on doing if she had stuck to such roles. Her lush timbre fills this music with ease and vigor.

Grümmer's voice (Angel) doesn't have the same degree of freedom, especially on top, but she sings with such fervor, and with such beguiling warmth in the midrange, that as usual 1 find this special artist irresistible. Schech (Acanta) and Müller (EMI), although more pressed in the role's weightier passages, sing quite attractively. Indeed, next to Grümmer, it is Schech who most successfully fills the broad expanse of "Allmächt'ge Jungfrau."

Nilsson (DG) of course has plenty of voice for the big passages ("Dich, teure Halle" gets off to a rousing start), but the voice isn't set up to produce a true legato. Silja's Elisabeth (Philips) is much like her Philips Senta: There are enough successful phrases to indicate the voice's potential, but not enough to make the performance listenable. Eipperle (Heliodor) also pulls her voice together here and there; as with the rest of this cast, it's hard not to believe that something better mightn't have been achieved.

We also have an almost complete Elisabeth from Maria Reining if we put together the 1943 Acanta excerpts with the Vienna studio "*O Fürstin*," also with Lorenz, made the year before (EMI Germany IC 147-29154/5, a Lorenz collection). For a voice of such generous size, it doesn't handle terribly well at full volume, tending to wobble, but otherwise this is lovely work note how much body the voice retains in soft singing.

Elisabeth's arias have been recorded frequently, with contrasting results. There are lots of entertaining performances of "Dich, teure Halle," among which I might signal De los Angeles' 1950 recording (EMI SLS 5012) for its impulsiveness and heady tonal freedom and Germaine Lubin's 1930-ish one (in French, EMI France 2C 061-96242) for its combination of vocal size, beauty, and easy handling. For "Allmächt'ge Jungfrau," though, since we can't combine the linear flow of Destinn (CO 364) with the vocal spaciousness of Flagstad (EMI Germany 1C 147-01491/2), I'll stick with Grümmer and Schech.

For Wolfram, because real ease on top is important to me, I gravitate to Wächter (Philips) for the color and fluency of his upper range. He doesn't have an easy time of it in Act III, though, where Braun (London) comes into his own, keeping that light upper-range tremor under good control and reading Wolfram's lines with calm eloquence. Janssen (EMI) produces a weightier sound, but I'm not smitten by the stagy quality of much of his delivery.

Fischer-Dieskau (Angel) also sings the music fairly well, but with his own brand of stagy overemphasis, presumably designed to give a semblance of weight to the midrange and to compensate for the voice's thinning out toward the break. This vocal split has become more pronounced by the time of his DG performance, which sometimes benefits from Gerdes' casualness but more often suffers from the accompanying lack of musical concentration.

Schlusnus (Heliodor) is a special case. In his prime he must have been a spellbinding Wolfram, as reflected by his ringing, poetic 1935-36 "Als du in kühnem Sange," "Blick' ich umher," "O Himmel," and "Abendstern" (LV 109), with their easy control of weights and colors. The eerie thing about the complete recording is that the actual timbre shows hardly any evidence of a sixty-two-year-old singer. But the voice doesn't stretch comfortably to fill out the "Abendstern," or move nimbly enough to negotiate "Als du in kühnem Sange"-at least not without some help from the conductor, not forthcoming here

Of value too are Hüsch's 1936 Wolfram excerpts ("Als du," "Blick' ich umher," "Wohl wusst' ich hier sie im Gebet zu finden," and "Abendstern," all on Arabesque 8022)—less weighty in tone, more straightforward in phrasing. In addition to Schorr's "Blick' ich umher," noted above, there is another one of Heldenbariton weight by Bockelmann (Telefunken's "Famous Wagner Interpreters," KT 11017). I also enjoy the easy authority of Karl Schmitt-Walter in the 1943 Acanta excerpts, and he recorded an even lovelier "Blick' ich umher" and "Abendstern" in 1937 (Telefunken HT 27). Domgraf-Fassbaender's manly 1931 recording of the Act III vigil "Wohl wusst' ich" (LV 131, with the "Abendstern") includes the Pilgrims' Chorus with the comments of Wolfram and Elisabeth (Käte Heidersbach).

The Landgraf, usually thought of as Wagner's most boring bass, in fact has some wonderful opportunities. From Moll's one Met run in the part, I especially remember the plangent duet with Elisabeth and the change of mood in "Ein furchtbares Verbrechen" when the Landgraf holds out to Tannhäuser his one hope of salvation, in pilgrimage ("Versammelt sind aus meinen Landen''). Sotin (London), with a voice that is in some ways more versatile than Moll's, rarely gets as much out of it, but this is probably his most disciplined recording, and nobody on records sings the role anywhere near as imposingly. Frick (Angel), though, is often more communicative, even if he can't match Sotin's smoothness and upper-range ease.

It's a long way down to the bawling of Greindl (Philips) and Adam (DG). Von Rohr, though bottom-shy, is a quite competent Landgraf in Acanta; in Heliodor, the voice sounds more solid on top, but the performance has the sprawling quality characteristic of this set. On an altogether higher plane are Andrésen (EMI) and Ludwig Hofmann (Acanta excerpts), whose voices have plenty of weight and bite. I just don't enjoy the sound of either.

Among the lesser minnesingers, we can report one gorgeous Walther (Wunderlich, as noted above), and one lovely Biterolf, Philips' Crass. We must also tattle on one garish Walther, Philips' Gerhard Stolze, and we should note that the London set, in strict accordance with the Paris version, omits Walther's contest song. (My assumption is that Wagner wasn't happy with his Paris Walther.)

The classic Shepherd is still Erna Berger (EMI), whose limpid song has turned up in a number of other forms, including Electrola's Bayreuth centennial box (1C 181-30669/78). Angel's Lisa Otto is also quite good. London casts a boy soprano—a recent fad (cf. the *Magic Flute* Genies) that is to be discouraged.

A final thought: Given the sketchy condition of the Tannhäuser discography, if some money-besotted soul were of a mind to underwrite a new recording, the Met's widely acclaimed production, which ignores most inward considerations but gets the piece's external shape impressively right, has choral and orchestral strengths worth preserving, and you would have a pretty fair cast if you assembled the best singers who have passed through it: Eva Marton (Elisabeth), Tatiana Troyanos (Venus), Edward Sooter (Tannhäuser), Allan Monk (Wolfram), Moll (Landgraf), and Kathleen Battle (Shepherd). HF

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SONNY ROLLINS

(Continued from page 78)



Rollins: I've got a younger audience now, and I also have a definite mixture of black, white, and Oriental people at my shows, which to me is beautiful. Also, I've been more successful in picking and choosing the jobs I want. I like the conditions better in concert-hall situations: better dressing rooms, hotels, and, usually, acoustics. However, nightclubs have a certain funkiness, and it's good to play them every now and then. As long as I can do enough concerts to keep the quality of the band and the music pretty high, though, I would say that I like the concert situation better.

Backbeat: You do quite an eclectic mix of material in your live performances and, for that matter, on records.

Rollins: I aim for that. I want to do some pop-music, but I also am going to do a ballad or two, something in a traditional straight-ahead vein, and some Caribbean stuff. Each style gives me something to play off and relate to. Some recent changes in my band may mean that we won't be able to be as eclectic, but if it were just up to me and not a matter of having to accommodate a band and its abilities, I'd like to be more eclectic.

I realize, of course, that some younger players may not be as familiar with the gamut of material from my career, on the other hand, I appreciate having younger players who can play long and strong, and not get tired. Sometimes guys who've been around awhile don't have anything to prove, in terms of making a name for themselves, so they may not work as hard. I'm still trying to prove something, so yeah, I like having some younger players in my band.

Backbeat: It has been some time since you've been a featured soloist on someone else's album, yet much to the surprise and pleasure of millions of rock and jazz fans, you played a memorable, sensitive solo on *Waiting on a Friend*, from the Rolling Stones' "Tattoo You." How did that come about?

Rollins: I think it happened because of a club engagement in New York we did a couple of years ago. The band was especially hot one night, and Mick Jagger was in the audience. He must have been impressed or something, because a few months later we got a call from him asking if I'd be inter-

ested in playing on the album.

Lucille is actually a fan and knew more about their music and career than me. She felt, as I did, that it was a good idea; so I told him to send tapes of the music over and I'd see if there was anything I could play on it that would be out of the ordinary, something to get people's tongues wagging. I liked the music, and I ended up enjoying the session. It was hard—I had to do a lot of takes and really get with the stuff, you know. It was real work, just like anything else I'd do, and I took it just as seriously—definitely not something to slough off.

I've been asked by a few rock groups since to do some stuff, but I'm not really going in that direction, so I passed. Besides, the Stones are kind of the top people in what they're doing, so I think it was kind of a once-in-a-lifetime thing.

Backbeat: A musician friend of mine recently commented that your music has always struck a remarkable balance between intellect and emotion. Any comment?

Rollins: I guess I could agree with that. I'm a guy that's a student of music, in that I'm going at it in a studious way, thinking about everything. A writer recently said in a review that my music was both accessible and involved at the same time. Well, I'm a deep thinker, so maybe that's what comes out. Again, Hawkins was a big influence. In his playing, you could hear the thinking, the studiousness—along with the force and energy.

Backbeat: Do you feel your yoga studies and discipline have contributed to this approach?

Rollins: Well, I did study yoga and philosophy when I traveled in India and Japan, and the yogic concept of *prana*, the lifeforce or breath, is, by nature and definition, in everything, including, of course, musical energy. But I usually tell people that yoga has helped me to deal with life off the bandstand. What I got out of going to India was trying to have some concept of how to live, rather than anything directly related to music.

Backbeat: But change and growth has always been a big part of your musical life.

Rollins: As a musician, there's still an ideal of Sonny Rollins' playing which I haven't gotten to yet, and that's why I change-as other influences come in. I have a wideranging approach because I'm still in search of my salvation musically, I'm still reaching. I like the r&b things I do-that's one of the first styles that attracted me. Louis Jordan, Jr. Walker, Ben Webster, "Lockjaw" Davis, Hawkins-a lot of guys have done things with the instrument that I like. I guess I'm trying to use different elements and influences because they're out there. On the other hand, I'm not trying to play every influence that I hear; I'm really just trying to express myself. HE



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