JUNE 1980 • \$1.25 BEERE REVIEW 6

WAR OF THE VIDEODISCS: Eyeball-to-eyeball in the marketplace Steve Simels has a talk with Dire Straits' MARK KNOPFLER

> EQUIPMENT TEST REPORTS: Aiwa AX-7800U AM/FM Stereo Receiver Audio-Technica ATH-7 Stereophones • Boston Acoustics A100 Speaker System Marantz SD9000 Cassette Deck • Revox B760 FM Tuner

CAR STEREO: It's pulling up fast on home hi-fi quality



NEW ELECTRONIC DESIGN ANTIQUATES SO-CALLED "HIGH SPEED" TECHNOLOGY.

Since its inception in the 1960's, there's been a lot of debate as to whether "high speed" is just a lot of fast talk or whether quick rise times and high slew rates are effective in lowering distortion.

Now Pioneer's latest technology brings an end to the heated "high speed" debate. Because Pioneer's new Non-Switching Amplifier design has been recognized as a most significant technological advance. It produces distortion levels so vanishingly low (.005%), its sound purity and specifications are comparable to the very best most expensive power amplifiers.

In fact, further study of Pioneer's new Non-Switching technology will show why "high speed" has become obsolete.

NO MATTER HOW FAST YOUR AMP, IT'S STILL BEHIND THE TIMES.

The truth is, "high speed" is just a fancy name recently given to an electronic technology that dates back nearly two decades. The terms slew rate and rise time were around when most amps had vacuum tubes and transistors were rarities. In fact, the only thing new about the terms slew rate and rise time is their recent abuse.

THE HIGHER THE SPEED, THE BIGGER THE CON.

Kenwood, Sansui, and other manufacturers of high fidelity components boast that their units offer higher fidelity because they offer higher slew rates than the competition.

A slew rate of 200 volts per microsecond $(v/\mu s)$ and a rise time of $0.85 \ \mu s$. do indeed sound impressive. They are at least three, four and sometimes even up to 10 times faster than those found on most of today's equipment.

But the truth is you no more need rates like this to get superior high fidelity reproduction of music than you need to be an Olympic weightlifter to turn the page of this magazine.

HIGH SPEED GOES NOWHERE FAST.

To understand why "high speed" is really "all talk and no action," you must first understand what's meant by slew rate and rise time.

Slew rate is the maximum rate of change or slope of a signal measured in volts per microsecond. Like miles per hour, it's a rate of how fast something is traveling. And in this case that something is the musical signal.

All it takes is a simple calculation to show what slew rate would be necessary to handle the most extremely demanding musical signal.

Let's assume 20,000 hertz to be our musical analog with a peak value of 40 volts which will deliver 100 watts of power into 8 ohms.

The steepest part of the wave, where the slew rate is greatest, is at the zero crossing point. The slope at this point is the derivative of the sine wave with respect to time (dt):

The waveform is $40\sin 2\pi ft$; and taking its derivative,



So this extreme case signal only has a slew rate of 5. And if the power was increased to 400 watts, the slew rate would only double.

A slew rate of 200 volts per microsecond like Kenwood boasts, only adds one thing to your amp. A high price tag.

Rise time is the time it takes for a signal to go from 10% to 90% of its peak-to-peak value.



Another simple calculation will show the rise time necessary to handle a 20,000 Hz. sine wave.

The arcsin of -0.8 is the angle at which a sine wave is at 10% of its peak-to-peak value and +0.8 when it's at 90% of its peak-to-peak value.

 $\sin^{-1}(-0.8) = -53.13^{\circ}$ $\sin^{\circ}(+0.8) = +53.13^{\circ}$

So the time it takes to go from -53.13°(10%) to + 53.13°(90%) is:



And the rise time needed to handle a 40,000 hertz signal is half of that; $7.38 \,\mu$ s.

So what's the necessity of a rise time $0.85 \,\mu s$ or faster? Well, some audio companies believe they need it to justify an inflated price tag. And some use it to keep your focus away from audible distortion they can't rid themselves of.

IF KENWOOD AMPS HAVE A LOT HIGHER SLEW RATE THAN PIONEERS', HOW COME THEY ALSO HAVE A LOT MORE DISTORTION?

Unless you own an eleven-year-old "tube job" it's almost certain the distortion you're hearing is not caused by insufficient slew rate and rise time.

In fact, this most significant form of audible distortion can, at the most, be reduced with "high speed" technology. But it takes

Pioneer's new Non-Switching technology to totally eliminate it.

This form of distortion is known as "switching distortion."

And, most likely, the reason you haven't heard of it before is because most high fidelity companies are still grappling with it. Trying to rid themselves of the audible noise that occurs every time a musical signal is handed over from one transistor to another.

In more detail. Most power amps today use high-speed bipolar transistors in their output stage. Operating in pairs, one handles the positive part of the output waveform and the other the negative. The audio signal alternates between these transistors thousands of times a second. With each cycle, one transistor switches on and the other switches off. When the switch occurs so does distortion.

But unlike other forms of distortion that are more noticeable at very high power levels, switching distortion is also a problem at lower listening levels. And the lower the listening level the greater the amount of switching distortion you hear.

OTHERS REDUCE SWITCHING DISTORTION. PIONEER'S NON-SWITCHING TECH-NOLOGY ELIMINATES IT.

For years, people have clashed over which amplifiers to buy.

The output transistors in a Class A amplifier are passing high currents at all times, regardless of the signal driving them. True, since the transistors never switch on and off, there's never any switching distortion. But, due to the high idle currents, over 50% of the available power is dissipated as heat.

Because of this, Class A amplifiers need larger heat sinks, greater power supplies, greater size, weight, and most important, a greater price tag.

A pure Class B amplifier or an AB amplifier, like the "high speed" models touted by Kenwood, are more energy efficient than those in Class A. But instead of paying through the nose for a heat producing Class A, what you're really doing is paying through the ear for an amp that produces distortion. Because transistors on Class B amplifiers constantly switch on and off.

And no matter how high the speed of the amp, they can't lose the distortion that's created when these transistors begin to switch.



NOT CLASS A. NOT CLASS B. BUT IN A CLASS BY ITSELF.

Unlike Kenwood and other manufacturers of high fidelity who remained with the technology of the sixties to reduce the problem of switching distortion, Pioneer forged into the eighties with a new design that totally eliminates it.

So impressive is this technology that it was accepted for presentation at an Audio Engineering Society convention in New York City.

Pioneer's new Non-Switching Design performs like pure Class A without any of its drawbacks.

This new technology instantly monitors the amplitude of the signal, and like a servo, automatically controls the amount of bias current fed to the output transistors.

Unlike transistors in other amplifiers, these transistors receive a trickle of current during "no-signal" periods. Just enough to keep them from switching off. But not enough for them to waste energy creating added heat and expense.

The result of this technology is absolutely clean sound at all levels.

"The technological advantages of the NSA circuit are evidenced by the low distortion of the SA-9800. At 0 dBW (1 watt), no harmonics can be found in a spectral analysis of the output, and, at rated power, (20 dBW, or 100 watts), only the smallest vestiges of (mainly) third harmonic emerge above the noise. Up through 10 kHz, this amp also is essentially free of intermodulation at higher frequencies, especially at high output



CLASS-A OPERATION. Paired transistors are always turned on, amplifying its assigned waveform within the range above and below its quiescent operating point. Therefore, no switching distortion can occur. But that bias current is always at the center point and thermal loss is considerable.



CLASS-B OPERATION. Paired transistors alternately turn on and off, amplifying the positive half-cycles and negative half-cycles. This lets amplifiers run cooler with high efficiency. But, as the power transistors are driven below its idle current into cutoff, switching distortion (also called "notching distortion") occurs.



"NON-SWITCHING" AMP OPERATION. Paired transistors are always turned on: they do not switch on and off. Since the bias is controlled by our new Pioneer Non-Switching circuit to prevent either output transistor from being driven below its idle current into cutoff, no switching distortion is generated and the thermal loss is low.

In levels.

"Indeed, our listeners did detect a subtle difference in the SA-9800, mainly in the ultra treble region. Brushed cymbals sound cleaner than we're accustomed to hearing them, and the highs a mite crisper than usual. You can, so to speak, reach down through the general cacophony of a loud passage and pick up the tinkly details that often remain submerged. Several words come to mind to describe the quality; scintillating, brilliant, transparent." - High Fidelity Magazine, September, 1979.

THE LESS DISTORTION, THE LESS NEED FOR FEEDBACK.

An important result of having such a clean, practically distortion-free amplifier, is a significant reduction in the need for negative feedback.

In most amplifiers, as feedback increases distortion decreases. And frequency response increases in proportion.

But when the basic amplifier suffers from the problem of switching distortion, even a feedback network that feeds back most of the signal can't significantly reduce it.

Pioneer, because of its Non-Switching design and Ring Emitter Transistors (RET's) has extended frequency response and totally eliminated switching distortion. Because of these characteristics, feedback is not needed to obtain impressive specifications. And neither are exotic slew rates and rise times. An unheard of .005% distortion is proof of that.

"...it is certainly a technical achievement of no mean proportions. From our measurements alone, we would have guessed that this was a pure Class A amplifier of exceptional quality, except for the fact that it runs cooler than most AB amplifiers of similar power." – Stereo Review, October, 1979.

THE TECHNOLOGY OF OUR FINEST AMPS IS ALSO FOUND IN OUR FINEST RECEIVERS.

Most audio buffs would think technology as advanced as Pioneer's Non-Switching circuitry, would only be found in Pioneer's latest amplifiers, but the truth is the same engineering can also be found in Pioneer's finest receivers.

Pioneer's SX-3800 and SX-3900 do not sacrifice true high fidelity for the sake of compactness in size or savings in price. In fact, the total harmonic distortion in the 60 watt/channel output of the SX-3800 is a mere 0.005% or less. The lowest of any receiver on today's market. And the price is a lot less than those receivers whose slew rates and rise times are almost ten times Pioneer's.

So, if you're looking for the best components you can buy, don't look for one that gives you "high speed."

Look for one that gives you high performance. Pioneer.



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Read what the August, 1979 issue of Stereo Review magazine said about the \$49.95 Minimus[®].7 mini-speaker by Realistic



"The panelists found the Minimus-7 to be one of the best of the 2-liter speakers and very much a bargain considering its price."

"... sound is 'tight."

"... its sense of openness, level of definition, reproduction of musical detail, and stereo imaging were all quite good ..."

"... power handling above average." "Good imaging and definition ..."

"a good buy."



Mobile Brackets for Minimus-7 Speakers

Enjoy the rich, full sound of the Minimus-7 speaker in your car, van, RV or even your boat. Fully adjustable brackets let you position the speaker at the turn of a thumbscrew. Black finish matches speaker.



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The disease is low frequency feedback



The cure is DiscFoot

DISCWASI-ER®

Hi-Technology Turntable Isolation System

- Works in combination with existing feet for dramatic reduction of feedback.
- Isolates better than original or "replacement" feet.

Home environments can "upset" a turntable by feeding back both speaker and footfall vibrations. Acoustic isolation of a turntable involves the complex variables of turntable weight, rcom/lloor conditions and audio system placement. The Discwasher DiscFoot has been specifically designed to successfully isolate most turntables in the home environment.

The "Material" Solution

The major components of the Discwasher DiscFoot System are new, "totally engineered" chemical complexes that behave radically different than other plastic, rubber or spring systems. These proprietary compounds are durable and precise in behavior, although difficult and expensive to synthesize. Laboratory and real-world tests justify the use of these unusual materials in the DiscFoot System.

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The Telling Test

The oscilloscope photo shows the output of two identical audio systems on the same shelf with their styli contacting the platters. The shelf is being struck by a rubber mallet. The top trace shows a turntable with absorptive "replacement" feet. The lower trace shows a DiscFoot System operating in conjunction with the existing turntable feet. Note the dramatic (tenfold) improvement in shock and feedback isolation. The DiscFoot System contains four isolation feet, four platform caps, four furniture-protecting sheets and four special damping pads (to adapt DiscFoot units to certain turntables.) Additional single DiscFoot units are available for turntables weighing over 22 lbs. The system costs \$22.



Discwasher DiscFoot can be found at audio dealers interested in preserving your music.



1407 N. Providence Rd. Dolumbia, Missouri 65201 CIRCLE NO. 16 ON READER SERVICE CARD



Edited by William Livingstone

 PIONEER'S LASER-OPTICAL VIDEODISC player, the VP 1000, goes on sale this month in four markets: Dallas/Fort Worth, Minneapolis/St. Paul, Syracuse, N.Y., and Madison, Wisc. The company plans to expand into four more cities every sixty to ninety days. The unit, which lists for \$749, has scanning, freeze-frame, random-access, and slowmotion features in addition to stereo and dual-language capabilities. Also announced by Pioneer is the formation of a new subsidiary, Pioneer Artists, which will produce and acquire videodisc software, primarily of musical performances in the categories thought to be of greatest interest to audio-oriented consumers.

● DEBUTING IN THE HOME VIDEO MARKET, Capitol Records has just released its first videocassettes (mono only, of course) in both VHS and Beta formats. Included are the Knack in concert at Carnegie Hall, ex-Jefferson Starship honcho Marty Balin's recent stage show <u>Rock Justice</u>, and approximately twenty-five feature films from the EMI catalog. Price: \$49.95 per cassette.

STEREO BROADCASTING BY AM STATIONS has finally been approved by the FCC! Instead of permitting the industry to choose among the five competing stereo AM broadcasting systems, the FCC has specified one developed by Magnavox Consumer Electronics to be used by all stations. Prototype home stereo AM units may be shown to the industry at the Consumer Electronics Show in June in Chicago, but it will probably be six months before such receivers are available in stores. Now, when are we going to get stereo on American television?

• FANS OF "THE ROCKFORD FILES" who mourn the TV show's demise should be glad to know that Stuart Margolin, who played petty thief Angel Martin on the series, is making his recording debut with "And the Angel Sings" on Warner Bros. Margolin, who has been called "the Olivier of Slime," wrote most of the material (said to be reminiscent of Chuck Berry and Jimmy Reed) and calls it "country-punk." A DIGITAL/ANALOG COMPARISON RECORD issued by Vanguard (VA 25000) starts the series "Audiophile Recordings for the Connoisseur." Both sides of the disc contain the same performance of Haydn's Symphony No. 100 ("Military") played by the orchestra of the Mostly Mozart Festival conducted by Johannes Somary. Side one has the performance recorded digitally; side two presents it in an analog recording. You be the judge. All discs in this series will have a list price of \$12.98.

• THE QUEEN ELISABETH COMPETITION will be broadcast live in stereo via satellite from Brussels, Belgium, by National Public Radio. Documentary programs on June 2, 3, and 4 will include excerpts from twelve concerts by finalists. The winner's concert will be broadcast June 5 at 2:00 p.m. This year's competition, under the patronage of Queen Fabiola, is for violinists. Previous winners have included pianists Philippe Entremont and Vladimir Ashkenazy and violinists David Oistrakh and Leonid Kogan.

♥ CHAMBER MUSIC DOESN'T SELL RECORDS! Right? Wrong! In April the Amadeus Quartet celebrated the sale of their two millionth record. Their latest release on Deutsche Grammophon is Mozart's <u>Eine Kleine Nachtmusik</u> and <u>A Musical Joke</u> (DG 2531 253).

• FOLK MUSIC IN AMERICA, a series of fifteen albums issued by the Library of Congress, has been completed with "Songs of Death and Tragedy." The new disc, a collection of sixteen songs, surveys ways that death is depicted in traditional American music. Featured musicians include the Blue Sky Boys, Grandpa Jones, and Ernest V. Stoneman. The Library has also issued five LPs of folk recordings first released on 78s in 1942. That series, edited by Alan Lomax, ranges from Afro-American game songs and Anglo-American ballads to music of the Spanish Southwest. Price: \$6.50 each. Bought as a set, the fifteen-volume series costs \$85. Write Library of Congress Recording Laboratory, Washington, D.C. 20540, for a free descriptive brochure.

Speaking of Music...





TESTING IN A WICKED WORLD

A YOUNG friend tells me that one of his business-school professors holds "the maximization of shareholder profit" to be a corporate manager's *sole* ethical responsibility. I thought for a while that I was going to have to worry about that, but I've changed my mind. Even if our business schools *are* hotbeds of sociopathy, they can preach wickedness successfully only to the already wicked; anyone who gets as far as graduate school lacking a social conscience is lost anyway.

The level of moral depravity in this last quarter of the twentieth century is no higher (or lower) than it ever was, but we are, since Watergate, undoubtedly more conscious of it, more ready to believe we can do something about it. That's all to the good, but a raised consciousness, like everything else these days, comes at a stiff price, in this case an epidemic of suspicion directed at the whole of the business community, from multinational oil company right down to the corner grocery store. If I am undismayed that some of this suspicion occasionally falls on STEREO REVIEW, it is because charity compels me to admit that paranoia is the only *logical* response for someone who genuinely believes that he is surrounded by knaves.

Why does STEREO REVIEW come under such baleful scrutiny? Because we test audio equipment, print the results, and what we print is, in varying degrees, all positive. Right. Paranoia knows the reason for this: a long line of trucks at our back door drop-

ping off old wine, young women, and solidgold amplifiers. Wrong. The real reasons are (1) editorial limitations and (2) editorial clout. The limitations are time, money, and space. An outsider would scarcely believe how much time is consumed by logistics (ordering, unpacking, packing, shipping, record keeping), let alone that spent actually testing and writing up a report. There must therefore be tight control over the time (money) spent in preparing reports, even tighter control over the space they take in an issue (we have other subjects to cover!). Having invested all this time, money, and space, would it be sensible for a magazine whose readers come to it asking "What should I buy?" to answer them by saying, in effect, "Don't buy this!"? Yes, there are expensive off-brand toys out there masquerading as hi-fi equipment (and even the majors, being human, have been known to stumble), but we do not see our responsibility as one of ineffectually policing the entire market but of providing useful guidance to the best part of it.

Editorial clout: the Power of the Press is very real-and dangerous if irresponsibly exercised. Competitive pressures have driven manufacturers to the very frontiers of technology, to areas not only beyond the limits of hearing, but often beyond the limits of test instruments. In addition, measurement methods are not all standardized, and even where they are, different testers using different test machines in different labs will come up with differing results. A test report in STEREO REVIEW will be seen by something like 1.7 million people, and an entirely innocent error in one could be a disaster for a manufacturer-and his employees. This has taught us to be very careful at every step. No consolation, I know, for those who want to hear that there is some kind of conspiracy; there isn't.

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If you're looking for incredible sounding speakers at an affordable price, by all means listen to ours! You will find that for less money than you planned

on spending you can get much better sounding speakers than you dreamed you could ever afford. Polk Audio loudspeakers have received worldwide praise because people recognize that they offer remarkable value. Critical acclaim such as the following makes it clear why Polk speakers have become famous for offering the best possible sound for the money.

"Polk Audio is a small, Maryland-based company whose speakers enjoy an enviable reputation among audiophiles who would prefer to own such exotica as the Beveridge System 2SW-1 (\$7000 per pair) or Pyramid Metronome (\$5200 per pair) but don't have the golden wallets to match their golden ears!" The Complete Buyer's Guide to Stereo/Hi-Fi Equipment

"...the Polk Model 10 is certainly a very fine speaker...the frequency response covers the entire audio range with commendable flatness... The transient response of the Model 10 is absolutely first rate, and the hemispherical dispersion is superb (we cannot recall measuring better dispersion on any forward-radiating speaker). The tone burst response was exceptional...the total effect is of an exceptionally pleasing sonic balance with plenty of spaciousness or 'depth'..." Stereo Review."

Polk Audio loudspeakers, starting around \$125 each, are available at the world's finest hi-fi stores. Write us for complete information on our products and the location of the Polk Audio dealer nearest you. **Polk Audio Inc.** 1205 S. Carey St., Baltimore, Md. 21230 Dept. C9 Distributed in Canada by Edon Acoustics — Ottawa *reprinted with permission from Zilf-Davis Publishing Co. Real-Time Ar

Monitor 5 Manitor 7 Monitor 10

<u>Real-Time Array</u> Reference Monitor System



INCREDIBLE SOUND-AFFORDABLE PRICE CIRCLE NO. 41 ON READER SERVICE CARD

After stunning the audio world by going beyond Class-A...



we stunned the competition with this Super-A receiver.

When JVC brought out "Super-A" amplifiers last year, they were hailed as a tremendous achievement. Now, we go a step further with our new line of Super-A receivers. Which means you can get Super-A amplification along with JVC's 5-band graphic equalizer, a terrific FM/AM tuner, and everything else that has made JVC a premier name in receivers. All for prices you'd expect to pay for conventional class-A/B receivers.

What does Super-A sound like?

By eliminating switching and crossover distortion (you can actually see them disappear on an oscilloscope), Super-A eliminates the subtle harshness which makes some conventional amplifiers hard to listen to. The sound is natural and detailed, with the delicate texture of musical instruments coming through clearly.

At the same time, the R-S33 receiver shown here gives you a hefty 40 watts per channel into 8 ohms, from 20-20,000 Hz, with no more than 0.007% total harmonic distortion. Power like this in a conventional Class-A would cause it to run hot and weigh a ton, to say nothing of costing you a fortune. But the R-S33 costs only \$329.95.*

5-band graphic equalizer

With conventional tone controls, you can make only crude adjustments of problems like cartridge peaks, speaker roll-off and room



acoustics. But with JVC's 5-band graphic equalizer, you can make adjustments in five separate tonal regions. So you can boost deep bass without creating mid-bass boominess. Mellow out a voice without cutting the highs. Boost the extreme highs and more.

Traditional JVC quality

With all this going for the R-S33 receiver, you might almost think we cut corners to offer it at such a great price. We didn't.

As with past JVC receivers, you get a direct-coupled DC power amplifier section. A sensitive tuning section with linear-phase IF stages. Two tape monitors with equalizer and dubbing facilities. LED power meters. And JVC's patented, errorfree Triple Power Protection system. 'Manufacturer's suggested retail price.





Conventional Class-A/B

Jagged center line indicates the presence of high-order harmonic distortion. This is the result of transistor switching in some conventional amplifiers. JVC Super-A Center line shows minimal distortion in output waveform. Switching and crossover distortion (highorder harmonics) are notably absent.



S.E.A. graphic equalizer permits independent adjustment in 5 tonal regions.

800-221-7502

Lust call his toll-free number for the location of your nearest JVC dealer (212-476-8300 in New York State). While you're there, you might also want to check out our lowdistortion, class-A/B receivers, the R-S11 and R-S55. And if you want the extra convenience and accuracy of quartz-synthesized digital tuning, you can get it in our R-S55 and our R-S77 with Super-A.



58-75 Queens Midtown Expressway, Maspeth, N.Y. 11378 (212) 476-8300 CIRCLE NO. 30 ON READER SERVICE CARD



SONIC HOLOGRAPHY®

Audition a departure from conventional stereo. Introducing the Carver C-4000 SONIC HOLOGRAPHY[®] — AUTO CORRELATION Preamplifier: the most complete sound control center in audio history. The C-4000 is a superb preamplifier combining a time delay system for concert hall ambiance, the Autocorrelater noise reduction system that works on *any* source material, a Peak Unlimiter to restore dynamic range, and SONIC HOLOGRAPHY[®] a new concept in audio realism.

Here is what the experts said about the Carver C-4000.

"...the result was positively breathtaking! When the lights were turned out we could almost have sworn that we were in the presence of a real live orchestra." Hal Rogers, Senior Editor – Popular Electronics, May 1979.

"Plain old stereo will never be the same." Arthur Salsberg, Editorial Director — Popular Electronics, May 1979.

"Instruments and performers are located where they belong, whether to the front of, between, beside, or behind the speakers — in short, anywhere in a 180-degree arc facing the listener." Omni Magazine, March 1980.

"The effect strains credibility — had I not experienced it I probably would not believe it myself." Julian Hirsch, Hirsch-Houck Laboratories, *Popular Electronics, May* 1979.

"Bob Ajaye ... after two days of critical listening called the Carver invention 'a giant leap forward for hi-fi." I agree." Larry Klein, Technical Director -- Stereo Review, May, 1979.

Whether you're searching for a new preamp, or just want to be stunned, we suggest that you critically audition a properly set up C-4000. Sonic Holography delivers the depth and breath of the concert stage. The only sound experience that out-performs Sonic Holography is the performance itself.



PO Box 664 Woodinville, Washington 98072 CIRCLE NO. 9 ON READER SERVICE CARD



 $_ETTERS$ TO THE EDITOR

KLH-1 Loudspeaker

• We appreciate Julian Hirsch's fine review of the KLH-1 loudspeaker in the April issue, but we would like to add a comment. Mr. Hirsch found the speaker's balance, in both his measurements and listening tests. to be a little bass heavy. We think that this resulted from the size and characteristics of Hirsch-Houck Labs' listening room and from Mr. Hirsch's preferred listening/ measurement position. The output of the KLH-1 is flat to within 1.5 dB of the midrange level down to 30 Hz. In most rooms in which we have both measured and listened to its output, this response provides a correct perceived balance at the ear. We have, however, come across a few cases like that in Mr. Hirsch's test. To aid listeners who experience bass heaviness under such conditions, we have developed an accessory to the KLH-1 called the "small-room adaptor." It plugs into the input of the KLH-1's Analog Bass Computer (ABC) and tailors the frequency response appropriately. This adaptor will be available shortly from KLH at modest cost.

We would also like to point out a small descriptive error in the review. The Analog Bass Computer does *not* incorporate thermal analog protection as stated. Thermal damage to the midrange driver and tweeter is extremely unlikely, however, as evidenced by both our tests and Mr. Hirsch's. The indicator lights on the ABC show when there is a possibility of thermal damage to these drivers and when the amplifier is clipping. The ABC's circuitry also provides effective protection for the woofer of the KLH-1 under practical conditions.

DENIS WRATTEN Executive Vice President, KLH Westwood, Mass.

Cartoonist's License

10

• The John Rouson cartoon on page 108 of the April issue, which delightfully portrays the dismay of a young violin student observing a rather seedy street fiddler, is amusing but may leave the wrong impression with readers. If parents only knew that scholarships to outstanding colleges for qualified young violinists, violists, cellists, and bassists are going *begging*, we'd quickly see a musical renaissance in this country of impressive proportions. Presumably these young string players will avoid life in the gutter to become lawyers, doctors, teachers, scientists, and so forth—and also members of an alert, participatory audience for professional musicians!

Rouson's cartoon on page 80 of the same issue showing a music critic at work in white tie and tails is, however, right on target. When the musician's performance ends, the critic's begins. Do performers appreciate the virtuosity that goes into a wellwritten review?

> BENJAMIN S. DUNHAM Executive Director Chamber Music America New York, N.Y.

One can only hope.

Dubbing Rub

• I am a tape fan and a computer programmer, so I am still enjoying your excellent March Special Tape Issue—particularly the cover, which gave me something new to lust after.

For me, the main value of tapes is to take a high-quality blank cassette tape and dub my latest disc acquisition so that I can listen to it on my way to and from work; I can make much better cassettes than most of the majors are turning out. I realize that this is basically dishonest, but I usually erase it after I've had a chance to listen to it a few times. I stand a much better chance of getting to listen to a new recording promptly that way than if I have to wait for a quiet Saturday afternoon to roll around. Besides, it keeps the record itself in mint condition. GENE LACY

Houston, Tex.

The Editor replies: Mr. Lacy's sensitivity to the ethical problems of dubbing from disc to tape does him credit, but I would not tax my conscience because of a bit of cassette "Xeroxing" for my own use. I

(Continued on page 12)

STEREO REVIEW

Discover satisfaction. Camel Lights. A SCADS A

The Camel World of satisfaction comes to low tar smoking.

This is where it all started. Camel quality, now in a rich tasting Carnel blend for smooth, low tar smoking. Carnel Lights brings the solution to taste in low tar.



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

LIGHTS: 10 mg "tar", 0.9 mg nicotine. LIGHTS 100's 13 mg. "tar 1.11 mg. nicotine, av. per cigarette by FTC methods: would, however, characterize as criminal activity the running off of free copies for friends or other copies for sale off the back of a van in the shopping-mall parking lot. I know too many hungry musicians.

Corporate Philistinism

I was delighted with Editor William Anderson's April column ("Speaking of Music") on the Nonesuch affair. It takes intelligence, perspective, and genuine conviction to speak out in this way.

Philistinism on the part of many of our American corporations involved with cultural or artistic products or services is a fact of life of long standing. Fortunately, it is slowly becoming somewhat tempered by a growing awareness of their humanistic and social responsibilities. What fascinates me, however, is the flip-flop character of corporate policy in this regard, especially as exhibited by our large communications corporations. As Mr. Anderson pointed out, they love the social cachet that attaches to association with the top luminaries of the world of classical music. But more than that, one would think that even in self-interest their fiscally minded top executives would realize that supporting a classical division brings an image of high quality and "class" to the whole corporation in all its activities. And there are few corporations today that would



<complex-block>

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not benefit from upgrading their public image.

FREDERICK STEINWAY Amherst, Mass.

American business' consciousness of its social responsibilities can be raised; just demonstrate that it costs money to ignore them. Ford was introduced to a brand-new "bottom line" when it won the Pinto case by the skin of its teeth, the FCC yanked RKO General's broadcasting licenses because of some hanky-panky TV Guide called "a practice most businessmen consider to be normal commercial procedure," and Elektra/Nonesuch was trapped by its recent PR debacle into essentially continuing (at least for now) what director Teresa Sterne had been doing all along instead of quietly folding the label and stealing away. It would be interesting to know how these events have been presented to stockholders.

ARTHUR CROOKSHANK New York, N.Y.

Digital Star Trek?

Steve Simels' March review of the soundtrack of Star Trek-the Motion Picture did not do the recording justice. It's not simply "well recorded"; sonically, it's one of the most exciting discs I've heard in a while. From the extremely dynamic bottom end, such as the bass drum in the cut The Enterprise, to the soft, natural sound of the solo piano in Ilia's Theme, the album is certainly well recorded. Score one for Columbia. What puzzles me, though, is that on the back of the album jacket are the words "Sony Digital Recording." If it is a digital recording, why didn't the producers bill it as such more prominently? If they had, the album would be more appealing to hi-fi enthusiasts and not-so-hi-fi thrill seekers as well, digital being the "in" thing now in sound.

> STEVE MITCHELL Independence, Kan.

The original soundtrack recording for Star Trek—the Motion Picture was a twentyfour-channel analog tape. Sony digital equipment was later used to produce the two-channel disc master. STEREO REVIEW reserves the \mathbf{O} symbol and the designation "digital-master recording" for analog discs whose first-generation master recording was made with digital equipment. Even this system is a hybrid that will in time give way to the all-digital disc, and such anomalies as the Star Trek soundtrack album, however fine their sound, represent mere temporary expedients.

Arabesque Correction

Richard Freed's very kind review in April of the Arabesque recording of Delius' Songs of Sunset and Borodin's Polovtsian Dances contains a slight error. Both of these performances are in stereo sound, the Delius for the first time anywhere. The Delius was originally issued by EMI in England in mono on ALP 1983. When Arabesque asked EMI for the tapes, I was able to tell them that the recording was in stereo be-(Continued on page 14)

The new Sansui G-4700.



A double-digital receiver with all the right numbers.

Digital readouts and digital circuitry. Great specs. And the best price/performance ratio in the business. All the right numbers. That's the new Sansui G-4700, Just look what we offer:

Double-Digital Design: The front panel of the G-4700 has a bright electronic digital readout that shows the frequency of the station you've selected; and behind the front panel is one of the most advanced tuning systems in the world.



Sansui's patented Digitally Quartz-Locked Circuit uses a precise quartz crystal time base to keep your station locked in, even through many hours of listening or if you turn the receiver off and back on again.

Conventional quartz-controlled receivers use analog phase comparison circuits that can become inaccurate because of harmonic interference. Our system uses a new LSIC (Large Scale Integrated Circuit) digital processor that actually counts the vibrations of the quartz crystal to compare to the tuned frequency. The frequency is perfectly locked in the instant you find the station you want.

With this unique Digitally Quartz-Locked system, the G-4700 delivers high sensitivity (15dBf, mono); a better signal-to-noise ratio (75dB, mono); and a better spurious rejection ratio (70dB).

DC power amplifier: Power is ample for almost any speaker made, with 50 watts per channel, min. RMS, both channels driven into 8 ohms from 20 to 20,000Hz with no more than 0.05% THD.

And the wide bandwidth DC power amp circuit responds quickly to transient music signals for the most accurate and pleasing music reproduction. What you hear is clean and sharp, just the way it was recorded.

Electronic LED power meters: Don't worry if your present speakers can't handle 50 watts. The array of fast-acting LED's (Light Emitting Diodes) on the Sansui G-4700 lets you monitor and control the output level so you don't damage your speakers.

Electronic tuning meters: Two fluorescent readouts help to zero-in on each station with accuracy and ease. Both the signal strength and centertune indicators operate digitally for precise station selection, and the nearby LED verifies that the quartz circuit has locked in your station.

Superb human engineering: A full complement of genuinely useful knobs, switches and jacks gives you complete control over what you hear and how you hear it.

Ask your authorized Sansui dealer to demonstrate the G-4700. Listen to the music. You'll love what you hear. Look at the numbers. You'll love what you see.

SANSUI ELECTRONICS CORP.

Lyndhurst, New Jersey 07071 • Gardena, Ca. 90247 SANSUI ELECTRIC CO., LTD., Tokyo, Japan SANSUI AUDIO EUROPE S.A., Antwerp, Belgium In Canada: Electronic Distributors



CIRCLE NO. 46 ON READER SERVICE CARD





A component system in disguise.

If you've always wanted component sound, Mitsubishi has the answer. Our new Auto Modules have all the advantages of component separates, yet feature all the conveniences of an in-dash system.

in-dash system. The CZ-747 with its super-compact chassis, contains the in-dash module tape transport and tuning sections. It features a Sendust head, metal tape bias switch and an electronic tuning system with memory, scan and auto-search. Time-of-day and

tuning frequency are digitally displayed and both tape and FM feature Dolby[®] Noise Reduction.

There's also the CZ-692. It features five AM or five FM pushbutton tuning, Sendust head and metal tape bias. It tap here Dally.

head and metal tape bias. It too has Dolby® Noise Reduction on tape and FM sections.

Add one of the Mitsubishi Power Modules to suit your power requirements. Our Power Modules are available in 8, 20 or 40 watts per channel.

We also offer an optional 5-band Graphic Equalizer Module for complete sound contour control.

The Mitsubishi Auto Modules. A total concept in component stereo for the road. You owe yourself a visit to your nearest Mitsubishi Car Audio dealer.

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cause I happened to have been present when it was made. After a considerable search, EMI found the tapes, which were then edited for the Arabesque release. The Borodin was originally issued in England in stereo on SXLP 30171. Both works had completely different couplings in their English releases.

WARD BOTSFORD Executive Producer Arabesque Recordings New York, N.Y.

Pro Nukes

 Steve Simels' remarks about nuclear power in his review of the "No Nukes" album (March "Best of the Month") make me boiling mad. Nuclear energy is the safest, most nonpolluting form of energy we have. What do Mr. Simels and his shallowthinking cohorts have to offer as alternatives? All major hydroelectric sites are in use and any proposed additional projects are invariably blocked by environmentalists. Coal is plentiful, but again environmentalists block its use, from mining to burning. Development of geothermal energy is also fought by environmentalists who attempt to withdraw favorable areas from utilization. Solar energy is usually held out as the savior, but in reality it offers little practicality in the near future for generation of electricity.

Well-managed nuclear energy offers by far our best hope of energy self-sufficiency. To deny its use is a much greater step toward "both short-term and long-term suicide" as Mr. Simels calls it. If people with Mr. Simels' view get their way, STEREO RE-VIEW itself will become useless. The only recorded music we will then be able to listen to will have to be played on hand-cranked phonographs.

> DAN AVERY Baker, Ore.

Steve Simels replies: It seems to me that it is a critic's duty to let the reader know where he stands on an issue when it directly relates to a recording like this one. After all, proceeds from the sale of the "No Nukes" album will be going to groups lobbying against nuclear power, and it would have been hypocritical to recommend the set if I were in fact pro-nuke.

Simels vs. CSN

• I just knew Steve Simels couldn't resist, in reviewing the "No Nukes" album (March), another groundless, pointless swipe at Crosby, Stills, and Nash—you know, the people who haven't "written or sung a decent new song since 1970." I find myself wondering what can be made of a record critic who has yet to write a valid, coherent review. I think I may have the answer: Mr. Simels finds albums "delicious" and therefore never gets to hear the best parts.

> BRUCE CAMPBELL Port Jefferson, N.Y.

Webster's New Collegiate Dictionary replies: delicious-affording exquisite pleasure; delightful.

CIRCLE NO. 34 ON READER SERVICE CARD



Harman Kardon introduces low negative feedback design for inaudible TIM distortion.

For the last few years, audio manufacturers have been rushing to bring you newer, lower THD levels in their amplifier sections. And every year, they've accomplished this the simplest way they could. By adding negative feedback, a form of electronic compensation.

Unfortunately, this "cure" for THD—typically 60-80dB of negative feedback—creates another form of distortion. Transient Intermodulation Distortion, or TIM, which does far more to degrade the music than THD.

At Harman Kardon, we lowered THD the right way. With a unique circuit design (U.S. Patent #4,176,323) that lets us use just a fraction of the negative feedback typically used. The result is our new hk700 series High Technology Separates. Built around our low negative feedback amp/ preamp combination that delivers a crystal clear, totally transparent 65 watts per channel. You can also choose from a full-featured digital tuner, a phase locked analog tuner, and the most advanced cassette deck on the market.

The world's first cassette deck with Dolby* HX.

Our new metal cassette deck goes beyond metal. It features the all new Dolby HX circuitry for an extra 10dB high frequency headroom and an astonishing 68dB signal-to-noise ratio. With Dolby HX, even an inexpensive tape can perform like a premium metal tape. And a premium metal tape sounds unbelievable. Our new separates look as good as they sound. Each measures a mere 15" wide x 3" high. As you can see, they stack beautifully.

We suggest you audition them. But only if you're serious. Once you hear the difference low negative feedback can make, you'll never settle for anything less.

(For the location of the Harman Kardon dealer nearest you, call toll-free 1-800-528-6050 ext. 870.)

*Dolby and the double-D symbol are trademarks of Dolby Laboratories Inc.

harman/kardon

55 Ames Court, Plainview, NY 11803 In Canada, E.S. Gould Marketing, Montreal.

CIRCLE NO. 22 ON READER SERVICE CARD

New Products latest audio equipment and accessories



Improving the Stereo Image

□ The Model 801 Omnisonic imager from Omnisonix, Ltd., is claimed to make sounds appear to come from many sources in the listening area, depending on the nature of the source material. The device, which contains response-shaping, phase-shifting, and channel cross-coupling circuitry, connects into the tape-monitor loop of a stereo system. Specifications include total harmonic distortion of less than 0.005 per cent from 10 to 20,000 Hz and a signal-to-noise ratio of greater than 98 dB. Input impedance is greater than 25,000 ohms, output impedance is less than 200 ohms, and the maximum output level is 8.5 volts. The unit measures 10 x 6 x 41/4 inches and weighs about 2 pounds. Price: \$179.95. Omnisonix. Ltd., Dept. SR, P.O. Box 307, Wallingford, Conn. 06492.

Circle 120 on reader service card



□ In addition to a continuous power output into 8 ohms of 20 watts per channel at no more than 0.02 per cent total harmonic distortion (THD) from 20 to 20,000 Hz, the NAD 7020 AM/FM stereo receiver has an IHF dynamic headroom of 3 dB. It can deliver a maximum short-term power of 72 watts per channel into 2-ohm loads. Figures for intermodulation distortion are less than 0.02 per cent, as is the specification for transient intermodulation distortion. The power-amplifier section also has a soft-clipping feature that provides an audibly smoother overload characteristic. The electrically separable preamp section has a phono preamp designed for low noise with a cartridge connected, minimum cartridgeimpedance interaction, and wide dynamic range. The infrasonic filter has a -3-dBpoint at 15 Hz and falls off at 24 dB per octave. The 12-dB-per-octave ultrasonic filter has a -3-dB point at 35 kHz. The tone controls are designed to operate without altering the frequency balance in the midrange. The FM tuner, with a PLL multiplex plex decoder, has an IHF usable-sensitivity rating of 1.9 microvolts (10.8 dBf), 42 dB channel separation at 1 kHz, and 65 dB alternate-channel selectivity. The FM THD at 100 per cent modulation with a 1-kHz signal is 0.2 per cent in mono. An IC provides the AM circuitry. The front panel has switching for two sets of speakers and one tape deck. Dimensions are 43/4 x 161/2 x 91/2 inches, and weight is 15 pounds. Price: \$330.

Circle 121 on reader service card



□ The Cambridge 208 is a small two-way ducted-port system said to have a flatter low-end frequency response without the usual penalty of low efficiency. The unit's 8-inch woofer has a long-throw bifilarwound voice coil; crossover to the 1-inch tweeter is at 2,000 Hz. Tweeter level is variable over a 5-dB range. Overall frequency response is within ± 2 dB from 50 to 20,000 Hz. The cabinet, made of a walnut veneer over a compressed-wood core, measures 11 x 19 x 10 inches and weighs 25 pounds. Price: \$129. Cambridge Physics, Inc., Dept. SR, 26 Fox Road, Waltham, Mass. 02154.

Circle 122 on reader service card



□ The Realistic TR-3000 quarter-track open-reel deck has three heads with off-thetape monitoring. The deck's pushbutton-activated full-logic solenoid transport control provides a constant tape tension that allows switching from the fast-wind modes to play without tape spills or breakage. The two reel motors are high-torque units while the capstan is driven by a servo-controlled motor. Bias and equalization switches optimize the machine for high-bias or normal tapes. Independent mike and line inputs permit built-in mixing. The 71/2- and 33/4-ips machine has a specified frequency response of 30 to 20,000 Hz ± 1.5 dB at 71/2 ips. Total harmonic distortion is 0.9 per cent at 0 VU. Wow and flutter at 71/2 ips is 0.06 per cent (weighted rms). Dimensions are 127/8 x 163/8 x 9 inches. Price: \$499.95.

Circle 123 on reader service card



Antistatic Record Sleeves From Empire

□ Audio Groome record sleeves from Empire Scientific Corp. are claimed to be tearproof. Lining is a high-density polyvinyl plastic selected because of its similarity to record vinyl. It is claimed that the liner will (Continued on page 18)

The continuing story of TDK sound achievement.

Part One.

Music has gone through many transitions. Its rhythms, tones and forms have changed dramatically. As have the means of reproducing it. From the first wax cylinder to today's music machine: the TDK cassette.

TDK pioneering in ferrite technology began over forty years ago. This led TDK engineers to develop microscopic particles which, through their long shape and uniform size,



could translate magnetic energy into flawless sound. By 1968 TDK had created TDK SD. The world's first high fidelity cassette. In 1975, TDK created a

revolution. Super Avilyn. Ultrarefined gamma-ferric oxide particles were bombarded with cobalt in a proprietary ion-adsorption process. The resulting TDK SA cassette had higher signal to noise. Higher coercivity. Low noise. A maximum output level superior to anything heard before. Overnight, TDK SA became the high bias reference.

[©]1980 TDK Electronics Corp.; Garden City, N:Y-11530

TDK has a philosophy of sound. A belief that total performance is the outcome of a perfect interplay between the parts. It all begins with *Part One*, the TDK tape. Magnetic powder is first converted into TDK magnetic material in the form of a coating paint or binder. On a giant rotary press and

in a dust-free atmosphere, jumbo rolls of tensilized polvester are coated evenly with TDK binder. The tape rolls are edited and leader is inserted at precise intervals. Surgically sharp knives then cut the tape into predetermined widths. The edges perfectly straight. All along the way, TDK tape undergoes thousands of checks. It's polished to micron smoothness to give better head contact, increase sensitivity and maintain stable output. TDK binder, recently improved, packs more particles on the tape surface. And the whole process is done automatically. Controlled by a central computer brain. From CIRCLE NO. 55 ON READER SERVICE CARD the very first, TDK tape runs true. And so does the sound.

The TDK story will unfold in future chapters. You'll learn about other key parts and their sound synergy in a TDK cassette. And you'll draw only one conclusion. Music is the sum of its parts.





THE AUDIO PRO TA-150 AM/FM RECEIVER

The finest audio component must do more than merely sound good.

For an audio component to be the absolute finest, it must satisfy <u>all</u> design parameters.

Audiophiles tell us the ideal component is a straight wire with gain. The TA-150's all-electronic design comes closest, which helps explain why its sound rivals the finest separates.

Scientists tell us the perfect machine would have no moving parts. The TA-150 has but one, a single programmable knob.

Designers tell us that form must follow function. The beauty of the TA-150 is that the world's most sophisticated receiver is also the easiest to operate.

Sound, science, and style. The total design approach to audio.







New Products latest audio equipment and accessories

not cause chemical leaching from the record surface and that it eliminates static build-up. The liner wraps around the edge of the disc, eliminating dust pick-up from the paper outer sleeve. The outer sleeve has pre-printed blanks for writing in disc information such as the number of playings. Price: \$2.50 for a package containing ten sleeves; available in record shops.



□ The Technics SE-A3 power amplifier (from the company's recording and broadcast division) features class-A circuitry. Rated power output is 200 watts per channel into 8 ohms with no more than 0.002 per cent total harmonic distortion from 20 to 20,000 Hz. Signal-to-noise ratio is 123 dB referenced to full output power. Other aspects of the unit's design are direct coupling throughout, independent left- and rightchannel power transformers, low-inductance power-supply capacitors, fast-response power meters with 0.01- to 300-watt display ranges, and switching for two speaker systems. Price: \$1,300.

Circle 124 on reader service card



□ One of a new series of similarly styled automotive units from Kenwood is the KXC-757 cassette deck. Incorporating auto-reverse and Dolby circuits, the deck also includes Kenwood's cassette-standby feature, operable in conjunction with the KTC-

767 tuner, which switches on a previously cued-up cassette when radio reception falls below acceptable limits. In addition to Sendust heads, the KXC-757 features volumecontrol and cassette-well illumination, automatic cassette ejection when the ignition key is turned off, and bidirectional tape advance that automatically locates the gaps between selections. The deck is adjustable for CrO, and metal tape as well; frequency response with conventional ferric tape is said to be 30 to 16,000 Hz. Wow and flutter are rated at less than 0.12 per cent (wrms). and the signal-to-noise ratio is 60 dB with Dolby activated. The KXC-757 measures 611/16 x 61/2 x 21/8 inches. Price: \$269.

Circle 125 on reader service card



Sanyo's AM/FM Receiver with Cassette Player

□ Sanyo's in-dash Model FT C8 receiver/ cassette player is supplied with two interchangeable Plexiglas dial plates-one for vertical mounting and the other for horizontal-for use in cars requiring either arrangement. Featured is Sanyo's Automatic Music Select System (AMSS), which can scan the tape in either fast-forward or rewind modes to locate and play the next selection. In addition to normal manual reverse, the unit incorporates autoreverse to change tape direction at the end of the cassette. The FT C8 also includes separate bass and treble controls, an FET front end and PLL MPX decoder in the FM tuner section, and a fader control to adjust sound levels between front and back speakers. The face plate is reversible, being black on one (Continued on page 21)

The 1980 Mazda RX-7 GS

Just one look is all it takes to appreciate the exceptional value of the Mazda RX-7 versus Datsun 280ZX or Porsche 924.

As remarkable as the Mazda RX-7 is on its own merits, it looks all the better when compared with the competition. Because the sleek, aerodynamic RX-7 is virtually everything you could want in a refined sports car—at an almost unbelievable price.

It can reach 0-50 in 6.3 seconds. Its inherently compact rotary engine is placed <u>behind</u> the front axle, for ideal weight distribution and superb handling.

In auto racing, a speciallyprepared RX-7 won its class at the Daytona 24-hour race. Another RX-7 set a world speed record at Bonneville.

The smoothness of the rotary engine makes the RX-7 a quiet sports car. All this performance from a car that can attain excellent gas mileage on the open road.

17 EST. **28** EST.** mpg **28** hwy mpg But the front mid-engine RX-7 offers infinitely more than performance. It also provides extraordinary comfort.



So if you know what you want in a sports car, and you don't want to pay a king's ransom to get it, take a look at the RX-7 GS or S Model. The beautifully-styled, high-mileage, high-performance sports cars from Mazda.

You're also going to like the looks of RX-7 GS standard features.

• AM/FM stereo radio with power antenna • Side-window demisters • Cut-pile carpeting • Tinted glass • 5-speed • Tachometer • Styled steel wheels • Steelbelted radial tires • Front and rear stabilizer bars • Ventilated front disc and finned rear drum brakes with power assist • Electric remote hatch release. 3-speed automatic transmission, air conditioning, aluminum wheels and sun roof available as options.

\$8395*

*Manufacturer's suggested retail price for GS Model shown. S Model \$7645. Slightly higher in California. Actual prices established by dealers. Taxes, license, freight, optional equipment and any other dealer charges are extra. (Wide alloy wheels shown \$275-\$295.) All prices subject to change without notice.

*EPA estimates for comparison purposes for GS Model with 5-spd. trans. The mileage you get may vary depending on how fast you drive, the weather, and trip length. The actual highway mileage will probably be less. California, [6] estimated mpg, 27 estimated highway mpg.

Mazda's rotary engine licensed by NSU-WANKEL.





Yamaha's PX-2 linear tracking turntable. A class of one.



Yamaha's new PX-2, the flagship of a remarkable new series of turntables from Yamaha, is destined to become the new standard of the audio industry. It is a masterpiece in the art of music reproduction. Totally in a class by itself.



One of the major performance advancements on the PX-2 is Yamaha's unique optimum mass straight tonearm assembly. This design concept is Yamaha's direct challenge to the industry trend of low-mass tonearms. Among the most significant benefits of optimum mass is that it specifically addresses two of the most critical elements of music signal tonal quality—tonearm resonant frequency characteristics and high trackability with a wide range of cartridges. Tonearm mass is such a critical element in sound reproduction (especially in the low and high frequency ranges) that Yamaha has designed this optimum mass tonearm to insure its resonance frequency is at the "least effect" point. (See graph.) As a further benefit, the vast majority of available cartridges can be effectively

matched with the Yamaha tonearm. Even MC types.

But the optimum mass tonearm is only one factor that puts the PX-2 in a class by itself. There's much more. Like an extraordinary 80dB S/N ratio, with incredibly accurate tangential tracking – constantly monitored by an opto-electronic sensor. The PX-2 is also a study in durability with its solid, anti-resonant monolithic diecast aluminum base. And the combined effect of the hefty platter and the heavy-duty DC motor depresses wow and flutter to below 0.01°₀.

Yet with all this performance, the PX-2 is deceptively easy to operate. All the microprocessor-activated controls are easily accessible – without lifting the dustcover.

The balance of the turntables in our new line (the P-750,



P-550, P-450 and P-350) all incorporate this same optimum mass tonearm philosophy. Each will set new standards for performance per dollar invested.

Visit your local Yamaha Audio Specialty Dealer for a personal test of our remarkable

 $\ensuremath{\text{PX-2}}$ and the other superb turntables in our new series. You'll hear music that's truly in a class by itself.

For more information write us at Yamaha, Audio Division, P.O. Box 6600, Buena Park, CA 90622.

*Yamaha cartridges shown (MC-1X and MC-7) on both models are optional.



New Product latest audio equipment and accessories

side and brushed aluminum on the other. A local/distant switch is included, as is an up/ down control for electric antennas. Frequency response is 80 to 20,000 Hz, and power output is rated at 41/2 watts per channel. Price: \$129.95.

Circle 126 on reader service card



□ The SD 4000 cassette deck operates at 17/8 ips and is said to give extended highfrequency response, improved dynamic range, and reduced wow and flutter at 33/4 ips. The deck also has three heads to give off-the-tape monitoring capability with double Dolby circuits. The unit's Sendustalloy heads provide the high-bias-level performance necessary for metal tapes in addition to superior high-frequency performance and long life. A CompuSkip feature will automatically seek out the next program selection in rewind or fast-forward modes. The rack-mountable unit also has LED peak-level meters, mike/line mixing, switchable multiplex filter, and bias and equalization settings for normal, CrO₂, FeCr, and metal tapes. Price: \$435.

Circle 127 on reader service card



□ "Scotch" VHS and Beta-format videocassette head cleaners include a prerecorded message telling the user when the video heads are clean. Each cassette contains five minutes of specially formulated tape that cleans recorder heads of dirt and debris in less than 30 seconds. A special process makes it possible for the cleaning tape to feature a video message which reads, "When you can read this message your heads are clean. Stop the recorder now." The life of the cleaning tape is determined by the amount of dirt removed from the heads. Prices: VHS, \$28.95; Beta-format, \$27.95.

Circle 128 on reader service card



JBE Turntable from Lights Fantastic

□ The JBE Series 3 turntable is claimed to be particularly resistant to acoustic feedback. The weight and density of the turntable's solid slate base is said to reject outside disturbances, resonances, and acoustic feedback. The 41/s-pound platter is made of acrylic materials and solid aluminum. The two-speed direct-drive chassis rides on four adjustable "microsorber" feet said to give high isolation from acoustic feedback. The DIN peak-weighted wow and flutter is specified as 0.07 per cent, and DIN B-weighted average rumble is -73 dB. To minimize electrical interference with the motor, arm, or cartridge, the turntable's control system and transformer are housed in a separate acrylic-finish box. The turntable comes without an arm but with holes drilled for the standard SME-type mounting. Price: \$795. Lights Fantastic, Dept. SR, 229 Newtown Road, Plainview, N.Y. 11803.

NOTICE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturers.

Domestic inflation and fluctuations in the value of the dollar overseas affect the price of merchandise imported into this country. Please be aware that prices quoted in this issue are subject to change.

21



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Given this issue's focus on the subject of highway hi-fi, I am departing from the usual format of this column in order to address myself to those questions that are (or should be) most frequently asked about car-stereo equipment. Since I find that the car-stereo marketplace is, at the moment, a confused combination of art, science, and silliness, some of my views may be at odds with your own opinions or what you have been told elsewhere. Nevertheless . . .

Q. What do you mean when you refer to car-stereo "silliness"?

A. From my point of view, it appears that much of the equipment is designed for a rather unsophisticated consumer, someone who is entranced by a multiplicity of knobs, buttons, flashing LEDs, and lots of power (or at least mid-bass boost), none of which necessarily make much of a contribution to the sound quality in a car.

Q. How has this flood of unsophisticated apparatus come about?

In my view, it is a natural consequence A. and extension of the car owner's urge to "accessorize" his vehicle. Much has been written in the past about Americans' love affairs with their cars and their tendency to convert their vehicles into living rooms (or bedrooms) on wheels-even before the popularity of the van. The urge to customize is expressed both by chrome-plated engine blocks and over-kill car stereos. The big difference is that only another car lover is likely to appreciate a chrome job, while anyone with two ears-whether car lover or not-is likely to be impressed by a 100-dB or so sound-pressure level (SPL) of carstereo mid-fi rattling his ear drums.

Q. How much amplifier power do I need in a car?

A. This is a difficult question which is Berger's article elsewhere in this issue. First of all, how loud a sound do you want? I think it's a bad—or even *fatal*—mistake to drive in any metropolitan area with a car stereo playing loud enough to drown out fire, ambulance, or police sirens. Of course, that doesn't mean that your system shouldn't have the potential to play very loud, but *loud* without *clean* will be psychologically wearing in very short order.

In a car's closed environment sound pressures are established fairly easily (an analogy can be made to headphone listening-if you don't carry it too far). Given the reasonably efficient drivers sold for car use, super-power amplifiers aren't needed unless your intention is to draw blood from the ears of listeners. However, since car-stereo equipment does not fall under the jurisdiction of the Federal Trade Commission's "truth in power-output" advertising rule, some manufacturers rate their equipment somewhat optimistically. A few published power ratings of, say, 40 or 50 watts, when properly deflated, could well turn out to be close to 10 watts per channel at 5 per cent distortion. This means that an amplifier which, on paper, seems over-powered for your needs may work out just right.

I've found that a real 50-watt-per-channel car power amplifier with legitimate hi-fi specs (in regard to frequency response and distortion levels) and driving a good pair of 6 x 9-inch, 20-ounce-magnet coaxials in the rear deck of a full-size car is capable of producing a measured 110 dB on peaks without distorting. I suggest, therefore, that 20 watts or so per channel should produce as much loudness as most people would want, as long as the 20 watts are real and not merely a wish-fulfillment fantasy of the manufacturer.

Q. What are your suggestions on car speakers?

A. For starters, you must realize that car speakers are far more difficult to select, install (mechanically), and position (acoustically) than home speakers (I almost wrote "equivalent" home speakers, but there is no real equivalency involved). First of all, the bass performance of a car speaker cannot go much below 70-80 Hz or so unless the speaker is equalized or mounted with its rear "loaded" by the trunk.

In my opinion, unless you want to play your car stereo very loud, a two-way system is adequate, except that it may present problems in respect to acoustic perspective. (Continued on page 24)

An in-depth look at the only "plug-in" remote control system you'll ever need for your home.

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16 UNIT CODE KEYS

You're in control by remote control.

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There's no end to all of the control you've got.

You can turn on the TV, radio or stereo in the morning to help you wake up without getting up from bed. Or at night, turn on the lights before going downstairs so you don't have to fumble in the dark. Turn off unnecessary lights and help get your electric bill under control. Or, dim the lights and save energy, too.

And when it's time to turn in, just push a button and turn everything off. And sleep soundly. But, if you hear a strange noise in the middle of the night, you can press a button to turn on all the lights and scare the daylights out of an intruder.

The Controller is designed to control every room in the house.

By pressing the buttons on the Command Console keyboard, command signals are transmitted over existing household wiring to the module of your choice. The Lamp Module turns on, off or dims any incandescent lamp up to 300 watts. The Appliance Module turns appliances like TVs, window fans or stereos on and off. And the Wall Switch Module is designed to turn on, off or dim any light or lamp up to 500 watts normally operated by a wall switch.

There's even a Cordless Controller that transmits signals to an Ultrasonic Command Console from up to 30 feet away. So there's plenty of control for everyone.

Simplicity is built into the system.



No special wiring is needed. Simply plug The Controller Command Console into any wall outlet in any room of the house.

Set your personal house code on the console. Then plug your lamps and

- FUNCTIONS: ON, OFF, BRIGHTEN AND DIM

FUNCTIONS ON AND OFF

> FUNCTIONS: ON, OFF, BRIGHTEN AND DIM

appliances into the appropriate modules. Set the individual unit code on each module to correspond to the appropriate button on the Command Console keyboard. Plug in the modules. And you're ready to take control.

For under \$100; everything's under control.

The Controller Starter Kit comes with a Command Console and modules to control lights and appliances at three locations. The system is also sold separately, so you can add to it at any time. And stay in control.





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audio-technica.



I, for one, dislike having the main sound source behind me, as it is in rear-deck-only installations. Some manufacturers have three-way separate systems with the woofer meant for bass-efficient rear-deck installation and the midrange/tweeter to be mounted up front somewhere. That might seem to be a good idea—except that many of the current systems are badly designed in respect to their crossover points. With the woofer operating up to 1,000 Hz or so, there is too much directional information coming from the rear most of the time. I'm not a firm believer in the importance of phasealigning speaker systems, but having a high-crossover woofer at the rear of the car and high-frequency reproducers up front is psychoacoustically ridiculous. The right way to do it is to put the crossover from the trunk-mounted woofer at 200 Hz or so and have the front- or door-mounted midrange/ tweeter unit operate from 200 Hz on up. And if equalization is used, the woofer doesn't have to be trunk-mounted.

Q. How do you feel about the use of graphic equalizers?

I think they're a good idea, but five A. bands are all that most users can cope with. They can restore the bass lost through inadequate mounting or excessively heavy magnets, but heavy bass boost applied to a speaker whose cone suspension and voice coil aren't designed to take it will cause damage. A bass boost of "only" 3 dB is equivalent to double the power applied from the amplifier. How do you know when you've become excessive in your equalization demands? If your previously clean sound becomes muddy or harsh or you hear snapping sounds on peaks, you are about to be in trouble or already are. Excessive treble boost will give no early warningyour tweeters will just quietly burn out.

How can I keep my car-stereo equipment from being stolen?

You can't. But many of the same A. general rules and precautions that help prevent your entire car from being stolen will help. Anyone who announces to the world with a manufacturer-supplied window decal that there's a Sonoconic speaker or a Kuzocorder receiver installed in his car is asking someone to de-install it surreptitiously. Other advertisements, such as loud free concerts in the parking lot or cassettes strewn on your dashboard, are also come-and-get-it invites. In other words, be discreet and avoid the temptation to show off your equipment visually or sonically. It may be so impressive that others can't wait to make it their own.

TINALLY, if you're not going to do the installation yourself (see the note at the end of Ivan Berger's article), choose your installer with a great deal of care, perhaps as much as you brought to bear on your choice of equipment. Although an installer's working position may be similar to Michelangelo's when dealing with the Sistine Chapel ceiling, he surely won't have the same degree of aesthetic good sense. In short, discuss with him *where* each element of your system is to be mounted rather than leaving the decision up to him.

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different oxide layes for "extra bright" playback in car stereo systems.

Like every BASF Professional Tape, PRO III comes with a lifetime guarantee that covers everything. Should any BASF cassette tape ever fail for any reason, we'll replace it at no cost. PRO III also comes with our patented "Jam-Proof" Security Mechanism – a BASF exclusive that provides smooth, exact winding, alleviates wow and flutter, and puts an end to tape jamming.

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It's called print-through. And if you think it interferes with your reading, you should hear what it does to your listening.

- The star

It happens on tape that has low magnetic stability. Music on one layer of the tape is transferred to music on an adjacent layer, causing an echo.

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CIRCLE NO. 32 ON READER SERVICE CARD



TURN THE (CAR) RADIO ON

T might not be evident from the tonguein-cheek cover of this month's issue, but car-stereo cassette/receivers are physically small and designed to put hi-fi into your car with relative ease. It was not always thus; there was once a time when installing even a radio in a car was a Herculean task.

The very first car radios weren't even car radios---they were just big, bulky, batteryoperated sets that people dragged out of their living rooms and manhandled into their cars. They worked very nicely, if clumsily, for, say, a picnic: the radio would operate on its own batteries when the car's engine was off, but the electrical interference generated by the engine's ignition made the radio useless when the motor was running. And so, in the late Twenties and early Thirties, some drivers whose love for radio was stronger than their good sense began actually installing special car radios rather than just parking home sets on the back seat. It was a process that could take as much as a week in some cases: much of the car had to be dismantled and, with luck, reassembled around the radio's several scattered parts. The size of such a radio could range from that of a present-day large car battery to that of a tool box, and it was connected to an electromagnetic speaker in an enclosure about the size of a hat box. The controls (volume and tuning) were usually in a small "remote-control" module meant to be clamped to the steering column and connected to the main radio chassis through a mechanical cable linkage. The "aerial" was frequently a large chicken-wire grid installed in the roof. A special large and heavy battery (or two) had to be installed under the floor boards. Even with all this, the radio would still produce nothing but noise when the motor was running. Eventually ignition and other electrical noises were eliminated by the use of devices called suppressors for the spark plugs, generator, and breaker points, as well as by putting the receiver itself in a shielding copper box.

All of this was, of course, an unforgivably complicated installation procedure, so manufacturers such as Chrysler, Studebaker, Dodge, Pierce-Arrow, and others shortly began building their cars with modifications (roof antennas and floor cutouts) that would make it possible to accommodate radios. Some early photos show home-grown antennas strung high over a car on T-bar mounts, front and back, that looked like nothing so much as the backyard clothes line. And car radio was so much of a novelty that "radio locks" came into use in open cars to prevent passersby from turning the radio on for a quick listen, then wandering off and leaving it to drain the battery.

Even the law conspired against the early car-radio buff. More than one locality tried to pass ordinances against car radios on the grounds that they could distract the driver, divert his attention, make him fall asleep, or distract drivers of other cars. The Radio Manufacturers Association (RMA) successfully fought this legalistic busybodying.

A curious sidelight was early police use of radio. The Chicago force was among the first (c. 1930) to make use of radio, but not as it's done today. They simply installed ordinary receivers in the police cars and had their messages to them broadcast over radio station WGN, cutting in on regular programming whenever they felt it necessary. The residents of Chicago might therefore be listening to the Cliquot Club Eskimos and suddenly find themselves hearing a real, live police broadcast. It soon became obvious, though, that the bad guys had access to the broadcast band too, and the police got their own special frequencies in about a year.

The antenna, that chicken-wire grid in the roof, ran into trouble when Fisher Body came out with the solid-steel top in 1934, thus making it necessary to find another place for the antenna. Just about every other place was thought of, from the running board (if you don't recognize that term, go look at an old car) to the spare tire. After a couple of years (once radios were sensitive enough to use them) someone dreamed up the beautifully simple whip antenna, and it's been in use ever since.

When FM first arrived on the car scene it did so by way of adaptors that permitted pickup of FM signals by the then all-AM radios, by that time all-in-one units about the size of a cigar box. Involved in its introduction were such companies as Motorola, Delco, and Automatic Radio-hardly surprising, for they had been in the car-radio business virtually from its beginning. In the mid-Fifties transistors began making their appearance in consumer electronic equipment. The first car radios to use them were "hybrids"-part tubes, part solid-state devices. In time the transistor took over completely, permitting the 12-volt car battery to be used directly (voltage had to be stepped up to 200-300 volts for the old tube units). The tube sets, however, had progressed to the point where they produced outputs of 10 to 12 watts (push-pull, using a vibratordriven step-up transformer power supply), while the early transistor units could produce only about 4 watts. Power-supply oscillators (electronic vibrators, if you will) have since been developed to provide the higher voltages the radio's output transistors need to yield more power output.

HE further miniaturization afforded by integrated-circuit chips has enabled engineers and manufacturers to create what amounts almost to home hi-fi systems even in a small car. No more wash-line aerials or copper-shielded radios, no more heavy, bulky batteries or radios the size of a breadbox. Now you can get good listening without a lot of hassle—unless, that is, you want to install four four-way speaker systems with a separate biamped four-channel power amplifier, accessory time delay, octaveband equalization, and





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| | M97ED | Nude Biradial (Elliptical) | ³ ⁄4 to 1½ grams | where light tracking forces |
| | M97GD | Nude Spherical | 3/4 to 11/2 grams | are essential. |
| | M97EJ | Biradial (Elliptical) | 11⁄2 to 3 grams | Where slightly heavier tracking |
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Shure has written a new chapter in the history of affordable hi-fi by making the space-age technological breakthroughs of the incomparable V15 Type IV available in a *complete line* of high-performance, moderately-priced cartridges: the M97 Era IV Series Phono Cartridges, available with five different interchangeable stylus configurations to fit every system and every budget.

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stylus assembly which results in lower effective stylus mass and dramatically improved trackability. Each of these features... and more... has been incorporated in the five cartridges in the M97 Series—there is even an M97 cartridge that offers the low distortion Hyperelliptical stylus! What's more, every M97 cartridge features a unique lateral deflection assembly, called the SIDE-GUARD, which responds to side thrusts on the stylus by withdrawing the entire stylus shank and tip safely into the stylus housing before it can bend.

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"The sound of this diminutive speaker is nothing less than astonishing.

"Listen to the Four if you possibly can. It is worth hearing—even if you are not shopping for a speaker—just for a demonstration of how good a small box can sound,"

Hirsch-Houck Laboratories Equipment Test Reports STEREO REVIEW June, 1978, Copyright Ziff-Davis Publ. Co.

"We can honestly say that we have never heard so much bass from such a small enclosure."

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"C'est une gamine charmante qui nous a surpris par son respect des timbres et de la dynamique, la grande lisibilité qu'elle donne de la musique."

HARMONIE

Mars 1979

"..., we were able to reproduce piano recordings with the immediacy, presence, and volume of the instrument itself. The bass reproduction is very tight and solid, as well as remarkably extended for such a small system. Few large systems we have heard have been more impressive."

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Vol. 11, No. 2, Spring 1978

Such comments would not have been made unless the high-frequency performance was also exceptionally good. The



treble range of the Allison Four is produced by a pair of convexdiaphragm tweeters of

our own design and manufacture, available only in Allison[®] loudspeaker systems. Our informative product catalog is available on request.

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Auto Treble Trouble

Q. Although I use good tape recorded on good home decks, when I play a dub on my car cassette system I have frequent trouble with: (1) a high-pitched "whine," usually most noticeable toward the end of a side; and (2) an intermittent loss of highs, not throughout the entire tape, but modulated at a slow rate. Most of my time in the car is in the state of Florida, where temperatures in a locked automobile tend to soar. Is this the problem?

David W. Aukamp Dunedin, Fla.

A. The increasing popularity of car-stereo systems has produced a number of reader inquiries basically similar to this one. The last time I bought a new car I checked into the OEM (original-equipment manufacturer) cassette decks available as a factory-installed option and decided that I would do without until I could afford one of the few really good, component-class cassette decks that are designed for custom installation.

Long-distance diagnosis is always dangerous, but I'm inclined to suspect that the "whine" may well arise from slippage between the rubber pressure roller and the back of the tape. There may be too much take-up tension or too much hold-back tension (likely to occur toward the ends of a reel), particularly if the cassette itself is too tightly wound—a possible result of high temperatures inside a locked car.

Again, drive-system irregularities may result in intermittent treble performance, for they will affect the amount of contact between the tape and the tape head. A slow modulation of these irregularities may well point to a rubber pressure roller that has become slightly flattened or glazed—either of which can lead to squeal.

Cassette Head Wear

Q. Some time ago you said that "at the cassette speed (17% ips) you are far more likely to wear out the motor bearings on your deck than you are to wear out the heads." Well, I have a deck with a permalloy head that has been used less than 1,000

hours, and the head has a definite "wear groove" I can detect with my fingernail. Is the head worn out?

> THOMAS DAVID State College, Pa.

A. It certainly seems as if you have a worn tape head, and on a consumer deck that almost certainly calls for replacement rather than a relapping as is often done on professional machines. A positive response to the "thumbnail test" certainly merits attention by a competent technician, and in the case of a lightly used deck I'd suggest asking the manufacturer what gives. Of course, if you have a terribly cheap machine (you didn't mention what you have or what you paid for it), perhaps your motor bearings are gone too!

Cassette vs. Eight-track

Q. I use both cassettes and eight-track cartridges extensively, and I think that better performance is to be found with cassettes. But why should cassettes be better? Is it simply that they don't make eight-track home decks of comparable quality, or that the tapes inside the shells aren't as good, or what?

> BUCKNER F. MELTON, JR. Macon, Ga.

On a purely theoretical basis it ought A. to be possible to realize a slightly higher signal-to-noise ratio and a slightly wider frequency response with a tape system that operates at 3³/₄ inches per second (the eight-track cartridge) than with one that runs at 17% inches per second (the cassette). As a practical matter of history, however, eight-track units have been largely a captive of their principal market---the automobile manufacturers-while cassette decks have had to prove themselves by competing primarily in the high-fidelity market. The result is that the eight-track medium long ago developed to the point where it made little economic sense to invest funds and engineering brains in trying to improve its quality level. The opposite has been the case with the development of the cassette. Thus, the cassette medium has (Continued on page 32)

30

We fit the same. But we perform so much better.

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But there, the resemblance ends. Because tapes are manufactured to very different quality standards with different materials and technologies, Fuji's performance is unique.

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Our revolutionary new Fuji Metal Tape goes even further. With ultra-wide response. Dramatically-improved dynamic range and sound quality comparable to studio open reel recordings.

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Technically, what the 110 does is simple. It samples the low frequency signal of your music, reproduces it a full octave lower, and then mixes it back in. Musically, what the 110 does is extraordinary. It re-creates the natural subharmonics of the original sound so your room vibrates with a depth of bass you've never heard before. Or felt. Except in a live performance.

Visit your authorized dbx retailer for a demonstration .

Because just one listen to the dbx Model 110, and your standards will be lowered forever.

dbx, Incorporated, 71 Chapel Street, Newton, MA 02195. 617/964-3210



CIRCLE NO. 13 ON READER SERVICE CARD

THIS TIME MAKE THE RIGHT CONNECTION

Only the new MMC 20CL can give your turntable the performance levels of our unique single crystal sapphire cantilever and a micropolished Contact Line diamond stylus. And our new universal connector makes proper installation an effortless task while it eliminates

the weight and mass of the common head-

shell. If you have a high quality turntable, it probably deserves the MMC 20CL. See your Bang & Olufsen dealer to make the connection.

Bang&Olufsen

Bş

MMC

20C

For Information Write To: Sandy Renquest Bang & Olufsen of America, Inc., 515 Busse Road, Elk Grove Village, Illinois 60007 been improved spectacularly (probably) beyond the expectations of its inventors, while the last major attempt I know of to improve the eight-track format's performance is over a decade old—and it died in the prototype stage.

There are, as well, certain aspects inherent in eight-track design that doom the format to second-class citizenship in the high-fidelity community. With an endlessloop tape-in which you pull the tape out from the center of the reel and return it to the circumference of the same reel-rewind facilities are obviously impossible without a redesign of the cartridge, and even "fastforward" capabilities are severely strained. In order for the device to work at all, the tape layers must constantly slip within the tape pack. Thus, the back surface of the tape must be lubricated, and when, sooner or later, some of this rubs off (or a speck of grit gets in), the delicate friction balance is upset. At this point the tape begins to wind itself more and more tightly with each playing, leading eventually to wow, flutter, and outright failure.

If you have cartridge selections that you want to save, then, dub them onto a good cassette. That's where your future—and the industry's—lies.

Brand-sensitive Treble

Q. My cassette deck gives very good trety of high-quality tapes, but with one highly regarded brand of cassette I get consistently less high-frequency sound, particularly in the first ten minutes or so of a side. Can you explain this?

> CHARLES CAMPBELL Indianapolis, Ind.

A. I can try, for the problem you report has come to my attention several times, but my response is more speculation than hard, ascertainable fact. From the tapes you listed that do work well on your deck and the one you mentioned that did not, it is clear that the difficulty does not arise from differences in bias/equalization requirements. As a matter of fact, your first-choice tape and the one you have problems with are as similar magnetically as two peas in a pod, so I suspect that the problem arises from mechanical rather than magnetic causes.

In the manufacture of any product, there are certain "tolerances" involved. The molds used in casting the upper and lower halves of a plastic cassette shell may be within the tolerances of the Philips standard, and the cassette well of your particular tape deck may also be within permissible tolerances, yet the specific *combination* of tolerances gives a poor result. This appears to be the case in your situation, but since you've found that certain brands of cassettes *do* work well in your machine, why not simply stick with them?

Because the number of questions we receive each month is greater than we can reply to individually, only those letters selected for use in this column can be answered. Sorry!



You've driven to the end of the world. Alone.

The engine is still warm.

Amid the roar of the waves and the cries of the gulls, you fire up your mobile high-fidelity system for a morning concert.

What will it be? Bach? Mozart? Perhaps some Keith Jarrett.

Whatever you choose, your system is equal to the task because you've chosen ADS.

The ADS Power Plate 100 Automotive Amplifier and the ADS 300i Automotive Loudspeaker System deliver the kind of power it takes to be heard above road noise, engine noise, and ocean waves. And it's not just brute power, but power with performance, subtlety and nuance — qualities collectively known as musical accuracy.

Easily the most sophisticated automotive audio components available today, the Power Plate 100 amplifier and 300i speakers are exactly what you'd expect from ADS, the company that literally invented mobile highfidelity. To find out more about putting an ADS system in your automobile, write ADS, Dept. SR-15, or call 1-800-824-7888 (California 1-800-852-7777) toll free and ask for Operator 483.

The more time you spend with your automobile, the more you owe it to yourself to listen to ADS.



Analog & Digital Systems, Inc., One Progress Way, Wilmington, MA 01887 (617) 658-5100

Installation of the Month By David Ranada



N a compact and sturdy unit, John Andregg of San Francisco has managed to install not only the electronics of his stereo system, but his record and tape collection as well. The top left portion of the home-built, walnut-veneered cabinet contains, from top to bottom, a Crown D60 power amplifier, a Tapco 2200 ten-band equalizer, another Crown D60, a Crown VFX 2A active crossover, and a Heath AR 1500A receiver.

The small drawer just below this "rack" section holds a top-loading Heath AD 1530 cassette deck, while the drawer just below that contains cassettes and Mr. Andregg's record, tape-deck, and stylus-cleaning accessories. The large drawers all hold records-about sixty discs to a drawer with enough room left so that one can flip through the collection. The drawers use sliders rated for 200-pound loads and will, in a pinch, safely hold a hundred discs each. Due to the heavy cabinetry and the large number of records, the entire installation is quite massive. Even though it can be moved on its eight casters, Mr. Andregg says no acoustic feedback problems find their way through his Dual 1229 turntable and Shure



V15 Type III cartridge. Above the turntable are two 25-watt miniature floodlights which may be slid and pivoted on their mounting rail to fully illuminate a disc and its associated dust, dirt, and grime without glare. Turntable illumination is an excellent idea for any installation, though it is rare to find it carried out with such elegance.

Mr. Andregg's background in electronics (he is currently employed as a service manager for a computer company) helped him construct his own loudspeakers using JBL drivers in home-built enclosures. He biamplifies them using the Crown amplifiers and crossover. The resulting sound lets him enjoy his classical, rock, pop, and musicalcomedy recordings at their best. His woodworking talent comes in handy in his other hobbies, which include fishing. He makes his own fishing rods and is now working on the restoration of an old lapstreak (the external planks overlap as clapboards do) fishing boat.

s your system an Installation of the Month? To find out whether it is, send a clear snapshot and a brief description of its components to STEREO REVIEW, Dept. IOTM, One Park Ave., New York 10016.
Everyone knows what Technics direct drive does for performance and accuracy in our turntables. That's why 73 of the top 100 radio stations that use turntables use Technics direct-drive turntables. Now, for only \$330," you can record your cassettes with the accuracy of Technics direct drive. And that says a lot about the Technics RS-M45.

So does its tape transport system. Especially when you consider what the RS-M45 has going for it: An FG servo DC direct-drive capstan motor. And while 0.035% wow and flutter can tell you a lot about our direct-drive performance, the world's only limited 3-year motor warranty⁻ tel s you a lot more.

Equally impressive are the RS-M45's solenoid controls. They not only make switching from one mode to another simple and accurate, they also put minimal strain on the tape transport system.

And to put minimal strain on you, there's the optional EP-9645 remote control unit. With it, all transport functions, as well as record mute, can be operated from your easy chair.

Just as special are the RS-M45's fluorescent VU meters with auto-reset peak-hold. They're fast, electromic and highly accurate. You'll also like Dolby[§]NR and a S/N ratio of 68 dB.

And if our SX record and playback heads make CrO₂ tape sound great (20 Hz-18 kHz), wait until you hear the increased frequency response (20 Hz-20 kHz) and extended dynamic range of metal.

Technics RS-M45. Direct drive and solenoid controls say it isn't your typical \$330 cassette deck. In fact, compared to the leading brands, it's one of a kind. And that's very typical of Technics.

*Technic:: recommended price, but actual price will be set by dealers. LimitedDealers warranty on the direct-crive meter and limited 2-year warranty on the deck. retindes labor and parts. Carry-in service. Pool of purchase required. Warranty is wold forcer mercial use. \$Dolby is a trademark of Dolby Laboratories.

CIRCLE NO. 55 ON READER SERVICE CARD

How to tape your records as accurately as Technics direct-drive turntables play them.



Technics



By Julian D. Hirsch



Variations on an Amplifier

ONE of the fundamental problems in any type of product evaluation is the inevitability of sample-to-sample differences. No matter how well controlled the manufacturing process may be, there will always be performance variations between individual samples of a product. Since it is impracticable to test a large number of samples (which could provide *statistical* information on such differences), there is always a risk of drawing unwarranted inferences from tests of a single sample.

As a rule, we test only a single sample of any product (two in the case of loudspeakers). A full test of each channel of a stereo component would nearly double the test time, but it would add only slightly to our knowledge of the behavior of a large number of units. It is therefore our practice to test both channels of FM tuners and stereo cartridges completely, but only one channel of a stereo amplifier, headphone, or tape deck. In a tape deck we test the left channel, which is recorded on the edge of the tape and is most likely to show the effects of poor head-to-tape contact. And we have also arbitrarily chosen to test completely only the left channel of an amplifier. The only measurements we make on the right channel are a quick check on clipping power output and distortion at lower levels to verify that both channels are performing similarly. If the left channel is "out of spec" for any reason, we make our full test on the right channel.

It is our view that the proper operation (that is, operation completely within the specifications) of one channel of a stereo amplifier, even if the other one is not as good, is *prima facie* evidence of its true performance *capability*. Of course, a malfunction in some part of the amplifier common to both channels, such as the power supply or a protective system, requires testing a second sample.

It appears that many people are not aware of the variations—*perfectly normal* and not indicative of any fault—that can exist between different samples of any highfidelity product and even between channels of the same unit. Although a power amplifier is one of the best understood and controlled audio components (with respect to repeatability of measured performance), there are still no two samples of the same model that will measure *exactly* the same. We have on a number of occasions tested two or three samples of a product and have always found this to be the case.

HE distortion curves for a hypothetical power amplifier (see page 38) show typical distortion differences between channels of the same unit. For convenience we have labeled them L and R channels, but they could just as well have been in two different amplifiers. Figure 1 shows that the distortion-vs.-power-output curves at 1,000 Hz are somewhat different in the two channels. In general, distortion can increase or decrease with increasing power output over most of the measurement range. At very low power levels it will usually (but not always) increase, especially when the measurement is made with a distortion meter that includes hum in the measurement. We use a spectrum analyzer that measures only the distortion components, but even so there

is a tendency for the distortion to increase at very low power outputs.

At intermediate power outputs most amplifiers have their lowest distortion-most, but not all (note that the maximum distortion in the right channel occurs at about 2 watts, a fairly typical listening level). Sometimes the minimum distortion reading will occur just before the outputs clip. In this example, the distortion at a typical listening level is more than three times as high in one channel as in the other. Is this serious, or is it indicative of a fault in the amplifier? Not at all! By and large, distortion differences of less than a full order of magnitude (a factor of ten times) are of no consequence. If one channel measured 0.01 per cent and the other was 0.1 per cent, we would suspect that something was wrong in the latter channel. Even so, it is highly unlikely that such a difference would be audible under any conditions.

Modern amplifiers have such minuscule distortion levels that we could really dispense entirely with measuring or even discussing distortion. One would be hard pressed to find program material that would audibly demonstrate the difference between distortion readings of, say, 0.002 and 0.2 per cent. Why, then, do we bother with measuring distortion? Partly as a technical exercise that in some cases reveals an impressive engineering achievement on the part of the amplifier designer, and partly because the current FTC rules on advertised power ratings requires a distortion disclosure as part of that rating. In order to verify that an amplifier meets the FTC criteria, it is necessary to test it quite fully over

Tested This Month

Aiwa AX-7800U AM/FM Stereo Receiver

Audio-Technica ATH-7 Stereophones Boston Acoustics A100 Speaker System

Marantz SD9000 Cassette Deck Revox B760 FM Tuner

For those who take recording seriously The 580 Series

From the economical 580M to the universally acclaimed 582, a 580-Series recorder is not an average cassette deck. It rises above mediocrity. It is designed for the serious recordist-for the person who insists upon the perfection that comes from individual calibration of each tape and the self-contained oscillator and metering that make this possible. With exclusive Asymmetrical, Diffused-Resonance, Dual-Capstan Transport, flutter and modulation noise cease to be problems. And, Nakamichi's Double Slot Guides and Tape-Pad Lifter assure perfect tracking and absolute signal stability-so stable as to cause STEREO REVIEW to exclaim of the 582: "What we found astonishing...was that this was the first deck...in which the response was identical (within ± 0.1 dB) whether the test tapes were played in the normal forward direction or turned over and played on side two," Unique Direct-Flux erase head, metal-tape compatibility, and IC logic with remote and unattended operation are common to all 580-Series recorders.





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581 Discrete 3-Head Cassette Deck Discrete 3-Head tech-nology highlights the 581. S/N more than 66 dB-20 to 20,000 Hz with under 0.8% THD! Dolby* and bias adjustments with built-in 2-frequency oscillator assures Nakamichi performance with any quality tape.

582 Discrete 3- Head Cassette Deck Acclaimed by every leading reviewer, the 582 is the ultimate recorder for the serious audiophile. With three discrete heads and full off-tape monitoring, the 582 has become the recorder on which experts evaluate tape!

*Dolby is the trademark of Dolby Laboratories.



For more information, write to Nakamichi U.S.A. Corporation, 1101 Colosado Avenue, Santa Monica, CA 90401

Sendust record/play head-the pinnacle of combination-head performance 20 to 20,000 Hz \pm 3 dB with less than 1% THD sets this recorder apart from the

199 Ft 1

ZXC



Figure 1. The harmonic-distortion levels of a correctly operating amplifier will usually vary (and differ) as the output power changes.

Figure 2. Differences in distortion levels between the channels of a stereo amplifier are perfectly normal and usually inaudible.

the full audio-frequency range and at all power outputs from 0.25 watt to rated power. Once the test program reaches that magnitude, it requires little more effort to measure the full distortion/power/frequency performance of the amplifier.

In Figure 2 is shown a typical plot of distortion at full power vs. frequency. The left and right channels in this illustration seem fairly well matched, but notice that there is still a two-to-one difference in measured distortion at 20,000 Hz. Again, this means little in terms of how the amplifier sounds. but it will to some extent affect the way it is rated. In most recent amplifier designs the maximum distortion occurs at 20,000 Hz. In this example, if the amplifier were rated to deliver 60 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.1 per cent total harmonic distortion, it would be within allowable limits. If the distortion rating were 0.08 per cent, one channel would pass and the other would

not, presenting the manufacturer with a dilemma, since his advertising claims that the distortion will not exceed 0.08 per cent in *either* channel when both are driven to 60 watts anywhere from 20 to 20,000 Hz.

Since we ask that a product submitted for test be checked out by the manufacturer and his test data supplied to us (oddly enough, only a few manufacturers actually comply with that request!), we would expect to be able to duplicate his distortion measurements within normal measurement tolerances. Often we can, but there have been times when we could not. This is a very disturbing situation, both for us and for the manufacturer. Repeatability of measurements on FM tuners is always a "tricky" business, but amplifier measurements are *supposed* to be "cut and dried."

A major source of discrepancies is the exact procedure followed in the test sequence (it is not specified in any standard, and rarely by any manufacturer or testing agen-



". . . Incidentally, if you play Widor's Organ Symphony No. 5, it'll heat a small room. . . ."

cy). An amplifier is supposed to be fully heated by the FTC-mandated one-hour preconditioning period before any measurements are made. We follow this procedure, but some manufacturers do not. Even so, there can be a considerable difference in the amplifier's operating temperature, depending on the immediately preceding history of its operation.

10K

20K

For example, when measuring distortion vs. frequency we start at 20 Hz, making distortion readings at power outputs of -10dB, -3 dB, and rated power before going to 30 Hz and repeating the process. In that way, we move upward in frequency in a 1, 2, 3, 5, . . . progression, making three distortion measurements at each frequency. By the time we reach 20,000 Hz (which is, for most amplifiers, the most difficult part of the test) the amplifier is usually very hot. The temperature rise in its power-transformer windings reduces the voltage available to the output transistors (and thus their maximum power-output capability), and often the transistor amplifier itself is not operating at its best when very hot. The result may be a failure to meet the distortion spec at 20,000 Hz.

When this happens (fortunately, not very often these days) we start again with a cold amplifier, heat it in accordance with the FTC rule, and start our measurement sequence at 20,000 Hz, working our way downward in frequency. If the amplifier passes when tested in either direction, we consider that it conforms both to the letter and the spirit of the regulation.

The message in all this is that the harmonic-distortion characteristics of an amplifier, no matter how impressive they may be, should be viewed only as an indication of the engineering expertise that went into its creation. When the distortion is very low, distortion comparisons between different amplifiers ("Amplifier B has only 0.002 per cent distortion, so it must be better than Amplifier A, with its 0.08 per cent distortion") have little or nothing to do with the listening quality. Remember also that no matter how carefully the distortion is measured, rather large-but inaudible-differences can be expected between different samples of the same model or between channels in a single unit.

Test Reports start on page 40

Supertuner: Nobody can steal our thunder.

Ever since Pioneer unleashed its Supertuner® technology on car stereo, the competition has tried to catch up. Tried to match our home hi-fi specs. Tried to duplicate our unique, stationgrabbing sound. But the only thing that muting to blank the noise between stations. Useable FM sensitivity of 1.1 μV.



Selectivity of 74 dB. A capture ratio of 1.7 dB. Team it with a set of Pioneer TS-695 3-way speakers, and you've got a Supersystem that works audible wonders with tape and FM. Your Pioneer dealer can give it to you at a very reasonable price.

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Equipment Test Reports

By Hirsch-Houck Laboratories



A^T first glance, the Aiwa AX-7800U looks like a conventional AM/FM stereo receiver, with a narrow "blackout" dial window extending almost the full width of the panel and a typical complement of knobs and pushbutton switches positioned below the dial area. Turning on the receiver with the square POWER button at the lower left of the panel immediately discloses its true nature. This highly sophisticated receiver is electronically tuned by a digital frequency synthesizer and has neither dial scales nor a tuning knob. Half-inch-high pale-green numbers in the center of the "dial" cutout show the tuned frequency for both AM and FM bands. An array of red LEDs at the left end of the dial window forms a line whose length is proportional to the tuned station's signal-input level. A small button below it changes the display to read the audio power output (into 8 ohms) from 0.1 to 120 watts. The rated output of the AX-7800U is 60 watts per channel into 8 ohms from 20 to 20,000 Hz with no more than 0.05 per cent total harmonic distortion.

Other LEDs near the power/signalstrength display show when the receiver is turned on, which display mode has been selected, and when a stereo broadcast is being received. Across the lower half of the panel, most of the controls are conventional in appearance and function. They include small knobs for the bass and treble tone controls as well as the balance and volume controls. Between the tone-control knobs are narrow pushbutton switches that select bass turnover frequencies of 200 or 400 Hz and treble turnover frequencies of 2.5 or 5 kHz. Similar buttons activate the two pairs of speaker outputs. A front-panel headphone jack is always live.

To the right of the knobs are more pushbutton switches; they control loudness compensation, tape-monitor functions, and input selection for PHONO, AUX, and TUNER sources. Red LEDs above the buttons show which source has been selected. Two more buttons control FM MONO/STEREO operation and FM MUTING.

The remaining controls are associated

with the digital tuning system of the AX-7800U. The actual tuning is done by pressing one of two large, flat buttons at the right of the panel. Marked UP and DOWN, they cause the frequency to shift in the indicated direction when touched momentarily or held in. A small button, with a LED showing the selected mode, controls AUTO or AUTO/MANUAL operation. In the latter mode, each momentary touch of a TUNING button shifts the frequency by 200 kHz for FM or by 10 kHz for AM. If the button is held in, the receiver scans rapidly, covering the full 88- to 108-MHz FM band or the 530- to 1,610-kHz AM band in about 8 seconds. The scan stops instantly when the button is released, and final frequency adjustmients can be made in one-channel steps by light taps on a TUNING button.

Touching a momentary-contact button above the tuning controls engages the HOLD SCAN feature (a light above that button shows when it has been selected). In HOLD SCAN, a momentary touch on one of the tuning buttons causes the receiver to scan rapidly until a station is received, when it unmutes for five seconds. Then it resumes scanning, pausing for five seconds on each received station. At the end of the band, the scan reverses and proceeds as before. At any time, a touch on the HOLD SCAN button stops the scanning action on the station being received.

The AUTO mode of tuning, activated by the AUTO/MANUAL button described previously, causes the receiver to scan until a signal is received, as in the HOLD SCAN mode. However, the tuning stops on each signal, and each subsequent scanning step requires another touch of the tuning button. The band selection (AM or FM) is made with two small momentary-contact buttons below the dial window. To their left are seven similar buttons for six preset station channels (the seventh is a MEMORY button used to move the frequency of any tuned station into the receiver's memory). To do this, MEMORY is touched, followed by one of the CHANNEL buttons. At any later time, touching that button will instantly tune the receiver to that frequency, light a LED above the selected channel button, and display the memory location number (a digit from 1 through 6) as a large yellow numeral to the right of the frequency readout. The stored information is retained with the power off as long as the receiver is plugged into an energized a.c. outlet. If power is lost for more than a short time (about a minute in our sample), the memory is lost, and when turned on the receiver will start up at 530 kHz on AM. In normal operation, each time it is turned on it comes on at the frequency to which it had last been set.

The rear apron of the Aiwa AX-7800U has all the input and output connectors usually found on a stereo receiver, including spring-loaded insulated terminals for two sets of speakers, an AM ferrite-rod antenna, and two a.c. convenience outlets (one of them switched). The Aiwa AX-7800U has (Continued on page 42)



tech talk:



To understand what an MCS Series. Linear Phase speaker can do, you have to understand what a conventional speaker can't do. A conventional speaker can't deliver all the sound it produces to your ear at exactly the same instant. The major cause of this lies



in the way a conventional speaker is constructed. As you can see by the diagram, a conventional speaker is arranged with the woofer

(bass), mid-range and tweeter (small high range speaker) mounted so that their outer edges are on the front surface. As you can also see, these speaker elements differ in depth. That means the acoustical centers in the middle of each speaker which actually produce sound are also staggered. And so is the sound reaching your ear. MCS Linear Phase speakers start out with specially designed speaker elements

Series

and crossover networks. Then the elements themselves are staggered (see diagram again) in such a way that their acoustical centers are precisely aligned. The result is sound to make you think you've never heard stereo before. But don't take our word for it, listen to your ears. After all, where MCS Series Linear Phase speakers are concerned, one sound is worth a thousand words. MCS Series Linear Phase speakers. Only at JCPenney.

Model 8310 2-way Bass Reflex \$119.95 (each) Model 8320 3-way Bass Reflex \$199.95 (each) Model 8330 3-way Bass Reflex \$299.95 (each)

Full 5-Year Warranty on MCS Series[®] speakers. Full 3-Year Warranty on MCS Series receivers, turntables, tapedecks, tuners and amplifiers. If any MCS Series component is defective in materials and workmanship during its warranty period, we will repair or replace it-just return it to JCPenney. Prices higher in Alaska, Hawaii and Puerto Rico.

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a relatively low profile, measuring 207/8inches wide and 173/8 inches deep but only 43/4 inches high. It weighs 24.4 pounds. The silver-colored front panel contrasts with the black metal top and walnut-finish wooden side panels. Price: \$590.

• Laboratory Measurements. After driving 8-ohm loads with both channels for one hour at one-third power (20 watts output), the top ventilating grille of the receiver (over the output transistors) was only moderately warm, and elsewhere on the exterior of the receiver the temperature rise was slight. The outputs clipped at 73 watts per channel for an IHF clipping-headroom rating of 0.85 dB. Although the amplifiers of the AX-7800U do not carry specific power ratings for load impedances other than 8 ohms, the measured clipping power into 4and 16-ohm loads was 95 and 62 watts, respectively. The receiver's protective overload relay cut it off at 60 watts when we drove 2-ohm loads. The IHF dynamic headroom (with a 20-millisecond-burst signal) was 2.22 dB into 8 ohms, corresponding to 100 watts at the clipping point. The dynamic output into 2- and 4-ohm loads was 193 and 139 watts, respectively.

When we drove 8-ohm loads at 1,000 Hz the distortion was between 0.002 and 0.005 per cent from 0.1 to 60 watts output, reaching 0.0086 per cent at 70 watts, just before clipping occurred. The intermodulation distortion was between 0.035 and 0.05 per cent over the 0.1- to 60-watt range, and it was 0.047 per cent at 70 watts. Driving lower load impedances did not increase distortion significantly. With 4-ohm loads, the distortion was 0.005 to 0.006 per cent over the full power range from 1 to 80 watts, and even the severe load of 2 ohms yielded distortion readings of 0.007 to 0.008 per cent from 1 to 50 watts output.

The distortion at full power over the audio-frequency range with 8-ohm loads was between 0.005 and 0.01 per cent from 20 to 7,000 Hz and 0.015 per cent at 20,000 Hz. At lower output powers the distortion was even lower at most frequencies. To generate a reference output of 1 watt, an input of 17.5 millivolts (mV) was required at the AUX input. The A-weighted noise was -77dB referred to 1 watt. The phono sensitivity was 0.26 mV, with a noise level of -75.6dB. The phono preamplifier overloaded at a

42

high 240 mV or so at frequencies of 1,000 Hz and higher, and at 20 Hz the overload occurred at 176 mV (referred to the equivalent 1,000-Hz gain). The rise time through the AUX input was 5 microseconds, and the slew rate was 14 volts per microsecond. The amplifier response was attenuated at low radio frequencies so that the IHF slew factor was in excess of our measurement limit of 25.

The tone controls had the usual characteristics, with a variable bass turnover and a hinged high-frequency boost or cut. Between the switchable turnover frequencies and the changes resulting from the control settings, the effective low-frequency turnover point could be shifted from under 100 Hz to about 500 Hz. The high-frequency effect began at about 1,000 Hz regardless of the selected turnover frequency, but the shape of the response curve depended on the switch setting. The loudness compensation boosted both low and high frequencies at reduced volume-control settings. The RIAA phono equalization was flat within ± 0.25 dB from 50 to 20,000 Hz and was down 1.5 dB at 20 Hz. It was not affected measurably by the inductance of a phono cartridge connected to the preamplifier input. The measured phono-input load was 50,000 ohms in parallel with 200 picofarads.

The FM-tuner section of the Aiwa AX-7800U had an IHF usable sensitivity in mono of 9.8 dBf (1.6 microvolts, or μ V) and the stereo sensitivity was set by the switching threshold of 25 dBf (10 μ V). The 50-dB quieting sensitivity was 10 dBf (1.7 μ V) in mono and 32.5 dBf (23 μ V) in stereo. At 65 dBf (1,000 μ V) input the distortion was 0.08 per cent in mono and 0.12 per cent in stereo, and the respective signal-to-noise ratios were 74 and 69 dB. The signal-strength (Continued on page 44)









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Browd with pride inver classic tradition this 100% of and har is truly a distinctive product of uncompromise We want to the distinctive product of uncompromise the second the distinctive product of uncomposition was only the classic all natural supredicates to bread to a second the second process of the second process of the terms of the solid second process of the second process of the Ellagor is uncommonly good been, the abordure fixed to the second process of the second process of the second process Ellagor is uncommonly good been.

CONTENTS 12 FL. OZ. . BEER

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ERLANGE

One look, one sip, one taste will tell you... this beer is a classic.

Taste the moment. Erlanger... only in bottles and draught.

indicator lights (nine in all) came on at inputs from 19 to 57 dBf (4.8 to 400 μ V).

The tuner's frequency response was flat within ± 0.5 dB from 30 to more than 10,000 Hz and was up 1 dB at 15,000 Hz. The channel separation was between 50 and 52 dB in the 1,000- to 2,000-Hz range, decreasing to 31.5 dB at 20 Hz and 35 dB at 15,000 Hz. Frequency response of the AMtuner section was down 6 dB at 35 and 2,300 Hz.

The FM capture ratio was about 1.5 dB at 45 dBf (100μ V) input and 1.7 dB at 65 dBf input. The corresponding AM-rejection measurements were 62 and 65 dB. The image rejection and alternate-channel selectivity were both a good 81 dB, and adjacent-channel selectivity was about 9 dB. The muting threshold was 30 dBf (17μ V). In spite of the very flat frequency response, the 19-kHz subcarrier leakage into the audio was suppressed to -63 dB, and the turer's hum level was -66 dB.

• Comment. From our test data, it is clear that the Aiwa AX-7800U is an above-average stereo receiver in all respects. Certainly one could not hope for (or benefit from) lower audio distortion or better FM-tuner performance. In short, we found no performance flaws or unexpected weak spots in the receiver. Perhaps the only useful features it lacks are electrically separable preamplifier and power-amplifier sections and dubbing/monitor facilities for two tape decks. (Aiwa points out in the instruction manual for the AX-7800U that tapes can be dubbed by connecting the playback deck to the AUX input, but that is not quite the same as having two complete crossdubbing facilities.)

The smoothness and quietness of a re-

ceiver or tuner with digital frequency synthesis are characteristic of the genre, but we continue to be pleased and impressed each time we use such a product. In the AX-7800U there is no question of muting or unmuting noises of any kind. The receiver outputs are silent until a station of suitable strength is tuned in, at which time it is heard clearly and quietly. Some conventionally tuned receivers are that good, but they are the exception. We never heard any switching transients or other unwanted noises from the Aiwa AX-7800U in any mode of operation. This fine receiver would be hard to surpass for any application that does not call for substantially higher power than it delivers, and we think that few listeners are likely to find it inadequate in that respect.

Circle 140 on reader service card



AUDIO-TECHNICA's top-ranking stereo headphone, the ATH-7, employs electret condenser elements. Although they require no polarizing voltage or power supply, they must be driven from the speaker outputs of an amplifier through an impedance matching adaptor that transforms the high impedance of the electret elements to a low value suitable for connection to the nominal 4- to 16-ohm output of a power amplifier.

The ATH-7 is a supra-aural headset, resting lightly on the ears without forming a pressure seal against the wearer's head. The thin, flat diaphragm of each earpiece couples to the ear cavity through an opening about $1\frac{1}{4}$ inches in diameter, and the rear of the diaphragm opens to the outside through a fine mesh that provides some acoustic loading for the transducer. The ear cushions are made of soft vinyl-covered plastic foam.

The headband of the ATH-7 is a light piece of perforated spring metal, with an inner adjustable cloth band that rests on the wearer's head. The adjustment is very easy, and the headband settings do not tend to shift with normal handling. The earpieces are marked for left and right ears, and they are so mounted on their supporting yokes that the phones will fit comfortably only when worn in the correct orientation.

The $8\frac{1}{5}$ -foot straight rubber-covered cord, which forms a "Y" where it connects to the earpieces, plugs into the impedancematching adaptor through a special fourpin locking plug. The adaptor box is 7 inches deep, $2\frac{3}{8}$ inches wide, and $3\frac{1}{2}$ inches high; it weighs 2 pounds. An integral 6-foot cable emerges from its rear to be connected to the speaker outputs of the amplifier; insulated spring clips for connecting the speakers are provided on the adaptor.

A slide switch on the front panel of the adaptor has positions marked STEREO-PHONES and SPEAKERS, enabling the ATH-7 to be used with an amplifier having only a single set of speaker outputs without losing the use of the speakers. Moving the switch to its STEREOPHONE position silences the speakers and connects the headphones. A green PROGRAM LED on the adaptor's front panel monitors the program level applied to the phones; it flashes when normal levels are present in either channel. A red OVER- LOAD LED flashes if the level in either channel exceeds safe limits, warning of possible distortion or damage to the phones (to say nothing of the wearer's hearing!).

The rated frequency response of the ATH-7 phones is 20 to 22,000 Hz ± 2 dB, although details of the test method are not stated (these can have a profound effect on the measured frequency response). The sensitivity of the ATH-7 is relatively high, so that 1 volt of applied 1,000-Hz signal produces a sound-pressure level (SPL) of 98 dB in the wearer's ear. The harmonic distortion at that level is rated at 0.25 per cent. The Audio-Technica ATH-7 stereophones are very light, weighing only 7.4 ounces without the cord and 9.7 ounces with it. The suggested retail price is \$150.

• Laboratory Measurements. The Audio-Technica ATH-7 phones were tested on a modified ANSI headphone coupler. The frequency response was one of the smoothest and widest we have yet measured from a headphone. Relative to the 1,000-Hz level, the output variation was ± 4 , $-3 \, dB$ from 20 to 11,000 Hz, and the overall variation was $\pm 4.5 \, dB$ from 20 to 17,500 Hz (the high end was limited by our headphone test microphone). The middle and low frequencies were especially smooth and flat (considering that these are not sealing-type phones), with a total output variation of 2.5 dB between 20 and 1,000 Hz.

We initially measured the harmonic distortion from the phones at the constant 1-volt input for which it is specified. At low frequencies (20 to 100 Hz) the distortion was between 1 and 2 per cent, but at higher frequencies the harmonic components were masked by system noise levels and could not be measured. We then increased the drive to 3 volts, at which level the distortion was about 0.25 per cent from 200 to more than 1,000 Hz and decreased at higher frequencies to about 0.14 per cent at 7,000 Hz. Due to the larger diaphragm excursion required at low frequencies, the distortion rose rap-*(Continued on page 46)*

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idly below 200 Hz to 0.65 per cent at 100 Hz, 2.5 per cent at 50 Hz, and 18 per cent at 30 Hz.

The sensitivity of the phones was almost exactly as rated, so that the 1-volt test signal generated a SPL of 97 dB at 1,000 Hz. The green PROGRAM light on the adaptor flashed at 3 volts input (corresponding to a comfortable, if loud, listening level) and the red OVERLOAD warning came on at 14 volts. Although the distortion was not audibly objectionable at that drive level, the volume was uncomfortably loud (about 108 dB). The impedance of the ATH-7 phones, including the impedance-matching adaptor, was about 18 ohms at 20 Hz, rising gradually to a maximum of about 80 ohms in the 300- to 2,000-Hz range before falling off to its minimum of 9 ohms at 20,000 Hz. This impedance characteristic should not present a problem to any amplifier.

• Comment. The Audio-Technica ATH-7 phones sounded as good as they measured. They had an extremely smooth, uncolored quality, with the effortless clarity that has long been associated with electrostatic transducers, either speakers or headphones. They differed from most conventional electrostatic headphones in several important respects, however. Most obvious was their lightness-the pressure on the wearer's ears and head was minimal, and they could be worn in comfort for extended periods. The weight and pressure of some otherwise fine electrostatic phones has been a major deterrent to their acceptance. In spite of the nonsealing construction, the deep, clean bass sound from the ATH-7 phones has been matched by only a couple of the phones we have used in the past; they were also electrostatic phones and considerably more expensive than the ATH-7.

The sensitivity of the ATH-7 was higher than that of many other electrostatic phones, as was its maximum undistorted output. With these phones one does not have to compromise on maximum listening level or wearing comfort in order to enjoy a sound quality that is at least as good as anything we have tested up to now. We note that, as a bonus, the ATH-7 is considerably less expensive than any other phone we have used that comes even close to matching its listening quality.

Circle 141 on reader service card



T HE Boston Acoustics A100 speaker system has been designed to minimize many of the performance compromises associated with "bookshelf" speakers, especially when they are placed on the floor. At first glance, the A100 is a moderate-size floor-standing speaker, rather shallow in its front-to-back dimension. It is $30^{1/2}$ inches high, $16^{1/2}$ inches wide, and $8^{1/4}$ inches deep (an optional wooden pedestal raises the cabinet some $1^{1/2}$ inches from the floor). Despite the frontal dimensions, the shallow depth of the A100 makes it better suited to wall mounting than many bookshelf speakers, which are usually considerably deeper. The A100 weighs 44 pounds.

The A100 is a two-way speaker design with a 10-inch acoustic-suspension woofer

crossing over at 1,600 Hz to a 1-inch softdome tweeter whose gap is filled with ferrofluid for better heat transfer and mechanical damping. It is relatively efficient as acoustic-suspension speakers go, being rated to deliver an 89-dB sound-pressure level measured at a 1-meter distance when driven by 1 watt. Amplifiers rated at outputs from 15 to 150 watts are suitable for use with the A100. The nominal system impedance is 8 ohms, with a 5-ohm minimum rating.

The woofer is located near the center of the front mounting board, with the tweeter a few inches above it. Both drivers are mounted flush with the front panel. A black cloth grille snaps on the cabinet. The speaker terminals are in the rear, and there are no level adjustments. According to its designers, the A100 achieves excellent spatial imaging and an audible sense of a "big" sound source by virtue of a very flat, welldispersed midrange response. The manufacturer states that the technical basis for the improvement is the better handling of the transition from half-space to full-space radiation in the mid frequencies. This problem often produces a "boxy" sound quality in bookshelf speakers. Through the choice of frontal dimensions and woofer placement, the frequency of the transition from half- to full-space radiation in the A100 has been shifted downward, thus minimizing any midrange aberrations. Price: \$170.

• Laboratory Measurements. Our composite frequency-response curve, created by splicing a reverberant-field measurement at middle and high frequencies to a closemiked low-frequency response, confirmed Boston Acoustics' claims for outstanding midrange flatness. From 150 to over 8,000 Hz, the output varied less than ± 1.5 dB. There was a slight increase in output at higher frequencies, to a maximum of +3.5dB at 13,000 Hz, before it fell back to the midrange level at 20,000 Hz. The low-frequency output rose below 200 Hz, to +4.5 dB at 60 Hz, before dropping at 12 dB per octave below 50 Hz. Including both highand low-frequency variations (neither of which may exist in the same amounts in another room), the overall response was within +4.5, -1.5 dB from 35 to 20,000 Hz, certainly very fine performance for such a modestly priced speaker.

The system impedance averaged about 7 ohms over most of the audio range, rising to nearly 10 ohms at 600 Hz and 28 ohms at the 46-Hz bass-resonance frequency. The minimum impedance between 20 and 20,000 Hz was about 6 ohms. When the speaker was driven at 1 watt (based on an 8-ohm impedance), the distortion was about 0.5 per cent from 100 down to 60 Hz, rising to 2 per cent at 40 Hz and 6 per cent at 30 Hz. A 10-dB power increase produced a similar distortion characteristic, with *(Continued on page 49)*

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quencies that you don't know for certain. A touch of a button precisely finds the next station encountered up and down the frequency band.

Manual tuning lets you approach known frequencies at high speed CIRCLE NO. 48 ON READER SERVICE CARD and then obtains the exact frequency in precise, discrete steps.

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display frequencies. Bright green LEDs in a five-step array show signal strength. And red LEDs pinpoint your favorite stations at a glance.

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An incredible sound experience awaits you. An experience that technology alone finds hard to explain. You'll hear music of such stunning purity and sensual richness, that you'll wonder how any turntable could make that much of a difference.

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The Onkyo CP-1030F Fully Automatic Turntable is an outstanding example. Its unique design lets you take much fuller advantage of today's most sensitive high-compliance cartridges ... providing more perfect record groove tracking and more perfect damping of the vibrations that destroy perfect sound quality. to the OFF or REPEAT position. Manual cueing is also smoother and more precise ... with far less lateral drift during stylus descent.

A Quartz-locked DC direct-drive motor ... with an LED illuminated strobe ... assures rotational speed accuracy. And a separate motor controls automatic tonearm movement functions.

The entire turntable rests on a highly stable tripleinsulated suspension system to isolate it from room vibrations and sound vibrations from your speakers.

Styling is superb. Silver-grey with black, low lustre metal and a crystal dust cover. Feather-touch control buttons are front-panel mounted, with a full array of LEDs indicating all function settings.

The CP-1030F is just one of five remarkable new turntables from Onkyo. All built for more perfect

The Onkyo CP-1030F utilizes a uniquely designed low mass, straightline carbon fiber tonearm and headshell. Its construction assures purer sound even with warped records.

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The Onkyo CP-1030F A remarkably advanced turntable that makes every record sound better, even when warped. slightly higher readings of 2 per cent down to about 50 Hz, 8.5 per cent at 30 Hz.

The speaker sensitivity was almost exactly as rated, and we measured an 88-dB sound-pressure level at 1 meter with a 2.83volt input of random noise in an octave centered at 1,000 Hz (nominally 1 watt). The tweeter dispersion was exceptional, with negligible difference between the left and right response curves at high frequencies when the microphone was located in front of the left speaker and 30 degrees off the axis of the right speaker. The tone-burst response was uniformly excellent and proved to be almost independent of the microphone position relative to the speaker.

• Comment. The flat measured frequency response of the Boston Acoustics A100 corresponded closely to what we heard as we listened to a pair of them. They are impressively smooth, with a slight tendency to-

ward warmth. Notably absent from the sound was any trace of artificial emphasis in the middle- and high-frequency ranges. However, when the program called for it, the highs were there in full measure, beautifully dispersed and balanced.

We first listened with the pair of speakers on the floor a couple of feet from the wall (which was as close as we could get them). Later we placed them against the wall, with the speaker bases about 26 inches above the floor. There was very little difference in sound between the two placements, and we would consider the A100 one of the few compact speakers we have seen that is equally at home on a shelf or on the floor. That statement applies to their appearance as well as their sound, since they do not look at all out of place on the floor (where their tweeters are much closer to ear level than they would be with many conventional bookshelf speakers). With wall mounting,

their shallow depth prevents the A100s from looking too obtrusive, although their large expanses of grille cloth can hardly be missed.

As for the "big sound," they certainly have that quality all out of proportion to their size. The low bass from these speakers distinguishes them from most comparably priced speakers, and they can deliver a very audible 30-Hz fundamental with little obvious distortion. All in all, there was nothing in the sound of the A100 that we did not like or that made us want to switch to another speaker. Even if their size and shape might be difficult to accommodate in some rooms, there should be many more in which they would prove far more suitable than a more conventional box shape. And, in any room, the Boston A100 would be a hard speaker to surpass at or near its price.

Circle 142 on reader service card



HE Marantz SD9000 is a two-motor, three-head, front-loading cassette deck with two notable features. First, it is capable of two-speed operation (the doublespeed 3³/4 ips and the standard 1⁷/8 ips), the higher of the two giving it the ability to provide extended frequency response and highfrequency headroom. Second, it has an unusually versatile, microprocessor-controlled transport section which, among other things, allows the user to program, in random order, the sequence in which up to nineteen recorded selections will be heard. Utilizing blank spaces (pauses) between selections to count forward or backward, the SD9000 will fast-forward or rewind under control of a programmed agenda or, at the touch of a different button, will play the selected sections in numerical order.

The transport portion of the SD9000 uses two d.c. motors, one servo-controlled for the capstan, the other to drive the reel hubs. There is no conventional cassette "well" and door. Instead, after flipping down a dust shield for the tape heads, cassettes are inserted, openings downward, directly against a front panel, making the entire label area visible at all times. All transport modes (REWIND, STOP, FAST-FORWARD, PLAY, PAUSE, RECORD) operate through logic-controlled solenoids, so any sequence of buttons can be pushed without snarling the tape. Light-touch SENSOR STOP switches are automatically activated if you remove the cassette while the tape is in motion.

The separate record- and playback-head elements are made of a Sendust alloy to ensure long life; they are contained in a single casing. Access to the heads for routine cleaning and demagnetizing is extremely easy, and, for any servicing requirements, slots are provided beneath the removable dust shield for azimuth adjustments.

In the central section of the front panel is a four-digit electronic readout that alternately serves—depending on switch settings—to indicate tape-counter readings or actual time. When the SD9000 is turned off, the display functions as an electric clock which can be set to turn the deck on and off at specified times. Directly below this are two twelve-segment peak-reading fluorescent displays that indicate the record and playback levels; they are calibrated from -30 to +6 dB, with the Dolby-level marking at the +2-dB segment. Directly below these indicators are a speed-selector switch, a ± 15 per cent manual bias-adjust control with center detent, and interlocking pushbutton switches to select bias and equalization for NORMAL ("ferric"), SPE-CIAL (chromium dioxide or equivalent), FECR (ferrichrome), and METAL tape types.

Along the bottom edge of the front panel are switches and controls for RECORD MUTE (to insert a brief silent space between recorded selections), microphone and line/ source recording level (mike and line can be mixed), output level, source/tape monitoring, internal-timer function (play or record), and a three-position Dolby-circuit switch.

At the right side of the front panel of the SD9000 are some twenty-four pushbuttons (six with LED indicators) and three multiposition rotary switches that govern the operation of the "Compudeck" features. With these, the deck can be set to turn on and off at specific times (in the play or record mode), to play prerecorded selections either sequentially or in the order in which the user programs them, or to play/record between user-specified tape-counter settings. A program-pause button and a "skip to the next selection" button are also provided, along with MEMORY CALL (it reminds you of the information you have stored in the deck's microprocessor memory) and CLEAR ENTRY/RESET for correcting any possible mistakes in pressing the correct sequence of pushbuttons

The rear panel of the SD9000 contains the usual phono-jack input and output connectors, a remote-control connector (an optional accessory is available), a switched convenience outlet rated at 400 watts, and a 50/60-Hz slide switch that must be set to the power-line frequency. The unit measures 163% x 53/4 x 115% inches (width, height, and depth) and weighs approximately 22 (Continued overleaf)



pounds. A 19-inch rack-mount adaptor is available. Retail price: \$800.

• Laboratory Measurements. Our sample of the Marantz SD9000 was supplied with the cassettes used for the factory setup (TDK MA for the metal-tape position, TDK SA-X for CrO_2 -equivalent, TDK AD for ferric, and Sony FeCr for ferrichrome). We also tested a number of other premiumgrade formulations—at both speeds—and found that, by using the manual bias-adjust control (which could alter the 15-kHz response by about +2 to -5 dB), we could achieve essentially the results shown in the two accompanying graphs.

Playback response was checked using Teac 216 (120-microsecond) and 316 (70microsecond) test tapes. As the graph indicates, the frequency response was exceptionally flat, well within a \pm 2-dB variation throughout the 31.5-Hz to 14-kHz range of the test tapes. (The very slightly elevated response at the lowest frequencies is characteristic of a full-track test tape played on a stereo machine and would not occur in normal use.)

As the overall record-playback frequency-response graphs indicate, at either speed the metal-alloy tape provided greater highfrequency headroom at a 0-dB input level than the other tapes did, although the ferrichrome tape (Sony FeCr), which showed the least high-frequency headroom in the measurements, curiously sounded very close to the metal-alloy formulation (and slightly closer to the original than either the ferric or CrO2-equivalent cassettes) in our informal listening tests. In any event, all the tapes met the manufacturer's ± 3 -dB specifications at 17/8 ips. (The TDK AD had a \pm 3-dB peak at 14 kHz, and the metal tape was -3 dB at 20 kHz, but both of these could be brought closer by using the bias

control.) At $3\frac{3}{4}$ ips, only the Sony FeCr (+4.5 at 20 kHz, again controllable with the bias-adjust facility) exceeded the same specification.

Using a 0-dB input signal of 1,000 Hz, third-harmonic distortion at 17% ips measured 0.6, 1.6, 1.9, and 0.7 per cent for the TDK MA, Sony FeCr, TDK SA-X, and TDK AD tapes, respectively. Headroom margins—the additional signal level necessary to raise the third-harmonic distortion to the 3 per cent measuring point—were, respectively, 4.2, 2.4, 1.9, and 4.8 dB, and the corresponding signal-to-noise ratios, on an unweighted basis without Dolby, were 51.2, 47.5, 48, and 49 dB. Switching in the Dolby noise reduction and using CCIR/ARM weighting improved these figures to 65.4, 64.1, 63.1, and 63.1 dB, and using the more traditional 315-Hz test frequency for cassette signal-to-noise measurements added enough margin (using the Sony FeCr tape) to achieve the manufacturer's 69-dB specification.

At $3\frac{3}{4}$ inches per second the distortion at 0 dB was 0.88, 1.2, 1.5, and 0.7 per cent for the metal, ferrichrome, CrO_2 -type, and ferric tapes, respectively, and the corresponding 3 per cent overload margins measured 4.2, 4.7, 2.8, and 4.8 dB. CCIR/ARM-weighted signal-to-noise ratios, using the Dolby system, registered figures of 66.2, 68.5, 65.6, and 63.9 dB (51.6, 50.5, 49, and 49.6 dB unweighted and without Dolby); again, using the conventional 315-Hz measuring frequency improved the signal-to-noise ratio somewhat.

The DIN peak-weighted wow and flutter at the two speeds measured 0.09 (1% ips) and 0.03 (3%); with the more widely used weighted-rms technique it was 0.044 and 0.025 per cent at the lower and higher tape speeds, respectively. Fast-forward and rewind times for a C-60 cassette were between 61 and 62 seconds, which is rather fast.

The Dolby indication was accurate (using a Teac MTT 150A test tape) within the resolution of the level display (itself accurate at the indicated points, as checked against our General Radio calibrated attenuator), and Dolby accuracy at -20, -30, and -40 dB was well inside the prescribed ±2-dB limit. An input level of 48 mV (0.048 volt) was required for a 0-dB indication on the display, the corresponding output level being 0.63 volt. With our 600-ohm generator, an output of 0.2 millivolt produced a 0-dB indication through the microphone input, which overloaded at 35 millivolts. The noise level, when using the microphone stage, increased by a maximum of 9 (Continued on page 52)



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dB but registered only a 4-dB increase at more typical settings of the control.

• Comment. Is the improvement from recording at 3³/₄ ips worth the 50 per cent loss of recording time from a given tape (which also, of course, doubles the tape cost for any given recording)? We knew what our measured responses had indicated, but we were interested in what might show up in our listening tests. For most dubbing of LPs and FM broadcasts the SD9000 did a virtually impeccable job at *either* speed. A slight difference could be heard during direct A-B comparisons, and it became more distinct on the most demanding of our source materials: direct-cut and digitally mastered discs, master tapes, and FM interstation hiss. When we switched speeds and compared input and output directly, we found that a very slight "grainy," "gritty," or "edgy" quality at 1% ips was markedly less at the 3¾-ips speed. There seemed to be more "air" (for want of a better word) surrounding the higher-speed recordings, and this difference was most noticeable when using the metal-alloy and the ferrichrome tapes. If you feel that anything that's detectable under *any* circumstance is significant, then for you the 3³/4-ips speed is worthwhile. But it is likely that you won't be able to tell, without a direct A-B comparison, which of the alternative speeds is being used.

Throughout our test and audition period the Marantz SD9000 functioned well and reliably, and we have no hesitation in recommending its serious consideration by audiophiles who can appreciate its special features and performance.

Circle 143 on reader service card



THE Revox B760 digital frequency-syn-thesizing FM tuner follows the high standards of design and construction set by Revox for their tape recorders and other audio components. The B760 is a large unit, and in its operation it differs radically from other frequency-synthesizing tuners presently on the market. Its grey panel and brushed-silver trim match the appearance of other Revox products. Its most obvious control is a large MANUAL TUNING knob in the center of the panel, marked to indicate that it tunes in 50-kHz steps. To its left is a display panel, at the top of which appears a large five-digit frequency readout and a one- or two-digit preset channel indicator. Below them are two illuminated meters that read signal strength and channel-center tuning. Because the 50-kHz tuning steps of the B760 make it possible to receive a station in at least three adjacent positions of the tuning control, the tuning meter is advisable for the same reasons they are used in conventional tuners.

Below the meters are five flat pushbuttons whose functions are related to the tuning process and to the storage of station frequencies in the tuner's digital memory. To the right of the tuning knob is an array of fifteen flat, square STATION SELECTOR pushbuttons numbered from 1 through 15.

To the left of the display group there are large toggle switches for POWER and DOLBY (the latter used only when the optional Dolby decoder is installed in the tuner). Pilot lights show the status of these switches. Below them is a small VOLUME knob for the headphone-output jack in the lower left corner of the panel. The B760 has a separate headphone amplifier capable of driving any magnetic phone to comfortably loud levels independently of the setting of the tuner's regular output-level control.

A toggle switch marked SEPARATION blends the stereo channels at high audio frequencies to reduce noise on weak signals, and another toggle has positions for normal INTER STATION muting and INTER STEREO (which unmutes the tuner only when a stereo signal is received). Pilot lights above the switches show when a stereo signal is received and when the muting is switched on. Below the switches are two black pushbuttons for mono selection and for turning off the muting circuit.

A slight touch on the aluminum trim strip across the top of the tuner causes it to hinge downward, revealing a number of additional controls. Small slide switches select either a 50- or a 75-microsecond FM deemphasis time constant (50 microseconds is used in Europe and 75 microseconds on this side of the Atlantic) and cause a change to 25 microseconds when the optional Dolby decoder is switched on. Another slide switch, marked MEMORY MODE, has positions for READ ONLY and READ/WRITE. Its function will be explained in connection with the tuner's memory system.

At the right side of the subpanel are three small knobs: OUTPUT LEVEL adjusts the audio level at the appropriate output jacks in the rear of the tuner. There are two THRESH-OLD controls that separately adjust the IN-TER STEREO and INTER STATION muting thresholds. In the center of the panel is a pull-out holder for three AA cells that power the memory circuits if the tuner is unplugged from an a.c. power source.

The STATION SELECTOR memory can be used to store the frequencies of up to fifteen FM stations; any of them can be instantly recalled at a touch of its button. Normally the tuner frequency is varied in the manual mode with the tuning knob, which moves in distinctly detented steps. Each step changes the frequency by 50 kHz (0.05 MHz), and the tuned frequency is displayed on the digital readout. To store any frequency, the desired memory location button is touched, followed by the STORE IN MEMORY button below the tuning meters. Then, whenever one of the station-selector buttons is touched, its frequency appears on the readout with the number of the button to its right. The frequency assigned to any button can be changed at any time by storing the new frequency over it; to erase a frequency, simply touch the STATION SELECTOR button and then the STATION BLANK button. To store or modify any of the stored frequencies, it is necessary that the MEMORY MODE switch behind the hinged panel be set to READ/WRITE. After the memories are loaded, the switch should be moved to READ ONLY to prevent accidental or deliberate change of STATION SELECTOR frequencies.

Also below the tuning meters are two buttons marked CANCEL and ADD, coupled by the identification "25 kHz." In some parts of the world FM channels are spaced at multiples of 25 kHz, and in such a location touching the ADD button adds 25 kHz to the tuner frequency (and CANCEL restores the normal 50-kHz tuning interval). The last button in this group is MANUAL, which restores the tuning function to the knob if the tuner has been operating in its preset mode.

The rear of the Revox B760 contains conventional phono jacks for the fixed and variable audio outputs, as well as VERT and HORIZ outputs that enable an external oscilloscope to be used as a tuning and multipath indicator. A DIN socket duplicates the function of the fixed audio outputs. There is a socket for the detachable a.c. line cord (Continued on page 54)

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CIRCLE NO. 33 ON READER SERVICE CARD

Revox B760 FM Tuner

(Continued from page 52)

and a line-voltage selector for operation from 100- to 240-volt, 50- to 60-Hz power sources. There are antenna inputs for 240to 300-ohm balanced systems and 75-ohm unbalanced antenna feeders. The special connectors required for these inputs are furnished with the tuner.

The Revox B760 is approximately 173/4 inches wide, 133/4 inches deep, and 6 inches high. It weighs 261/2 pounds. Price: \$1,695.

Laboratory Measurements. The Revox B760 proved to be a very sensitive tuner, with a mono IHF usable sensitivity of 11 dBf ($2\mu V$, or microvolts) and an even better 50-dB quieting sensivity of 9.1 dBf (1.6 μ V). The stereo sensitivity of 23.8 dBf (8 μ V) coincided with the minimum value of the adjustable stereo threshold (the maximum was 51 dBf, or 200 μ V). The stereo 50-dB quieting sensitivity was a good 33 dBf (24 μ V). It is notable that the tuner quieted very rapidly with increasing signal strength, making it effectively more sensitive than one that might have had the same numerical ratings but whose output contained more noise than distortion at low signal inputs.

At a 65-dBf $(1,000-\mu V)$ input the ultimate quieting was 76 dB in mono and 65 dB in stereo, with respective distortion readings of 0.06 and 0.31 per cent. The tuner's capture ratio was about 2 dB, and the AM rejection was an excellent 70 to 72 dB. Its internal hum was also unusually low, measuring -77 dB.

The B760 has five tuned circuits in its "front end," and they were responsible for its exceptional image rejection, which exceeded our measurement limit of about 100 dB (it is rated at 106 dB). The in-band selectivity was also better than average, with alternate-channel measurements of 82.4 dB and an adjacent-channel reading of 20.5 dB (the latter is one of the highest we have ever measured).

The frequency response of the B760 in stereo was almost ruler-flat, varying less than ± 0.3 dB from 30 to 15,000 Hz. The tuner's low-pass filters, although they did

not affect its high-frequency response, removed the 19-kHz pilot carrier very effectively, leaving a residual level of only -75dB. The stereo channel separation was 45 dB in the midrange, falling to about 30 dB at 30 and 15,000 Hz. The audio output was 1.1 volts at the fixed output or the maximum level of the variable output.

• Comment. Although the performance of the B760 cannot be faulted, it does have a characteristic that we find annoying in a premium-price tuner. The tuner does not "remember" the last setting of the stationselector buttons. Each time it is switched on, it comes on at the frequency determined by the manual setting of the tuning knob. Also, one soon finds that it is difficult to remember the frequencies assigned to all fifteen station-preset buttons. If Revox provided some sort of labeling system it would be helpful.

Examination of the schematic diagram of the B760 reveals some of the reasons for its high price (though many of its excellent individual performance characteristics can be matched or sometimes bettered by far less expensive tuners). Nothing has been spared in the design and construction of the B760. Every circuit function has been supplied without apparent concern for cost. For example, the i.f. amplifier has a five-stage IC limiter, the stereo decoder uses four ICs plus two transistors, and the FM discriminator is a pulse-counting detector with three ICs and five transistors.

We were surprised to find in our use tests of the Revox B760 that it is d.c.-coupled from the discriminator to the audio outputs. Since our FM audio measurements go no lower than 30 Hz, we became aware of this only when we saw the woofer cones moving in and out at a 0.5-Hz rate when receiving a local "good-music" station which was apparently transmitting record eccentricities and warps without modification!

The overall measured performance of the Revox B760 ranks with that of some of the best tuners we have tested, and its selectivity and interference-rejection capabilities are outstanding. It can be safely said that the Revox B760 will not be surpassed in actual FM reception quality by any tuner one can buy.

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Going on Record

By James Goodfriend



MOVIES I HEARD WITH YOU

NOTHING, I think, so tellingly demonstrates the human need for a serious contemporary music (that is, a music to take seriously, not as mere light entertainment) as the perpetual search for something to fill that slot in our own time. Put the blame where you may, music produced in this century by the traditional source of serious music—serious composers—has had only a spotty success with the public, which seems to demand something *else*.

Some generations ago, the more polished productions of popular songwriters were inserted at the ends of classical vocal recitals to represent contemporary times. A whole generation of Americans (and some Europeans) took jazz very, very seriously, as another generation has paid similar obeisance to certain aspects of rock. While there are some individuals (perhaps a growing number) who wait breathlessly for the latest production of a Stockhausen, a Carter, or a Wuorinen, another, larger group of people have decided that the serious, the "classical" music of our time is the film score.

The case for film scores is a fairly straightforward one. They are produced, for the most part, by skilled, trained musicians who have their roots in the classical tradition but are free to draw upon any music that suits their purpose. So far as musical resources are concerned, virtually all are or can be employed. The music is heard, in many cases, by millions of people (and hearing a piece of music, after all, is the first prerequisite to liking it). And for those who have difficulty apprehending the abstract expressions of wordless music, the film score has a dramatic meaning impressed upon it by the film of which it is a part. In this way, it is something like ballet, in which, also, when you want to hear the music it is there, and when you don't there is always the dancing-which is what you really came for anyway.

The case against film scores is a more complicated thing. The music, after all, is an adjunct to the main matter at hand, and it is produced and modified to fit the procrustean bed of the script and the film cutter. Unlike in ballet, the music is not the directing force; the action and dialogue are. That much is simple fact, but what flows

from it? First, while it may not be impossible to write good music with such restrictions, it is damnably difficult. Second, since the film is, more often than not, a commercial venture, the nature of the music composed for it is probably subject to the approval of someone whose taste and experience lie elsewhere. Third, otherwise serious composers have been known to look down on the whole idea of film music enough that they may produce on assignment what might charitably be called "not their best work." Fourth, the very nature of a film score-start, stop, stand in place-takes away from virtually any music composed for it one vital dimension in particular: that of form. The architecture of a film score is imposed from outside, and it is almost impossible to make it have anything to do with purely musical architecture.

Some of the best composers of film music are very aware of this last objection and rewrite their music afterward, producing suites, or fantasies, or syntheses based on the film scores. Some very fine music has resulted from this, though it too is not long on form; it would involve total recomposition to pull anything as formally complex as a symphony or a concerto (a real one) out of a film score. But, successful as some of this music is, there is the nagging objection that this is no longer film music, but concert music arrived at through difficult and even devious means. The real film music is back there in the film, mixed in with the noises, the shouts, and the dialogue, subservient to the action on screen but intensifying it, telling us what to feel.

A PART from merely saying, "Well, I like it and the hell with you," one can go in two directions from here. One: film music is not serious music, the circumstances of its production requiring it to be no more than skilled craftwork. Or two: we have in film a new art form in which several independent arts are asked to sacrifice certain individual characteristics in order to produce something of a richness that no one of them could manage alone. There can, in short, be film masterpieces (if *most* films are bad, so are most operas). You can take your choice. For myself, I tend to flit back and forth. \Box

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The Pop Beat

By Noel Coppage

The New Country Woman's precursor, Loretta Lynn, is shown portrayed by Sissy Spacek (with Tommy Lee Jones) in a scene from the current film Coal Miner's Daughter.



THE NEW COUNTRY WOMAN

"HE ERA is gasping for breath, macho **T**HE EKA is gasping for crampant, wet-shirt reactionaries are rampant, wet-shirt contests spread like polyester across the land, Germaine Greer waxes irrelevantand the New Woman finally makes it into country-rock. The lesson, I guess, is that there's a lag built into everything. Look at how long it takes the light of (real) stars to reach us. Look at how long it takes Chrysler and disco to die.

Now that she is here, the New Woman will change things, question things, and the genre does need a shake-up. I would draft a letter of thanks, but I'm not sure whether to send it to Gloria Steinem or Dr. Spock.

For a long time there was only Emmylou Harris, different from Wynette-Lynn-Parton not so much in what she sang or the way she sang it but because her attitudes and assumptions came from a different place and brought with them the assertiveness to run their own show. Harris succeeded because she is a terrific musician, but you teach by example, and she's now quietly teaching attitudes.

Then there was Marshall Chapman, passing through en route to harder rock and bringing up, more clearly, the Dr. Spock connection. Chapman grew up in an affluent home, which almost automatically means a more liberal one than the Wynette-Lynn-Parton shanty. A woman of her age and upbringing grasps the new way of seeing things a lot more easily than does one a few years older from a more conservative background. It's one thing to raise your consciousness, bootstrap-style, and take assertiveness training and auto-repair coursesand it's something else not to have to.

Now, suddenly, over a few months, I've identified three additional high-quality New Women in country-rock: Roseanne Cash, Gail Davies, and Lacy J. Dalton. Their main characteristics are the same as Harris' and Chapman's: they came with knowledge of other musics, they are exceptional musicians, and they don't depend on men for direction.

Roseanne (speaking of affluent homes) is Johnny Cash's daughter, and she produced her album, "Right or Wrong," with her husband Rodney Crowell, one of the better songwriters. They gave it a sound from somewhere between Austin and L.A., but it has an honest country-rock feel. Like Chapman's, Cash's singing is free of traditional country-woman Angst and the inhibitions behind it, but her voice has more colors.

Gail Davies sounds more like a 1970supdated folkie in "The Game," which is not her debut album but might as well be. She produced it, achieving a lovely, spacious, transparent sound. She is free enough of hangups to use soft sounds, with generous portions of acoustic guitar, and to sound soft herself, but she also sounds more selfdirected than, say, Patti Smith emulating Mick Jagger.

ACY J. DALTON, the one from the most rawboned neighborhood-the coal country of Northeastern Pennsylvania-comes closest to a hard-country sound with an old-time rural intensity. But liberated attitudes frolic about her subject matter in her debut, "Lacy J. Dalton," and her delivery is too raw for today's country-and-stationwagon set.

Dalton's debut was produced by Billy Sherrill, a formidable Nashville authority figure and seemingly a confirmed dabbler in string sweetening and other pop softeners, yet the album has a tough, basic, crossover-be-damned sound. At least part of this has to be Dalton asserting herself. There's quite a contrast between the dearth of Billy Sherrill earmarks on this album and the plethora of same on Janie Fricke's albums. Fricke is a transitional figure: she helped take the whine out of the country female voice, but she didn't come to town to make albums her own way; she came to be a backup singer and got herself talked into making albums.

The promises of Austin are going unkept. They were man-made promises, although Jessi Colter anticipated the arrival of the New Woman and helped open the gates. Now the quality of these new albums in that kind of near-vacuum could tilt expectations out of whack. And lag will delay and drag out the shake-up. But be alert: more New Women are bound to arrive, mixing leather and lace as they damn please. How do you trim a Stetson for an outlaw-consciousness roundup?



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THERE's good news and bad news about car stereo this year, but none of it is really *new* news. The good news is that more and more carstereo equipment offers the features, the facilities, and—most important the specifications of home equipment. The bad news is that none of this equipment is free to perform as well as it would if it *were* home equipment, because it's forced to operate in that perverse environment, the moving car.

Let's dispose, as best we can, of the bad news first. When you ride in a car, you're sitting in a very small, quite noisy room with abominable acoustics-and it's only a few feet from a potent generator of electrical interference. You're contending with vibrations that can shake a normally smooth-running tape transport into audible wow and flutter, and with radio-reception conditions that vary from the weakest fringe signal to the strongest, overloadinducing transmission (not to mention multipath and other problems that you can't aim your antenna to correct). To deal with these impossible conditions. you have equipment that must be compressed to fit into compact spaces yet still be rugged enough to be bumped,

Most car-stereo systems provide three

The Electronics

program sources: AM radio, FM radio, and cassette tape. Each has a place in most people's car listening: FM brings you highfidelity stereophonic music (plus, occasionally, drama and other things) over most of the country without your having to juggle tapes. Tape, on the other hand, can be heard anywhere-in mountainous areas and even in long tunnels-and lets you play whatever you want, whenever you want to hear it-assuming, of course, that the tape you want to hear is one you've brought along. AM brings you news, weather, sports, traffic information, and talk shows to help you stay awake on long night drives. It also works over greater distances.

Tape doesn't have to be cassette, of course. It can be eight-track, too (once the dominant form), and it might even, in a few years, become microcassette. But since cassettes are the more compact of the two current formats, have a longer operating life, are easier to record on (more and better home recording gear exists for them), and are overwhelmingly the dominant format in new car-stereo units, we'll ignore eighttrack from here on in.

• Under-dash Units. If you already have an AM or AM/FM radio in your dash, you may prefer not to replace it but rather to supplement it with a cassette/FM or cassette-only system that mounts under your dash. (The lack of under-dash models with AM coverage shows that manufacturers asbaked, and frozen throughout most of its incident-filled life. The surprising thing is that car stereo, even against these all but unimaginable odds, usually sounds pretty good. Getting the best from a car-stereo system, however, involves more thought and effort on your part than setting up a conventional home system would.

First question to be dealt with: What kind of electronics do you want? Radio or tape alone? Radio/tape combination? With or without CB (this option is becoming rare)? Should the tape be eight-track or cassette? Do you want an all-in-one receiver, one with a separate amplifier section, or a set of completely independent components? And what level of performance and which features do you really need? Then there are the accessory options: Do you need a booster amplifier, an equalizer, an expander, a delay system? And, lastly, the speakers: Should they go in the dash? Under it? In the doors? On the rear deck? Some place else? Should they be mounted in holes cut into your car's interior paneling, or should they be self-enclosed minispeaker boxes? Do you want two-way or three-way speakers-or one-way or five-way, for that

matter? And hovering over all this are the two really *basic* questions: How much should you spend, and what will you be getting for your money?

SOME hi-fi writers recommend spending half your home-system budget on your speakers alone, but nobody takes that approach for the car. There are inherent limitations in speaker-system size, complexity, and housing for the car that establish a ceiling on car speaker prices. In the lower price ranges, of course, speakers will take a larger share of your total budget. (When he tries to cut costs, the designer of electronic equipment can cut back on both features and performance, but the speaker designer has only performance to sacrifice, and there's a limit to how much of that he can get away with.) At the low end of the scale, a pair of reasonably good dual-cone round speakers for your door might cost about \$35 to \$60, while an in-dash radio/cassette receiver will probably cost you at least \$100. So, since the electronics will account for the biggest part of your budget, and since the range of available choice is widest in that area, let's begin there.

sume that any buyer whose dash slot wasn't already full would buy an in-dash unit.) They're inexpensive (\$100 to \$300) and easy to install. Mount them on slide-mounts (these are provided with some Craig and



The AM/FM/cassette receivers on the cover are: (1) Kenwood KTC-767, (2) Sanyo FT 2400, (3) Panasonic CQ-7600, (4) Radio Shack Model 121886, (5) Jensen R430, (6) Pioneer KPX-9500, (7) Clarion PE-958A, (8) Royal Sound RS-2510, (9) Audiovox HCC-1100, and (10) Mitsubishi RX-2. The car (11) is, of course, a sturdy little model Rolls Royce pickup. Sanyo models), and you can foil thieves by locking them in the trunk when you park; you can also share one slide-mount unit between two or more vehicles. But they take up knee-room, they are easy to steal *if* you leave them in place, and they lack most of the de luxe features of the in-dash units.

Here and there, though, the under-dash models come up with some features you won't find in the dash. Pioneer's KP-500, for example, has a circular dial that's far easier to read at a glance than conventional straight ones but wouldn't fit into an indash unit. B.I.C. has a two-speed (17_8 and 33_4 ips) under-dash deck to play the tapes made on the two-speed home decks now sold by several manufacturers.

But for fancier "under-dash" equipment you'll need to spend a lot more for separatecomponent systems. Most separate car components cost about \$200 to \$300 each, and you'll need a set of them (tuner, tape deck, preamp, and power amplifier usually) to do what a single in-dash unit does. You'll find a profusion of features: Clarion, Fujitsu Ten. Kenwood, Mitsubishi, and Sony all have units with automatic, signal-seeking tuning; Kenwood, Mitsubishi, and Sony have pushbutton station preselectors, too. Fujitsu Ten's digital tuner even has such niceties as beep tones that confirm each press of the button and a digital clock that not only buzzes on the hour but has an alarm. Sony has a pulsewidth-modulation (class D) amplifier for greater efficiency. And Fujitsu Ten's preamp and tape deck incorporate remote auto-tune buttons.

(Continued overleaf)



But are separate components really for you? They do give you a chance to mix and match brands, performance levels, and features just as home stereo components do. However, they're not as easily stacked, and the mounting racks available are each made to hold one manufacturer's components; other brands will be of different sizes. And, too, spreading the controls among several components makes the system harder to operate while driving. On the other hand, there's nothing quite as luxe looking as a full set of separates. So you may want them for your van or motor home where space is less of a problem and the equipment is less visible to potential thieves. And, of course, they'd look just dandy set into the bar of your Rolls Royce.

• The In-dash Mainstream. For most people, the most practical and popular way to go is the in-dash radio/cassette combination. As with home equipment, it runs the gamut from low-cost gear with low performance and a minimum of features up to expensive gear with high performance and almost every feature and convenience under the sun. In the vast middle ground between these extremes, though, you have a choice, at any given price, between models emphasizing either features or performance.

To date, the major emphasis has been on features—some of them slightly off-thewall. In part that's because it's easier to demonstrate a feature that does something entirely different than it is to demonstrate an improvement that results in something's being done a little better. But it's also owing to the variety of specification systems, which makes it very difficult to compare performance figures from model to model.

This situation is beginning to clear up, largely through the efforts of the twenty or so major car-stereo manufacturers who set up an "Ad Hoc Committee" to prepare carfi specifications similar to those in force for home hi-fi. So far, not many of the older spec sheets follow this new standard (I've found only one, for Craig's T-687), but by the time you read this many more will, and the rest should follow late this year. Those manufacturers following the Ad Hoc standards in their spec sheets will clearly say so—and can therefore be trusted over those that don't.

In the meantime, you often have to read between the lines. Amplifier power is the spec most often inflated (see accompanying box), and FM sensitivity too is regularly spiced up a bit for popular consumption. The rest are usually honest, but they are also unclear. The moral is plain: if the specifications are not spelled out in terms as rigorous and meaningful as those for home hifi, pay little heed to them. Don't, in other words, buy for specs but for sound—assuming that you can get a meaningful in-car demonstration.

• Features—the Visible Difference. With the now-about-to-be-cleared-up confusion

about specifications, the most easily comparable (if not quite the most vital) difference between car-stereo units lies in the features they provide. And there's good news here: features which were luxuries a few years back are now becoming nearly standard.

At about rock-bottom in the price range (roughly \$80 to \$150) you'll still find a few units with no controls beyond tuning, volume, and tone (treble-cut) plus cassette eject and fast-forward levers. But even in this price class most decks have rewind as well as fast-forward, and separate bass and treble cut/boost controls—features you'd have had to pay a little more for only a few years ago.

Other major features are likely to involve tape handling. You can now find automatic reverse, for example, in units as inexpensive as Sanyo's under-\$100 FT C6, and it has become common in models selling from \$150 up. Automatic tape eject is available over a wide price range, too. But not all auto-eject systems are the same. Some pop the tape out only when it's wound to its end; others eject it (or provide an audible warning) when you turn your ignition off, thus preventing mechanical problems that can develop when tape and deck are left in the "play" position with the power off.

A third automatic function, auto replay, is found mainly on \$150-\$400 decks which don't have auto-reverse (rewind the tape and the auto-replay feature will start the tape playing as soon as it reaches its beginning). Then there are tuning aids to help you find a radio station quickly without taking your eyes from the road. Pushbutton tuning of preselected stations is the most familiar one. The lowest-price pushbutton sets (about \$150 up) let you preselect a total of five AM and FM stations, but with restrictions: you may be able to choose between three AM and two FM stations (or vice versa), or have only one button restricted to each band, with the other three settable to either FM or AM. At around the \$150 level you begin finding preselects with one AM and one FM station per button, doubling your choice on a five-button set to ten stations altogether.

Other tuning aids appear in even lower price brackets. Most car-stereo models today have interstation muting to eliminate the rush of noise between FM stations (Motorola's 830SX has AM muting too). From about \$120 up you'll find switches to defeat the muting so you can receive weak stations that otherwise would not get through. Another feature that relates to weak-signal reception is the local/distant switch; it sets FM sensitivity to maximum for distant stations, but reduces it to avoid overload from strong local signals.

Mono/stereo switches help fringe-area reception too (when signal strength fluctuates above and below the set's *automatic* stereo/mono switching threshold), switching the automatic circuits back and forth disconcertingly between clean mono and dirty stereo. They also clean up the sound when the signal is above the stereo threshold but muddied with multipath distortion. You'll find mono/stereo switches on some, but by no means all, models from about \$60 on up.

WHAT'S WATT?

AMPLIFIER power ratings are perhaps the most unexpectedly misleading specifications in car audio. The novice very likely does not know what "selectivity" is, and will therefore ignore it. However, everybody knows that a "20watt" amplifier is more powerful than a "5-watt" one—but is it? The answer depends on how the power ratings are measured. For example, a "20-watt" amplifier may deliver 20 watts per channel, or 10 watts for each of two channels, or even 5 watts each into four. (Home sterco equipment must specify power per channel, but so far there's no such legal requirement for car sterco.)

The wider the bandwidth over which an amplifier delivers its rated power, the better it sounds. Most amplifiers can deliver more power at middle frequencies than at very high or low ones. But power is usually most critical at the low end. So an amplifier providing 10 watts from, say, 50 to 15,000 Hz at 1 per cent distortion would deliver a tighter, more solid bass than one that went down only to 100 Hz or so. That is why, pending wider adoption of the industry's Ad Hoc specifications, we find car-stereo spec sheets citing power over very limited bandwidths or even just at "1 kHz"when they list any bandwidth at all. And why we also find that there are cagey efforts to squeeze out a few more advertised watts by adjusting the distortion reference. Shown in the accompanying table are some examples of this practice from current spec sheets (it should be emphasized that these are some of the clearest power ratings-at least these companies tell you what they mean!).

The moral? When it comes to car stereo, ignore any power specification that does not specify (a) that it's measured at a reference distortion level of 1 per cent or less, and (b) that it applies down to the lowest frequency your car speakers can deliver. Anything else isn't a spec—it's a campaign promise.

| Advertised maximum power | Power at 10% distortion | Power at low distortion |
|--------------------------------|-------------------------------|--------------------------------|
| 23 W/ch | 16 W/ch | 2 W/ch at 0.8% THD (Blaupunkt) |
| 8 W/ch | 5 W/ch | 4.5 W/ch at 1% (Mitsubishi) |
| | 10 W/ch | 8 W/ch at 1% THD (Sparkomatic) |



• Self-adjusting Tuners. At about the \$250 level we begin to find tuner sections that obviate the need for such controls as the mono/stereo switch, at least under most conditions. Under a variety of mysterious initials, acronyms, or trade names (Clarion's "SASC," Craig's "Signal Stablizer," Kenwood's "ANRC," Marantz's "A.I.R.," Mitsubishi's "SRC," and Sanyo's "SNC"), these tuners slide smoothly from stereo to mono reception and back again as reception conditions change. This eliminates those irritating staccato mono/stereo transitions and helps reduce multipath distortion too.

Some of these tuners do a great deal more. Craig and Sanyo have models that vary their audio bandwidth with changes in signal strength. Marantz's A.I.R.-equipped models vary tuner sensitivity and selectivity too. Sanyo has a "Soft Muting" circuit to fade stations out gently when they grow too weak for listening. But perhaps the most elaborate set of systems for dealing with weakening signals is Kenwood's: its ABSS system automatically relinquishes any station that becomes too weak and tunes in the nearest strong one. But since that next clear station probably won't be playing the kind of music you want to hear at the moment, Kenwood also offers "Cassette Standby," which switches from a too-weak station to whatever cassette you've left cued-up and waiting-but the transport doesn't engage the tape until the standby circuit tells the tape to move.

• Other Conveniences. Another feature that can affect both tape and FM is Dolby noise reduction. Many models from about \$180 and up have Dolby tape playback, while some models above about \$300 have

Dolby FM too. (You may even find Dolby FM decoders in some lower-price models, but car-stereo spec sheets are for some reason frequently coy about this.) And if you want still greater noise reduction (on your own taped programs), Royal Sound will soon have dbx noise-reduction decoders as add-ons for two of their models and dbx built into another.

It took car-stereo makers a long time to realize that most tapes are Dolby-encoded nowadays. They were equally slow to recognize that CrO_2 and other tapes requiring a 70-microsecond playback equalization curve were becoming about as common as the older, 120-microsecond type, but where only a handful of models had equalization switches last year, at least two dozen (starting as low as \$170) do now.

Since all these features let you hear what's on the tape with reasonable fidelity, the next problem is to find the section of tape you want to hear. Alpine, Kenwood, Sanyo, Sharp, and others have "music-sensor" systems (a misnomer—they actually sense the *silent* spaces between musical selections) which stop the tape at the beginning of each piece coming out of the fastwind mode. Motorola has a model with "Auto-Cue," which lets you hear the tape chatter while fast-winding so you can find your place by ear. And Alpine's 7308 has a digital tuning dial that can also serve as a tape-indexing counter.

• **Digital Dials.** Digital frequency readouts are rapidly replacing conventional dials and pointers (there's even a \$140 digital-dial model, Sanyo's FT C10). Digitals look impressively modern; they pack large, legible numbers into small spaces, and their cost is coming down as demand and production rise.

But more significant is the relationship between digital dials and all-electronic PLL (phase-locked loop) or frequency-synthesis tuning. These tuning methods don't require physical rotation of a tuning capacitor, so a physical dial pointer becomes an expensive nuisance. In fact, with PLL tuning, the cheapest alternative to a digital dial is a dial made of a series of LEDs that light one at a time to show where the pointer would be; Panasonic's "Cockpit," Blaupunkt's "Berlin," and some Roadstar models make use of this system.

Since some electronic tuning employs a quartz "clock," it then becomes simple to use the digital display to show the time of day also. Some models from Sanyo and Sparkomatic can also be set to measure elapsed time-handy for checking travel time. Sanyo even has one with a clock/calendar, and J.C. Penney's MCS 25 (\$599) has both elapsed-time and calendar features. Electronic tuning lets you play some other tricks too. It makes it comparatively simple to add such tuning aids as station preselects and auto-tuning, and it eliminates any need to fine-tune manually. This is for safety and convenience when the driver is operating the set on the road.

For preset tuning, virtually every all-electronic tuner has one AM and one FM station per button. And because the buttons need not move pointers or capacitors physically, they can be small, light-touch types that leave more room on the control panel room that's often occupied by still more station-selector buttons. Various models from Audiovox, Blaupunkt, Clarion, Kenwood, Marantz, Mitsubishi, Roadstar, and others



have six-button setups for a total of twelve stations (save on the Clarion PE-956A, which has presets for two AM and four FM stations); Fujitsu Ten's EP-320 "Dashboard Wizard" has a seven-button, fourteen-station preselector.

Sony's XT-1 component digital FM tuner has ten buttons for ten FM stations plus a unique feature called the Programmable Automatic Reception System (PARS). Using PARS, you can load the tuner with a sequence of stations along your driving route. As each fades to the point where it's no longer listenable, the tuner will switch automatically to the next one. Clarion will soon have a different programming system that will use the dial clock as well to shift to preselected stations at preselected times.

If preselectors are useful when you know the stations you want to hear, automatic tuning is useful when you don't. Auto-tuning finds a station for you in any of three ways. In one auto-tune mode, usually called "scan," the radio tunes to the next strong station on the dial, gives you a several-second taste of the program, then goes on to the next station until you stop it by pressing a "hold" button. In the second mode (usually called "search" or "seek"), the tuner stops at the first strong station it finds after you release its button (on some sets, this same system is used for "manual" tuning). The third mode, called "memory scan" and found on such models as Marantz's CAR-427, scans through the stations in the preselector memory. Prices for auto-tuning units begin at about \$250.

Most car-stereo units scan in only one direction; at the end of the band they either reverse direction or "wrap around" to the other end. A few, such as Motorola's 830SX, do it in both directions.

Since digital dials bright enough for daylight use can be annoying in the dark, the better models have some sort of dimming system. On most it's a manual switch, but various models from J. C. Penney, Blaupunkt, and others have photocell sensors that dim or brighten the digits in accordance with light conditions.

Incidentally, AM and FM aren't all you can receive on some tuners: you can listen to the sound of VHF television channels 2 to 13 on Roadstar's RS-2141 receiver, or with an add-on converter available from Kraco. That same converter (and several Kraco indash receivers) can pick up National Weather Service broadcasts. Some Motorola units can pick up travel-advisory broadcasts at the far extremes of the AM band, and a few European sets can pick up shortwave too.

• The Output End. The radio and tape sections are only part of the story, for the amplifier and tone-controlling sections certainly bear a great deal of responsibility for what you hear. Such niceties as switchable loudness compensation are common in sets

costing \$150 or more. And there are models above that level whose tone-shaping facilities go beyond the usual bass and treble controls. Grundig, for example, has one model with three-band equalization, while Panasonic, Fujitsu Ten, Kraco, and Roadstar all have models with built-in five-band equalizers. Several companies have bass boost (such as Fujitsu Ten's "DSS"), and Concord has models with "Bass EQ" and "Treble EQ"—actually, adjustable turnover points for the bass and treble controls. And Concord's pitch control brings offspeed tapes up or down to the right key.

• Biamping. Another way to improve tone quality is by "biamping"-feeding woofers, midrange, and tweeters from separate amplifiers. The technique is used in elaborate home hi-fi systems to, among other things, reduce distortion caused when peak power demand in one part of the spectrum reduces the power available for another. That can make a system with a 20-watt bass amplifier and a 5-watt treble one sound as good as a single amplifier with somewhat more than 25 watts of power. In a car, that's the efficient way to go, for the 5-watt amplifier can operate directly from the car's 12-volt electrical system with no need for a more powerful amplifier's voltage-raising power supply. Jensen and Sanyo were among the first to hoist the biamp banner on the road; now Audiovox, Roadstar, Concord, and others are joining them either with electronic crossovers in their in-dash units or by offering them as accessories. And Concord's HPL-510 is designed to operate either as a self-contained 20-watt unit or as a biamped system with its internal amplifier providing only the treble and midrange and an external amplifier supplying the bass.

External power amplifiers aren't used only for biamplification. Since fitting a very high-powered amplifier section into an indash unit isn't easy, most car-stereo units above the 20-watt level come with their power-amplifier sections on separate chassis and linked to their preamps by cables. Or they come with no power amp at all, but with preamp-level outputs to feed whatever power amplifier the buyer chooses.

And since this, in turn, has sparked the sale of amplifiers with preamp-level inputs, many low-power receivers from about \$150 up now have preamplifier outputs in addition to their speaker-level ones. Such units may be used by themselves when you first buy them and upgraded later by adding a higher-power amplifier.

• Amplifiers, Boosters, Equalizers. Originally, the only add-on amplification you could get for your car system was a "booster" which amplified whatever signal came out of the speaker-output connections. Boosters, as such, are still around, generally with lower prices and powers. Power amplifiers (generally called just "amplifiers") designed to be driven by preamp-level input signals cost a bit more, but they sound cleaner because the signal they're amplifying is cleaner than it would be if it had already passed through an inexpensive poweramplifier stage.

Many power amplifiers nowadays have

both speaker-level and preamp-level inputs, so you can use them with anything. These make especially good sense if you want to upgrade your present, low-cost system in stages. First add the amplifier, using your stereo's preamp outputs if it has them or its speaker outputs if (as is more likely) it does not. Then you can replace your in-dash unit with a fancier, preamp-only type—or take the amp along to your next car and put the fancier unit into that.

Today's car-stereo amplifiers incorporate some interesting technology. Probably the most unusual is the Dynamic Compliance circuit in Concord's new HPA-70 and HPA-45 amplifiers (70 and 20 watts per channel, respectively, into 4 ohms, with the HPA-45 delivering 25 watts per channel into 2-ohm loads). Concord calls it an "automatic equalizer"; speaker-cone motion is sensed and compared with the amplifier's output, and the difference provides a correcting signal that adjusts the amplifier's performance as required for flat response.

Another technology new to mobile sound (and far from common in home stereo systems) is pulsewidth modulation, used in the aforementioned Sony XM-1 component amplifier. Biamplification is far *more* common in the car than in the home. Among those espousing it in amplifiers and associated preamp/control units or equalizers are Alpine, Audiovox, Jensen, and Sanyo, though several companies offer separate crossovers as well.

Four-channel amplifiers are growing common-though not for quadraphony. Instead, the idea is to feed each speaker with a separate amplifier, allowing front/rear balance to be controlled before the amplifier stage rather than by a power-wasting control placed between speakers and amplifiers. This system is a natural for biamping, too, of course. Among those offering fourchannel amplifiers are Audiovox, Blaupunkt (including one model with built-in time delay), Jensen, Kenwood, Marantz, Panasonic, and Sanyo. Sanyo, incidentally, uses a somewhat different system in their PA-6060 and PA-6120 amplifiers, which have their own motorized front/rear faders remotely controlled from either of two Sanyo equalizers. If biamping is your application for these amplifiers, you should know that some of the models have unevenly divided power; you can feed more power to your woofer, less to your tweeter (or more to one end of the car than the other).

As amplifiers become more powerful, cooling them becomes more of a problem. Heat sinks frequently occupy as much volume as the rest of the amplifier-which is why both ADS and Kenwood have amplifiers of low, flat construction to maximize the heat-dissipation area. ADS' Power Plate amplifier (their first amplifier model, though they've built speakers with built-in amps) also has such features as a turn-on noise suppressor, a subsonic filter, and three switchable equalization curves to match infinite-baffle and open-back speakers, large mini-box models, and small minis-all three of which ADS makes. There are now even companies that specialize in amplifiers-such as Linear Power, with one preamplifier and five power amps from 20

(\$110) to 150 watts per channel (\$500), and Mobile Audio Development.

If a plain old amplifier isn't enough for you, you can also get an equalizer/amp or equalizer/booster combination-with preamp-level equalizers available separately, too, to fit between your stereo system and its amplifier. The majority of mobile equalizers are five-band types with both channels ganged on each slider-just the right combination to make a super tone control without complicating life too much. If, on the other hand, you prefer complication, there are many seven-band systems: from Kenwood (with illuminated sliders you can "read" in the dark), Pace/Altus, Pyramid, Pioneer (including one with time delay), Roadstar, Royal Sound, Sanyo, and Sparkomatic. And both Audiovox and Jensen have semi-parametric five-banders with adjustable center frequencies.

If, on the other hand, you want to use your equalizer not as a tone control on individual tapes and broadcasts but to tailor your car's sound for keeps, Zapco has a nine-band model with separate sliders for each channel; once it's set, it can be swung out of the way to keep nosy passengers from fiddling with it. Jensen's new five-band equalizers can swing away too-but in this case it's to allow room for a control panel large enough for the double-length sliders that are easier to adjust precisely. And Pyramid's preamp-level seven-band model is small enough to be tucked into your glove compartment to protect its settings. Finally, Spectron has a three-band equalizer with center frequencies at 60, 180, and 16,000 Hz, obviously picked more for acoustical tailoring than tone controlling.

If you want to see as well as hear your power, you'll find LED audio-level indicators on equalizer/amps from Autotek, Concord, Delco, Mobile Audio Development, Mitsubishi/Melco, Pioneer, Royal Sound, Sanyo, and Sparkomatic. The power meters on some Radio Shack and Kraco units are to be preferred, however, since you're less likely to watch them instead of where you're going. On the other hand, if it's the sound you find distracting, Royal Sound's RC-2000, a LEDequipped, seven-band preamp/control center, has a headphone jack so your passenger can listen while you don't. (*Driving* with headphones on is, of course, an obvious safety hazard—as is driving with a system playing at 100 dB or so.)

Equalization isn't all you can add to your sound system's electronics either. Blaupunkt and Pioneer have equalizers with built-in time delay, Sound Concepts and Fujitsu Ten make separatetime-delay units, and Alpine has one designed to plug into their equalizers. Alpine also has a control center for the traveling musician; it not only has echo, but front-panel mixing inputs for microphone and electric guitar (one supposes the driver performs only as the vocalist here) plus a rhythm generator set up for waltz, waltz-rock, swing, march, bossa nova, rock, and two disco rhythms.

The Speakers

If amplifiers are getting more powerful, then speakers must be able to handle all that power. And power handling is being emphasized by many manufacturers. AFS Kriket and Sanyo both have ferro-fluid "liquidcooled" speakers, and Sanyo has a model with a finned frame for better heat dissipation. Jensen has upgraded their speakers' power handling too.

The urge for more bass is being met by subwoofers from several companies—AFS, Altec Lansing, Mesa, and Visonik, to name a few. Both the Visonik and Altec units come with matching amplifiers; Altec took advantage of that fact by giving their subwoofer a 2-ohm impedance so that their bridged driving amplifier could develop about 40 watts from the car's 12-volt electrical system.

Another design trend is to mount two- and three-way speaker components in a square, raised panel that can be laid over a 6 x 9-inch hole in a reardeck or over a smaller, round hole in a car door. Among those offering such speakers are Altec Lansing, ADS, Avid Epicure (now with a new, smaller version of the one they introduced last year), and Marantz (with the same components available in a mini-box mount). ADS's new 300i, by the way, has a fused tweeter; there's also a threeposition high-frequency contour switch behind the removable grille.

Speaking of tweeters, Sony now has enclosed speaker systems with ribbon tweeters, while Jensen mounts the tweeters of its latest Coax II series in the grilles for better dispersion. Cerwin-Vega has a similar mounting for the "dhorm" (dome/horn) tweeter in their latest speaker.

Speakers are being designed more and more to deal with the acoustical peculiarities of the car's interior. Advent's EQ-1, for example, has built-in equalization to compensate for the lower-midrange dip in response which occurs when speakers fire up onto the slanted rear window—a phenomenon amply documented by measurements taken at AFS' dealer clinics. Avid referst othe same problem in their speaker-design literature, and Canton handles the problem by using speaker boxes that angle the sound forward.

Bose has a different approach to handling car acoustics. Not surprisingly, it involves "direct/reflecting" speakers which direct the sound at the listener as well as reflect it from the rear window. If that sounds like Bose's home models, so will this: the 50-watt-perchannel amplifier that comes with the system is equalized for optimum speaker frequency response.

If you're biamping your system, you'll need speakers with separate (or separable) highand low-frequency inputs. That's easy with the completely separate drivers offered by such companies as AFS, Altec Lansing, Intervox, Jensen, Visonik, and others. And though installing them involves more holecutting, it also helps solve some installation problems by fitting the tweeter into the best acoustical spot, one where a full-size coaxial wouldn't fit. But biampable all-in-one speakers are available too—from Heppner, Jensen, Sanyo, Trusonic, and others.

T is evident that the car-stereo mar-ketplace has expanded to such a point that even the wise King Solomon, if he decided to install a system in his chariot, would be as confused by it as any of us. But there are some loose guidelines to help prevent catastrophic errors. First of all, stick to widely distributed brands with names you recognize. This by itself is no guarantee of quality, but it will keep you from getting stuck with an orphan, a closeout, or a "private label" that was imported in a thousand-lot container and will never be seen on our shores again. (It's difficult to get a warranty honored or even non-warranty repairs done when the closest factory repair station is in Osaka.)

Make sure that what you're buying will fit comfortably into your car. A conscientious car-stereo dealer will quiz you carefully on your make, model, and year and recommend products (from among those he stocks, of course) that will fit your vehicle using

CA(R)VEAT EMPTOR!



whatever adaptors, trimplates, and additional housings may be necessary. And it's not only the electronic products that require matching to your car; the speakers do too, both physically and acoustically.

For these reasons you might find it best to buy your car stereo (particularly if it's a complex, expensive setup) from a local installer who is prepared to do the installation and guarantee the results. Try to find one with a good track record, so to speak, who'll be happy to have you ask some previous satisfied customers about his work. For those do-it-yourselfers for whom electrical wiring and mechanical installation hold no terrors, the Crutchfield Corporation (1 Crutchfield Park, Dept. SR, P.O. Caller 1, Charlottesville, Va. 22906) is set up to sell products through the mail and provide whatever kits and/or toll-free phone consultations are necessary to get them installed correctly.

Car/stereo compatibility does not come automatically, but only through careful shopping, both for the equipment and the installation of same. Do it right and you'll end up with a system that will provide—to coin a phrase miles of smiles. -L.K.



MARK Knopfler

Steve Simels has a little talk with a man who doesn't give much away. "R OCK-AND-ROLLERS," sang Ian Hunter, "you're all the same." But the truth is they're not, at least in my experience. Oh sure, a lot of them are just plain stupid, which is the first major disillusionment fledgling rock journalists suffer when they start doing interviews, but by and large the ones I've met have been closemouthed and gregarious, uninteresting and witty, jive and sincere, egocentric and selfeffacing—in other words, as varied a lot as the rest of us.

The point is, of course, that they can and do surprise you. Just when you figure you've got them all pegged as something or other, you meet somebody who doesn't conform at all to the stereotype. Which is why I was surprised speechless when I met Mark Knopfler, the writer and guiding force behind Dire Straits (a band widely celebrated for its musicality) and he told me without cracking a smile that he doesn't "particularly like music."

He also (so I had been told) doesn't particularly like journalists. He confessed to Melody Maker's Richard Williams that the lukewarm notices for "Communiqué," Dire Straits' second album, were a predictable, rather boring example of the British press' habit of "setting 'em up and knocking 'em down," and while we here at STEREO REVIEW regarded the record somewhat more enthusiastically (it was a 1979 Record of the Year runner-up), it is possible that the difficulty I had in getting him to open up was a result of that prejudice. Nevertheless, it would be fair to say that of all the rock stars I've encountered on their good days, he's the only one to whom a one-word characterization of "reticent" would apply. He is, in fact, probably the most guarded, cautious, obviously secretive fellow I've ever talked to, and, though I've chatted with other guitar heroes who took great neurotic pains to minimize their own accomplishments, Knopfler genuinely seemed more at ease talking about everything from philosophy to' the weather. Anything but music, his or other people's.

Whether this decision to play things close to the vest stems from simple insecurity, a Dylanish attempt to create a mystique (after all, Dylan is a big musical influence on him, about which more later), my own ineptitude as a questioner, or simply a passion for privacy I wouldn't venture to guess. Perhaps it's all of the above. Reticence is certainly an unusual trait for anyone involved in such a public pursuit as rockand-roll (especially if they're successful), but it seems less of an anomaly in this case when you realize that it also comes across in Knopfler's music. It may, in fact, have been one of the reasons Dire Straits hit as big and fast as they did. There were, to be sure, other reasons: the tension between the atmospheric American idioms (mostly drawn from country and the blues) and the vividly drawn portraits of specifically English milieus (Wild West End, for example), Knopfler's remarkably fluid and architectural playing, the understated intelligence and grace of the songs, and the band's brilliant performances. But there was also a fascinating undercurrent---of mysteries left unsolved, secrets not revealed. It speaks volumes, for example, that when Knopfler did a session with Steely Dan recently (he considered their invitation a compliment), he took great care "not to give away my best stuff.'

The best stuff, I suppose, is on Dire Straits records, at least for now. The day I got their first album in the mail I recall I experienced an epiphany of sorts. I was not, you see, expecting anything special. I knew the group had a decent following in Europe (the album broke in Holland and Germany long before it did in England), and I had a pretty good idea what their basic sound was, both from having read reviews in English music papers and from a live cut on an import Pub Rock anthology ("Live at the Hope and Anchor"). But, though the reviews had been intriguing (Melody Maker said they were doing "the music Eric Clapton wishes he could but currently can't"), the band sounded merely okay to me, something like a cross between Dr. Feelgood and a so-so Southern boogie band.

Once I heard the thing, though, I was, like nearly everyone I played it for, utterly knocked out. The music was spare, sinuous, and insinuatingly sexy, but above all it was as American as Dust Bowl ballads and John Ford cowboy movies. What hit so hard about it was that the entire thrust of the English punk/New Wave movement, with which the Straits were aligned in terms of public perception if not their own temperament, was profoundly anti-American, perhaps an (overdue) English attempt to establish an indigenous pop culture which for the first time in twenty years did not look out across the Atlantic. English kids, we were told, were bored to death with imitating our music; they wanted something of their own. And yet, here were these four intense young men beaming various American styles back at us again, and they were doing it even better than the people whose influences they had all but transcended.

Knopfler himself finds nothing surprising about any of this. "America," he told me, "has culturally ghetto-ized the rest of the world. Even punk. Face it, once you learn your first three chords on a guitar, it's American music." As you can gather, he doesn't mind this much; he is, in fact, fascinated by this country. He visited here a few years before forming the band, bumming around and soaking up the sleaze, and the memories are quite special for him. His most animated moments in our conversation occurred when he told me about coming to New York City. "My first night," he said with a wistful look usually reserved for reminiscences of the Summer of '42, "I got picked up by a girl on the bus; she took me to the Nathan's off Times Square in the middle of the night."

The rest of our chat was more mundane, typical musician/businessman stuff. "I think," he said when I asked him about the second album's selling disappointingly in relation to the first,

"that it was generally overrated. It sold poorly in the States, but that was because the gap between the release of the first one and the second was so short. In the rest of the world, the first one had been out for six or seven months before you got it. In actual fact, the second one did very well world-wide.'

On the current state of the rock art he was more laconic. "I hate most of what I hear coming out of L.A. I won't say anything bad about individuals, because I don't know those guys, but the music bores me. Then again, I may be hearing the wrong stuff. I just got my first stereo, and I don't have anything to play on it."

AME, however, appeals to him, at least on certain levels. "What's nicest about fame," he said with a laugh when I suggested that people were now idolizing him the way he looked up to his early heroes (Scotty Moore, Presley's guitarist on the Sun sessions, and James Burton, who performed a similar service on the Fifties Ricky Nelson hits), "is knowing that kids are copying your licks. We were staying at a Holiday Inn on the last tour, and we sat in with the lounge band. We were sitting around at the bar, having a drink, when we heard them start Sultans of Swing, and they had the cherds wrong. So we showed them how to do it."

Knopfler is twenty-nine now, and though he's had other career stints, including working as a journalist himself (for the Yorkshire Evening Post, where his stuff was, from all accounts, exceptionally good), he told me, "I always knew I was going to be a musician.' And he has hinted that Dire Straits may be only a temporary thing (a prospect that no doubt sends chills along a few spines at Warner Communications). Besides the Steely Dan sessions, he has already done a Dylan album, worked with such luminaries as Bonnie Raitt, and publicly declared that what he would really like to do is tour as Van Morrison's lead guitarist.

But the Dylan connection, it seems to me, is the most crucial, both in terms of his music and how he related to a pesky little snoop like me. Dylan, you will remember, was nearly impossible to pin down through the Sixties; he was nearly as famous for turning interviews into absurdist exercises as he was for his songwriting. Though this was partly an arrogance born of amphetamines, it was also quite clearly calculated to protect himself, to ensure that, like a character in one of his songs, he never made a foolish move.

Knopfler was weaned on Dylan, as was most of his generation. You can hear it in his singing and in the mathe-

matical precision of his guitar work. Had he been older. I have no doubt that the Dylan album he would have played on would have been "Blonde on Blonde" rather than "Slow Train Coming." But I think you can detect a ghost of the Sixties Dylan in how he chose to deal with me. He wasn't obnoxious or mean; in fact, he was charming in his way, and even his silences could not hide the alert intelligence behind the taciturn responses. But mostly it was obvious he knows that whenever he talks to a journalist he is in some sense appearing (in Dylan's phrase) with his Mark Knopfler mask on.

That being the case, I couldn't resist trying to pry at least one bit of candor out of him, fittingly enough about his experience playing with the now Born Again Mr. Zimmerman. What was it like, I wondered, after all this time, to get a chance to work with a guy you've idolized since you were a teenager and then find, suddenly, that he's gone . . . well . . . Somewhere Else?

The lack of precision in my question irked Knopfler, and he stared at me for a moment.

"How do you mean that?"

"Well," I said, "was there ever a moment-during a playback, perhapswhen you found yourself shaking your head and thinking, 'My God, what am I doing here? This guy's a religious nut'?'

And at that he threw his head back and laughed out loud for the only time during our talk. Then, just as abruptly, he stopped, smiled, and folded his arms like Jack Benny. In short, nothing was revealed: as the man says, he doesn't give away his best stuff.



The Coming WAR OF THE VIDEODISCS By David Ranada

HE troops have been mustered, the battle lines drawn, and the trenches dug for what seems to be the coming War of the Videodiscs. Even as you read this, armaments are being manufactured, secret weapons developed, and propaganda composed for the advertising salvos that will be aimed at ruthless competitor and innocent consumer alike. This war will not cost any lives, change any borders, or reallocate any natural resources. But it will cost a lot of money and it will determine the way we Americans (and a good part of the rest of the world) listen to our stereos, watch our TVs, use our home computers, and teach our children—in short, how we receive and disseminate video, audio, printed, and computer-compatible information for a long time to come.

What is the cause of the upcoming battles? Over the past decade or so, technology has spawned several ways of recording and playing back the very high frequencies of the video range on plastic discs, discs that are relatively inexpensive, not too difficult to manufacture, and easy to play. These discs can retain not only video signals but digital audio (in any number of different formats) and large amounts of computer data in unprecedented "packing densities" as well. The businesses involved in the development, manufacture, and possible standardization of a videodisc format are therefore not only such giants of home entertainment and consumer electronics as Philips, RCA, Zenith, Matsushita, Pioneer, Columbia, MCA, and Sony, but also the giants of the not inconsequential computer industry, starting, not surprisingly, with IBM.

Only in the past few months have the outlines of the conflict become clear. RCA has signed on both CBS and Zenith as licensees of its stylus-groove SelectaVision videodisc system; CBS will be a producer of software (the discs) and Zenith will concentrate on the hardware (the players). Matsushita (which owns Panasonic, Technics, and part of JVC) has announced that it will adopt the JVC-developed Video-High-Density (VHD) grooveless-disc/stylus system in hopes that it will become the standard videodisc format. And in late March Pioneer announced that its Philips/MCA-compatible videodisc player (the \$749 VP-1000) will receive a cityby-city introduction in the U.S. starting this month. It, like Magnavox's Disco-Vision, uses a laser to scan its discs (as a matter of fact, the Pioneer and Magnavox machines are designed to play the same "software").

On the digital-audio front, Pioneer has been demonstrating for the past two years a digital-audio adaptor that attaches to a videodisc player similar to the VP-1000. Sony has shown an experimental prototype of a videodisc-based digital audio system using sixteen-bit encoding and offering a 2¹/₂-hour playing time *per side*. Philips' prototype Compact Disc digital audio system (see the September 1979 issue of STEREO REVIEW, page 28) has been joined by Teldec's Mini-Disk (MD) digital audio system.

Note that all these digital-audio systems are for now only prototypes or "technology demonstrators," not massproduced, market-ready items. The digital-audio manufacturers are waiting until the videodisc market settles down, or at least settles on one or two "standard" systems, before they introduce their products. But perhaps the audiophile need not wait that long for improved audio quality from videodisc technology. The two video systems I've examined most closely, Magnavox's DiscoVision and RCA's SelectaVision, should be capable of high-quality audio reproduction even without using digital technology, for both use frequencymodulation techniques similar to those used in standard radio FM, though the carrier frequencies are far lower with the videodiscs.

Recorded "FM"

DiscoVision's audio system uses one carrier for each of its two audio channels. The modulating audio signals, pre-emphasized with a 75-microsecond network, produce full-modulation frequency deviations of ± 100 kHz in

the 2.3- and 2.8-MHz carriers. The SelectaVision system, at least the one described in the March 1978 issue of the *RCA Review*, also uses two separate carriers (at 716 and 905 kHz), with a maximum frequency deviation of \pm 50 kHz. Though the DiscoVision system is theoretically capable of better performance, both methods produce quite respectable signal-to-noise ratios: RCA's prototype measured 57 dB, Magnavox's had a 70-dB figure. The former meas-

For the moment, the more interesting aspect of videodisc technology would appear to be what it has to offer in terms of audio quality

urement is superior to that obtainable with all but the best analog discs, while the latter number surpasses those obtainable in direct-to-disc and analogpressed digital recordings. (Early production models may not do quite as well, however.)

Remember that this audio performance comes with a picture and without many of the problems of analog discs. Because of the very high frequencies involved and the use of frequency modulation, any videodisc system, whether using a laser or a stylus "pickup," should be free of the problems of stylus or disc wear, frequency-response deviations, cartridge mistracking, stylus and cartridge misalignment, turntable rumble, tracing distortion, acoustic feedback, and inner groove distortion, among other things. And there should be longer playing times, lower distortion, and lower disc noise than from analog LPs, plus wider bandwidth than from FM broadcasts. Given the high costs of high-performance "audiophile" discs, cartridges, turntables, and preamps nowadays, even audio-only videodisc software does not seem too farfetched to consider.

There are two substantial differences between the audio circuitry of the two systems, however, one minor, the other major. The less important difference is the way each system handles the two audio channels. DiscoVision uses each of the FM carriers separately, as two FM systems. The SelectaVision technique is similar to stereo FM broadcasting in that one carrier contains the *sum* of the two audio channels, the other the *difference* between the audio channels. Reconstructing the original stereo information involves signal addition and subtraction (as is done within the multiplex decoder of an FM tuner). While this system guarantees that both stereo channels will have the same theoretical performance characteristics, the decoding operation must be performed with great accuracy if stereo separation is to be preserved. While not so important with stereo music, RCA's decision to use this method makes it less easy to obtain ultra-high sound quality with simultaneous-translation, duallanguage videodiscs or other programs requiring very high audio separation.

However, it is SelectaVision's sumand-difference method of two-channel audio that makes possible the manufacture of a stereo-compatible monophonic videodisc player-which brings us to the major difference between the two systems' audio circuitry: Discovision has stereo capability; SelectaVision, initially at least, will not. When it introduces SelectaVision nationwide near the end of the year, RCA will have only mono discs and players. Although the first SelectaVision discs will be playable on future stereo players and (future) stereo SelectaVision discs playable on mono players, you will have to buy a stereo SelectaVision player (now in the prototype stage of development) if you want stereo playback. Since the added parts cost of a stereo unit should be less than \$10 at the manufacturing level (assuming extensive use of integrated circuits) and because the basic system is capable of extremely good sound quality, it is unfortunate that RCA has chosen not to put its best foot forward by introducing a high-audioquality stereo player. The reason, presumably, is that RCA management long ago committed itself to enter the videodisc market with a low-cost (about \$500), mass-market player and is stubbornly determined to defend that price tag even if it means sacrificing stereo sound. (RCA has not demonstrated, nor are they working on, any digitalaudio applications for their videodisc system.)

Compatibility

Were it not for the technical feasibility of the *digital* audio disc using videodisc technology, the audio tracks of a videodisc (using FM technology) would promise the best mass-produced, lowcost high-fidelity medium available. There is no doubt that a digital audio system based on videodisc technology will provide extremely high quality (see accompanying chart). However, doubt does surround the compatibility question: just how interchangeable should

 Checking SelectaVision disc and stylus life on the test bench (photo courtesy RCA)

VIDEODISC...

"A laser could read not only 'optical' videodiscs but stylus-read ones as well...."

the various portions of a digital audiodisc system (disc size, rotation speed, player electronics, etc.) be with any existing or proposed videodisc system?

At this point only one thing seems clear: digital audio will not be obtained by connecting a digital audio adaptor meant for videotape recorders to the video output of a videodisc player. While this approach will work, it is a waste of both hardware and software. Digital-audio VTR-adaptors contain much circuitry designed to compensate for certain operating principles of VTRs and television. This rather expensive aspect of VTR adaptors can be eliminated with videodiscs if there is no requirement that the output from a videodisc player playing a digital audio disc resemble a video signal. Also, requiring a digital audio disc to retain its digital information in a video format is a waste of disc space, reducing playing time considerably without increasing the disc's reliability or freedom from error. None of the prototype disc systems in the accompanying chart encode digital audio as video signals.

Even with the elimination of this option, there remain dozens of others, some far more crucial. Among these are transducer technology (stylus or laser, with or without grooves), modulation method, the size of the undulations engraved on the disc, the rotation rate, disc size, and center-hole diameter, in addition to the "normal" digital-audio parameters of encoding scheme, sampling rate, and error-correction formats. Not all options are available at all times. For example, Sony's 3PM (three-position modulation) code for digital audio discs is not compatible with the stylus/groove interactions of SelectaVision. There are, however, several interesting aspects to some of the choices.

A laser could read not only "optical" videodiscs but stylus-read ones as well, though the laser and stylus systems available now are not physically compatible. For example, RCA uses laser playback of SelectaVision discs in the mastering and quality-control portions of the production process. Similarly, a stylus meant for a grooveless disc can be designed to read grooved discs too. It is *possible* (but not very likely) that a standard groove geometry can be arrived at, or at least that a standard playing mechanism can be developed that will take many videodisc formats. But it is perhaps already too late to hope for such logical standardization. Corporate as well as engineering egos are involved, not to mention all the R & D dollars already spent.

Audio Minidiscs

Philips' and Teldec's digital audio systems both feature small-diameter discs. I think this is a great idea. A small disc for digital audio is more portable, easier to store, requires less raw material, and sacrifices no audio quality. Dr. Toshi Doi, manager of Sony's digital audio project, estimates that a 12-inch digital-audio disc can ultimately be made that will hold two channels of sixteen-bit-encoded sound and play up to 141/2 hours per side. Reducing the disc size in this situation will obviously not involve too great a sacrifice in playing time (imagine all of Wagner's Ring or the complete Beatles on one disc).

Pressing-plant machinery will have to be modified to press small digital audio discs, of course, but the whole problem of videodisc "compatibility with analog-record production" has been overstated. Even the most "analoglike" videodisc system (RCA's) has required extensive modification of pressing machinery and production processes. Optical videodiscs, being of layered construction, resemble analog audio discs even less. Because of the fragility of the information (before the application of protective plastic coatings, if any) and the minute size of the grooves or laser-read "pits," videodisc pressing plants have to be kept far cleaner than audio-disc operations; some even have air-filtration systems.

WE have been concerned here mostly with matters of a technical nature, and have picked only some of the high (or low) spots in the whole video/digitalaudio-disc field for discussion. Artistic and social issues raised by the two new media have not even been touched upon. Naturally, the major question is who and how many will buy these video products if and when the technology is standardized. Will vou be willing to pay extra for a separate digital audio player or video/digital adaptor of some kind? Or, as some in the industry believe, will you be satisfied with two good channels of FM videodisc audio along with colorful pictures? I am sure that I won't be satisfied until I see a defect-immune, stylus or laser-read digital audio disc on the market. At least I think I'm sure.

| DIGITAL AUDIO | | | | | | |
|----------------------------------|---|---------------------------------------|--------------------------------------|---|--|--|
| 1. 15 8. 3 | VIDEODISC | DIGITAL AUDIO-DISC SYSTEMS | | | | |
| | Pioneer VP-1000 videodisc system | Sony DAD-1X digital disc player | Philips Compact Disc system | Telefunken Mini-Disk system | | |
| Disc and transducer system | Philips/MCA grooveless disc, laser-photodiode | Grooveless disc, laser-photodiode | Grooveless disc, laser-photodiode | Grooved disc piezoelectric stylus | | |
| Disc diameter, inches | 12 | 12 | 4.5 | 5.31 | | |
| Playing time, hours per side | 0.5 or 1 | 2.5 | 1 | 1 | | |
| Number of audio channels | 2 | 2 | 2 | 2 or 4 | | |
| Rotation rate, rpm | 1,800 or 600 to 1,800 | 450 | 215 to 500 | 278 to 695 | | |
| Frequency response, Hz | 40 to 20,000 | 2 to 20,000 ±0.25 dB | 20 to 20,000 | 20 to 20.000 | | |
| Dynamic range, dB | >55 | >95 | 85 | 85 | | |
| THD, per cent | <0.3 | <0.03 | <0.05 | < 0.05 | | |
| Quantization | Not applicable | 16-bit linear | 14-bit linear | 14-bit linear | | |
| Sampling frequency, kHz | Not applicable | 44.056 | 44.33 | 48 | | |
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MUSIC and writing are not my only pastimes. Like Ruth Draper's Mrs. Clancy, I've always kept up my Italian, for example, and anybody who really knows me will tell you I'm nothing if not well rounded. I do a bit of broadcasting, I'm an active ex-smoker, and I've even raised exotic Oriental cats. As a juror I eventually worked my way up to the position of foreman of a grand jury that heard testimony in more than thirty murder cases, and now I've made a modest beginning as a judge, confining my activities so far to the performing arts.

Earlier this year I made a "judicial" out-of-town debut in Hicksville, a Long Island suburb of New York, where I was one of a panel of judges in a local competition for pianists and organists. It was part of the 1980 Keyboard Entertainer Search conducted by the Baldwin Piano and Organ Company under the sponsorship of the Liberace Foundation for the Performing and Creative Arts.

Liberace apparently has a good bit on his mind besides his piano-shaped swimming pool, his bank accounts, and the copy of the Sistine Chapel ceiling painting in a bedroom of his Las Vegas home. He feels that if his talents had not been recognized years ago, he might still be performing under the name Walter Buster Keys at the Wunderbar in Warsaw, Wisconsin.

In announcing this talent search, he

said, "Amateur nights and contests provided me valuable experience and incentive when I needed it most. I want to do what I can to help undiscovered talent get a start." Providing that help is the goal of the nonprofit Liberace Foundation, which is supported in part by the proceeds of the Liberace Museum opened last year in Las Vegas.

My fellow judges in the New York part of this contest were mezzo-soprano Joan Morris (RCA ARL1-3089), organists Lee Erwin (Angel DS-36092) and Donald Kinnier, and singer/pianist Steve Ross (Stolen Moments 1938). We were assured by Jack Romann, who represented Baldwin, that we would not be hearing any contestants who could not play well. Those had already been eliminated in the preliminaries. We were to look for *entertainment* talent among the five organists and five pianists selected from New Jersey and New York.

The play-offs were held in a covered shopping mall at Mid-Island Plaza in Hicksville, and the contestants were required to perform on a portable stage set up between a noisy electronic handwriting-analysis machine and the Four Queens Ice Cream Parlor. All ten played well even in this unlikely venue, but when we considered style, apparent enjoyment of the act of entertaining, and the ability to establish rapport with an audience, the judges did not have to deliberate long before choosing pianist





Angie Calandra

Angie Calandra of Brooklyn and organist Jack Candy of Wappingers Falls, New York. The way they communicated with the audience made it clear that both have had considerable experience entertaining in clubs. I hope that by the time you read this both will also have reached the world finals in Las Vegas, where the first prize is \$10,000 and an opportunity to perform with Liberace himself.

Doon after I got back from Hicksville, I served as a judge in the district auditions for the Metropolitan Opera National Council at the YMHA in New York City. The audition program administered by the Council in the United States, Australia, and Canada has a forty-five-year history of discovering and encouraging young opera singers. The auditions are no longer a competition for a Met contract, but a number of prizes and scholarships are awarded along the way.

This year in the New York district alone there were 120 applicants to be heard in four days. A panel of three judges heard the first sixty singers, and I served on the second shift with journalist Bridget Paolucci and soprano Adele Addison to hear the rest. Each singer performed an aria of his or her choice and was prepared to sing any one of four others if the judges wished to hear more. Each entrant got to sing for about ten minutes.

A few no-shows cut our total down to fifty-six or fifty-seven, but in only two The woods are not exactly full of undiscovered musical talent, but contests and awards are helpful in bringing to light a few worthy candidates for fame and fortune

days that's a lot of singers. Practically all were sopranos. How many times can you hear "Va, laisse couler mes larmes" from Massenet's Werther before you feel like crying yourself? Not many. Even if you like sopranos. Even if you love Massenet.

Although two clear winners had emerged in Hicksville, I came back convinced that the woods are not full of talented keyboard performers ready to inherit the Entertainer of the Year title the Las Vegas Chamber of Commerce awarded to Liberace (again!) for 1980. At the YMHA it depressed me that the level of singing was so poor among operatic hopefuls in New York, of all places. At moments I longed for the sound of a handwriting-analysis machine, and my heart bled for certain candidates who were pleasant, attractive young people without the basic vocal equipment even to think of an operatic career.

Despite the poor overall quality, the judges found four worthy candidates to send on to the Eastern Regional Auditions a couple of weeks later. I attended the Regionals just as an observer (more experienced judges were on duty), and that restored my faith in the future of operatic singing in America. A single weeding out had made an enormous difference, and in one pleasant afternoon we heard the fifteen singers selected from New York, New Jersey, Connecticut, and Pennsylvania. The four prize-winners that afternoon—sopranos Margaret Vasquez and Lauren



Wagner, bass Kevin Langan, and baritone Thomas Woodman—are unusually gifted, and I shall watch their progress with interest. All four did well in the national finals in March. Why should they struggle to reach

the finals if there is no longer a Met contract at the end of the auditions trail? In addition to prize money, there is a great deal of prestige attached simply to getting into the finals, and a young singer gets to be heard by a lot of influential people along the way.

On February 9 you may have heard the American heldentenor Edward Sooter, who dramatically replaced the ailing Richard Cassilly in the title role of Otello on the Met broadcast that day. A native of Kansas who has made his career in Europe, Sooter was a finalist in the National Council auditions during his student years back in 1960, but did not win a contract. This year after his Met broadcast debut I asked him if the auditions had been influential in his career. "Oh, golly, yes!" he answered. "I made the finals, you see, and got to sing on the stage of the Old Met with [Ignace] Strasfogel-'Winterstürme' from Die Walküre. That meant a lot of encouragement for me and also brought me support from outside. People thought if I was good enough to reach the finals at the Met, I must be worth helping."

There is something very appealing about young performers—perhaps it is their vulnerability—that makes people *want* to help them. This is in part the motivating force behind the many contests, scholarships, and awards programs that form a talent-scouting network for young musicians of all kinds across the country. There are so many competitions, in fact, that I wonder how a promising artist can possibly *escape* notice.

Not all the prizes available are awarded in competitions, however. Nominations in the Avery Fisher Artist Program, for example, are made only by its advisory board. The annual Avery Fisher Prize has gone to such young American instrumentalists as pianists Murray Perahia and Emanuel



Ax, cellist Yo-Yo Ma, and clarinetist Richard Stoltzman. This year's prize has just been awarded to pianist Richard Goode, and the 1980 recital awards for instrumentalists at an earlier phase in their careers went to pianist Mona Golabek and cellist Sharon Robinson.

The underwriter of these awards is, of course, Avery Fisher, the hi-fi manufacturer turned Maecenas in his retirement. He describes the awards as one of the ways in which he acknowledges a debt to music. "I wanted to give something back to music," he told me recently, "and I feel privileged to be able to help some of these young artists in their careers."

Perhaps that's why I take a special interest in the career of soprano Sheri Greenawald (a favorite in St. Louis and San Francisco). She was a member of the Hunter College Opera Workshop when I was on its board of directors, and I feel a measure of pride whenever I read one of her reviews. Similarly, I want all the young artists I've heard in competitions this year to do well. After all, the management of the Wunderbar in Warsaw, Wisconsin, also felt they had a personal stake in the matter when Liberace performed as soloist with the Chicago Symphony. When he returned to Warsaw, they were so proud of him that they billed him as Liberace, his real name, but added "the former Walter Buster Keys."

By William Livingstone



Billy Joel (Photo by David Gahr for Columbia Records)



Billy Joel's 'Glass Houses'': Beyond Category

N the basis of his jubilantly assured work in "Glass Houses," new on Columbia, it appears that Billy Joel will survive not only the well-intentioned ministrations of his few analytical admirers but those of his inanely trendy merchandisers as well. Survive? He triumphs! Intellectual pop abstractionists-the Rock Establishment-are busy sifting Proletarian Realism out of the wrack of the New Wave, and they are Not Amused by Mr. Joel. His admirers try defensively to place him in a cozy folk/ethnic context, the most popular theory at the moment being that he is an American McCartney with a dose of sociological steroids and a shot or two of blue-collar testosterone. And his merchandisers are aggressively trying to sell him to a haggard public already armpit-deep in the ersatz thrills and shudders of Punk, as if he were some musical relation to the likes of Joey Ramone or John Lydon (a.k.a. Johnny Rotten).

The good, the terrific news is that "Glass Houses" lives up to absolutely no preconceptions, expectations, generalities, or genres other than those Billy Joel himself has chosen to establish. There isn't one instance in which he's coasting, or repeating himself, or taking a second (easy) shot at a favorite subject or theme. This album is a continuation of the kind of work he began to show he was capable of with "The Stranger" and after that with the "52nd Grammy-winning Street." (Both, by the way, have already passed the ten-million mark in sales.) The ten songs here are uniquely Joel: sharp, immediate, often harshly funny vignettes about the way things are now with his

characters, about their genuine emotional impulses, not their coy philosophizing or maudlin poeticizing about them. Take, for instance, the horny exasperation felt by the hero of I Don't Want to Be Alone: he submits to his lady's request that he wear a jacket and tie and meet her in the lobby of the Plaza Hotel, and what does he get? "So here I am standing, waiting in the lobby/Sweating bullets in this stupid old suit/And when she sees me she busts out laughing/'You're a sad sight, honey, but you look so cute!' " Casanova of course suffers this insult with clenchedteeth stoicism because he really doesn't want to be alone that night. Or there's the muted frenzy of Close to the Borderline. It's about one of those urban sensitive plants so beloved of the New

BILLY JOEL: Glass Houses. Billy Joel (vocals and keyboards); instrumental accompaniment. You May Be Right; Sometimes a Fantasy; Don't Ask Me Why; It's Still Rock and Roll to Me; All for Leyna; I Don't Want to Be Alone; Sleeping with the Television On; C'Etait Toi; Close to the Borderline; Through the Long Night. COLUMBIA FC 36384 \$7.98, © FCA 36384 \$7.98, © FCT 36384 \$7.98.

Cinematography. He's going quietly *ca.ray.zee* because "While the millionaires hide in Beekman Place/The bag ladies throw their bones in my face/The bums drop dead and the dogs

go mad/In packs on the West Side." But the last chorus reveals that other, rather smaller concerns are driving him to the borderline: "I need a doctor for my pressure pills/I need a lawyer for medical bills/I need a banker to finance my home/I need security to back my loan. . . ."

Interestingly, a new, wryly charming facet of Joel's talent is beginning to move front and center here. It's Still Rock and Roll to Me is one example: it manages to be simultaneously satirical, endearing, and hilarious as the putdown, put-upon hero wonders aloud, "Everybody's talkin' 'bout the new sound/Funny, but it's still rock and roll to me." Sleeping with the Television Set On is another. It has the kind of droll but unregretted sadness of lived experience that one might expect more from a French chansonnier than from a kid from Long Island, but it works beautifully. Perhaps the most charming of all is All for Leyna, a kind of affectionate recap of those wonderful old doo-wop songs that knocked (almost) everybody out in the Fifties. And my particular favorite is a moody, gritty ballad called Through the Long Night that I found reminiscent of-and as good as-his already classic Just the Way You Are.

But you mustn't take only my word for any of this; get "Glass Houses" and hear for yourself. I can't give guarantees, but I can give you odds that you'll be regularly amused, often touched, and continuously entertained by an album you'll be playing again and again.

Billy Joel has come a long way since the dreamy sentimentality of *Piano*

"... his able talent places him among the best American songwriter/performers...."



TAMÁS VÁSÁRY: scholarship, insight, finesse, and no little poetry

Man, and an even longer way since his first recordings over a decade ago, when he started out with a group called the Hassles and "graduated" to become half of a team known as Attila. He needs neither defensive admirers nor fast-buck merchandisers, for his secure and able talent places him among the best American songwriter/performers now working. (All through this album, incidentally, I kept thinking, "Eventually he's going to do a Broadway show, and won't that be something!") "Glass Houses" proves that it is all there: the music is there, the ideas are there, and the ability to execute both superbly is there. Billy Joel has reached an exciting and singular moment in his career: the first big crest. But there are going to be more of those-just as there were for, shall we say, Irving Berlin?

—Peter Reilly

Tamás Vásáry's Mozart Concertos: Uncontrived Eloquence In Every Bar

N some twenty years of recording for Deutsche Grammophon, pianist Tamás Vásáry has given us some extremely tasteful performances of the music of Chopin and Liszt; he has recorded those composers' concertos as well as numerous solo works, plus an especially appealing Debussy collection and all the concerted works of Rachmaninoff. Having established himself in our minds with this sort of repertoire over such a long period, Vásáry might not be immediately thought of in connection with Mozart, but he has in fact performed Mozart's music frequently, both as pianist and (since 1973) as conductor, in this country as well as Europe. Now DG has issued a record on which he conducts two Mozart concertos from the keyboard: No. 14, in E-flat Major (K. 449), and No. 26, in D Major (K. 537, the so-called Coronation Concerto). The orchestra is the Berlin Philharmonic, and the result is surely one of the most beautiful presentations of Mozart concertos ever put on disc.

It is the music that impresses here, and admiration for the performances comes as an afterthought. But these performances have everything: scholarship, insight, finesse, and no little poetry. In the first regard, it may be noted that Vásáry has deleted the spurious bar before the first-movement cadenza in K. 449, and that he does not play the usual Mozart cadenzas in K. 537 since they were actually composed for an earlier concerto (K. 451, in D Major, a delicious and unaccountably neglected work); he provides his own cadenzas for K. 537 and the finale of K. 449, all of which are eminently suitable. In the second regard, his approach in both

works is markedly more expansive than what we have been accustomed to. There is no heaviness or self-consciousness of any sort, and neither is there any trace of surface glitter: the intimacy that is the essence of K. 449 is magically realized, and K. 537, which is so often spoken of as a sort of weak link in this magnificent chain of concertos, reveals a depth beyond what many of us have been able to acknowledge before. This is, of course, not merely a matter of slower pacing or "relaxation"; the Larghetto of K. 537 gains here from being taken a little more briskly and flowingly than usual, as well as from some very apt (but rather seldom attempted) ornamentation.

There is uncontrived eloquence in every bar of the solo playing, the conducting is by no means perfunctory (even the Berlin Philharmonic does not always respond on this level with such gorgeous wind playing), and Vásáry's blending and balancing of the two elements are superb. So is the recorded sound, both warm and crystalline. There simply has not previously been a recording of K. 537 as thoroughly successful as this one. Listeners accustomed to a perkier treatment of the opening movement of K. 449 may enjoy returning to one or two of the other fine versions (and there are some splendid ones), but I suspect that the greater depths plumbed by Vásáry, and what I have already alluded to as his poetic realizations, will make this the record to which one returns most often, and with the deepest pleasure, for both works. If



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Radio Electronics also says: "The STA-2200 is a joy to use."[†] For example, you can command the receiver to sample each station in the memory, then touch-select the one you want. There's also Dolby[®] FM Noise Reduction, LED signal level indicators, and the display doubles as a quartz clock.

Stereo Review summed up the STA-2200's tuner by saying it "worked to perfection."* And Radio Electronics said ". . . because of its clever design and pleasing layout, we have assigned a VERY GOOD R.E.A.L. rating to the STA-2200."[†]

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Says Stereo Review: "With the STA-2200, Radio Shack has made it perfectly clear that the technical sophistication responsible for the overwhelming success of the TRS-80⁽³³⁾ computer system has been applied very effectively to their high fidelity products."*

We couldn't have said it better. Thanks, guys!



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Quoted by permission from Hirsch-Houck Test Labs Report, Feb., 1980, Stereo Review. (Copyright Ziff Davis Publishing, all rights reserved) †R.E.A.L. Sound Audio Lab Report by Len Feldman, Jan., 1980, Radio-Electronics. Gernsback Publications Inc., all rights reserved. The STA-2200 is 599.95, at participating stores and dealers, price may vary. Dolby is a trademark of Dolby Laboratories.



LACY J. DALTON: more than enough grit to lead every charge

this signals the beginning of a complete cycle of the Mozart concertos from Vásáry, so much the better—provided he is not asked to mass-produce the subsequent installments but is given the time to make them all as exceptional as this one. —*Richard Freed*

MOZART: Piano Concerto No. 14, in E-flat Major (K. 449); Piano Concerto No. 26, in D Major (K. 537). Tamás Vásáry (piano); Berlin Philharmonic Orchestra, Tamás Vásáry cond. DEUTSCHE GRAMMO-PHON 2501 207 \$9.98, © 3301 207 \$9.98.

Let's Make a Little Room for Singer/Songwriter Lacy J. Dalton

NEW WOMEN are providing the action in country-and-something music right now, but knowing that and being ready for the debut album "Lacy J. Dalton" are two different things. My reaction, after four or five listens, is still "Whew!" (It makes the job a lot easier when one's feelings speak up so clearly). After some deserved single success with her conventional but exciting *Crazy Blue Eyes*, young singer/songwriter Dalton—who sang rock on the way up, along with r-&-b and even jazz—has hooked up with producer Billy Sherrill to deliver an effort that is oddly straight country and yet rocks like mad.

That's probably because Dalton herself so naturally covers both those bases. She has a raw intensity that honestly—reminds me of Hank Williams. The sound of her might remind you of several people—Buffy Sainte-Marie, a Donna Fargo that isn't harmless, and even (faintly, in one cut) Edith Piaf—but, basically, *raw* is the key word for her sound. It works like another famous raw voice, Bob Dylan's, in that it seems to skip a step in getting to where the listener lives.

As a writer (usually a co-writer), she seems utterly sure-handed, as if her relationship with the English language is the kind of affair that is going to stay fresh and active. Again, you might think of Donna Fargo, or of anyone who's been around too much to stay cooped up inside the conventions of earlier country-music women. There's a blue-note quality in her songs, and no small amount of rock-and-roll.

Sherrill, who usually does the opposite, gives this one the hard-edged, barband sound it calls for. It is a fairly straight country backing—Charlie Mc-Coy's doing his best work in years—except that each song is given as much beat as it needs, usually an ample but not unattractive amount. This is rightly keyed to the singing, which has more than enough grit to lead every charge. Anybody who can make me stop and listen to *Tennessee Waltz* can do most anything; Dalton does it with some crazy, off-the-beat phrasing that not only makes the song a new experience but draws McCoy, who's seen them all come and go, outside himself and into some inspired surrealism. In subtler ways, she has that effect on all the musicians, and the cumulative difference isn't what you'd call subtle. Looks like we're going to have to make room for Lacy J. Dalton. —Noel Coppage

LACY J. DALTON. Lacy J. Dalton (vocals); the Jordanaires, Janie Fricke, Annie Hughes (backing vocals); instrumental accompaniment. Crazy Blue Eyes; High Like an Angel; Honky Tonk Man; Carolina Come-On; Beer Drinkin' Song; Tennessee Waltz; Late Night Kind of Lonesome; Losing Kind of Love; Are There Any Cowboys Left?; Turn My Head Around. COLUMBIA JC 36322 \$7.98, ^(G) JCA 36322 \$7.98, ^(G) JCT 36322 \$7.98.

A Notably Successful Program of Songs By Rachmaninoff And Chausson

A CLRIOUS combination indeed is Nonesuch's new album of songs by Sergei Rachmaninoff and Ernest



Mezzo Jan DeGaetani, pianist Gilbert Kalish: exceptional artists

Chausson. Despite annotator Richard Dyer's laudable effort to relate the two composers on other levels, the real linkage in it is established by the remarkable Jan DeGaetani, whose artistry interprets the songs of the austere Russian giant and the melancholy French sensualist with equal felicity. She is not one of those finely drawn artistes whose theatrical or musical mannerisms conceal vocal limitations: her warm, ample, cleanly focused true mezzo embraces these songs very comfortably. This ease counts for more in the Russian songs, which are wide-ranging musically as well as emotionally, than in the French ones. There are powerful climaxes in The Answer and The Harvest of Sorrow, and the singer's resources are nowhere found wanting.

A note of praise for the program itself: the Rachmaninoff songs are from his early period (1893-1912), yet they are admirably differentiated and certainly unhackneyed. As for those of Chausson, so few of his considerable output have been recorded that finding six of them on one disc, and so lovingly rendered, amounts to a minor feast. Perhaps he was not a "major" song composer, but these six songs, which include the large-scale and somewhat uncharacteristic *La Caravane*, nonetheless manage to encompass all the elegance and refinement of the French *mélodie*. They are sung with just the right blend of emotional involvement, textual clarity, and vocal naturalness. The more passionate Rachmaninoff songs get a different treatment, of course, but the passion there is never excessive.

Both composers wrote demanding piano parts, but they pose no problems for a musician of Gilbert Kalish's resources (though I found his handling of the postlude to *The Harvest of Sorrow* somewhat understated).

We have two exceptional artists here in repertoire that may be new to them, but which they have obviously studied penetratingly and prepared with care. Technically, the disc is flawless. As I said, a feast. —George Jellinek

JAN DE GAETANI AND GILBERT KAL-ISH. Rachmaninoff: Oh, Do Not Grieve; Lilacs; Christ Is Risen; The Answer; To the Children; A Passing Breeze; How Long Since Love; The Harvest of Sorrow. Chausson: Amour d'Antan; Le Charme; Le Temps des Lilas; Les Papillons; Le Colibri; La Caravane. Jan DeGaetani (mezzo-soprano); Gilbert Kalish (piano). NONESUCH H-71373 \$4.96.

Rodney Franklin Reveals a Spectrum of Compositional Skills And Performing Gifts

E would not expect a gifted young jazz pianist coming into his own today to sound like Teddy Wilson, Art Tatum, Erroll Garner, or any other of those titans of yesteryear who shaped the art of keyboard improvisation. To do so, he would not only have to be a miracle-child incarnate, but he would have to have been isolated from all the influences that have fused jazz with more recent popular modes. And so, if the artist in question were a twenty-one-year-old product of the fusion age, his style would very likely owe something to, say, Herbie Hancock and Chick Corea, and if he were a true talent, not merely imitative, he would undoubtedly have something to say in his own right.

Which brings us to young Rodney Franklin, whose new Columbia album "You'll Never Know" reveals an impressively versatile and remarkably integrated musical personality. Defying the inhibiting strictures of categories, Franklin has fashioned the diverse selections on this fascinating album with the evident intention of laying out the whole broad spectrum of his compositional gifts and performing skills. On Felix Leo, The Groove, and the title track he strikes out confidently and unselfconsciously in a rhythmically accented popular vein, employing voices in a manner that would seem to belong to an album of a different sort. But he raises these songs to another aesthetic level entirely through his agile pianistics, crocheting intricate patterns over the simple, basic lines. He can switch deftly into more introspective moods too, as in God Bless the Blues, an intelligent and sensitively shaped tribute to his musical roots, the solo-piano Journey, brief but chromatically rich, and The Watcher, in which he and an ensemble of young contemporaries draw a variety of textures and voicings from Miles Davis' classic In a Silent Way.

Franklin's formidable assets as a pianist include a subtle mastery of color and shading and a technical facility so secure that he can make the keyboard work hard for him without apparent effort. Perhaps he moves easily on this professional level because he started so young. As a kid growing up in Berkeley, California, he attended a university laboratory school where they were experimenting in teaching jazz to the very

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* Residents of CA, CO, DC, FL, IL, MI, MO, NY STATE, and VT add applicable sales tax. Outside U.S.A. add \$2.00 per order. young. By the time he was in second grade he could play alto sax and organ, at nine he won an award as soloist with his school jazz band, and before he got to high school he had led his own combo. Since then he has been a pianist with the innovative saxophonist David Murray.

Precocity in itself is no guarantee of a larger mature talent; special instruction has enabled many a bright kid to master musical mechanics in pre-adolescence without its ever leading anywhere. But there is ample indication here of a mind at work, a sensibility that articulates the musical thinking of an entire generation. It is easy to appreciate Rodney Franklin right now as a young musician whose eclectic approach reflects the contemporary musical world into which he has just moved. But if he is as good as I think he is, he'll not be content to leave that world as it is; he'll try to change it.

—Phyl Garland

RODNEY FRANKLIN: You'll Never Know. Rodney Franklin (piano, Rhodes piano, bass guitar, vocals); Vincent Spaulding (electric guitar); Harold Foreman, Paul Jackson (bass guitar); Tony St. James, Randy Merritt (drums); Kenneth Nash (percussion); Dean Holzkamp, Mel Martin (flute, soprano saxophone); Ray Pizzi (bass clarinet); Phyllis St. James, Lisa Roberts, Brooks Hunnicutt, Audrey Franklin (vocals). Felix Leo; God Bless the Blues; The Watcher; Journey; The Groove; You'll Never Know; Return; Parkay Man. COLUMBIA NJC 36122 \$7.98.

C. P. E. Bach's *Hamburg* Symphonies: A Major Symphonist At His Creative Peak

ONCE again, with Philips' new recording of the *Hamburg* Symphonies, we have evidence that Beethoven, Haydn, Mozart, and even the great music historian Dr. Charles Burney were more than justified in their admiration for the music of Carl Philipp Emanuel Bach. At a time when Mozart and Haydn were casting their carefully chosen musical language in classically balanced structures of Apollonian restraint, J. S. Bach's oldest son was still working with the rather spastic language of the *Sturm und Drang* movement and evolving from it Dionysian forms based more on emotion than on logic.

The four Hamburg Symphonies of 1780 were written at the composer's creative peak, and they place him on the map as a major symphonist of the eighteenth century. The music is powerful, dramatic, and passionate. It is brilliantly orchestrated as well, and demands virtuoso playing on the part of all the instrumentalists. The English Chamber Orchestra rises to the occasion and gives the music an electrifying performance. Each individual part sparkles as it ricochets through the mosaic textures. Conductor Raymond Leppard is not afraid of rapid tempos, and he whips his players into a fury appropriate to the Sturm und Drang style. On the other hand, he is not afraid to linger over the contrasting sighing and weeping figures of the Empfindsamer style that counterbalances the violence of the Sturm und Drang. In short, these readings are superb and completely right. The "Hamburg Bach" is presented here as what he really was: a powerful, original composer. -Stoddard Lincoln



C. P. E. BACH: The Four Hamburg Symphonies (Wq 183). English Chamber Orchestra, Raymond Leppard cond. PHILIPS 9502 013 \$9.98.

RODNEY FRANKLIN: a musical mind at work



Popular Discs and Tapes



Reviewed by CHRIS ALBERTSON • EDWARD BUXBAUM • NOEL COPPAGE • PHYL GARLAND PAUL KRESH • PETER REILLY • STEVE SIMELS • JOEL VANCE

AZTEC TWO-STEP: The Times of Our Lives. Aztec Two-Step (vocals and instrumentals). Looking for Love; My Friend Billy; She; Boys; Never Stop; and five others. WATERHOUSE 9 \$7.98.

Performance: Ups and downs Recording: Good

The times of Neal Shulman's and Rex Fowler's lives have included more critical than commercial success for their band Aztec Two-Step, but the boys have hung on for several years by adapting little by little to the current musical times. Here they adapt a little more. No, they don't come under the influence of New Wave; they go the other currently fashionable direction, toward a cooler image and more sophisticated production. Occasionally they take it too far and turn out something annoying, such as You Who, but that's balanced by things of a similar nature that really click-She, for instance-and by how well Shulman's excellent guitar fills fit the latest repertoire. Vocally, of course, they have not compromised anything and remain first-rate; it is as songwriters and recorders that they are trying on new hats. I think a little too much of this threatens to become elevator music, but there are enough successes to suggest Shulman and Fowler will learn fast how to do this very well. Meanwhile, if your thing is the evolutionary process, dig this. N.C.

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BOBBY BARE: Down & Dirty. Bobby Bare (vocals, guitar); instrumental accompaniment. Good for Nothing Blues; Numbers; Some Days Are Diamonds; Tequila Sheila; Rock Star's Lament; Crazy Again; Tecumseh Valley; and six others. CoLUM-BIA JC 36323 \$7.98, @ JEA 36323 \$7.98, @ JET 36323 \$7.98.

Performance: Incorrigibly Bare Recording: Good

Bobby Bare is equal parts Penrod, Peck's Bad Boy, and a Huckleberry Finn old enough to be technically "grown up," whatever that is. A beery, trash-talking old boy, "a struttin' rooster," as he says in an outrageous Shel Silverstein song called Numbers, he also comes across, singing, as basically gentle and great company to have aroundand even though he doesn't write much any more, he has taken on, with age, the additional image of a shrewd social observer with a populist viewpoint, faintly reminiscent of Faulkner's V. K. Ratliff. This live album, presenting new material, gives you a concentrated short course in Bare's personae, covering all of the above and more, including his being one of the most honest and natural-sounding singers around. The album has five songs by Silverstein, a good Kristofferson one, Good for Nothing Blues, that fits Bare perfectly, and odds and ends by such individualists as Townes Van Zandt and Bob McDill-all of which now sound like they belong to Bare and nobody else. The only thing about the album that bothers me is the crowd, whose affable rowdiness is a little too diligently miked and becomes intrusive at times. The back-up band sounds lean and ready. The fidelity of the live recording is not outstanding, but it's generally more than passable. The best thing about it, the central thing about it, is that Bare is still playing himself with style N.C.and aplomb. Long may he wave.

THE BRIDES OF FUNKENSTEIN: Never Buy Texas from a Cowboy. The Brides of Funkenstein (vocals); instrumental accompaniment. Never Buy Texas from a Cowboy; I'm Holding You Responsible; Smoke Signals; and three others. ATLANTIC SD 19261 \$7.98, [®] TP 19261 \$7.98, [©] CS 19261 \$7.98.

Performance: Clinton's clones Recording: Satisfactory

Well, here's George Clinton again with his satchel of funkisms, which we've come to know through groups called Parliament, Funkadelic, and Bootsy's Rubber Band, This time he's playing Svengali to a trio of female singers called the Brides of Funkenstein, but the sound is amazingly similar to what he has produced on other recordings. The opening number, Never Buy Texas from a Cowboy, sounds like a dozen or so songs I've already heard from Clinton's groups, though there is some novelty in his use of female voices rather than male ones. The whiney insinuations sound more invitingly dirty than usual, and the Brides try for at least a touch of sassy style, which is more than we've heard lately from Clinton's other clones. **P**.G.

GEORGE BURNS: I Wish I Was Eighteen Again. George Burns (vocals); orchestra. I Wish I Was Eighteen Again; Nickels and Dimes; The Baby Song; Old Bones; A Real Good Cigar; and five others. MERCURY SRM1-5025 \$7.98, ⁽⁶⁾ 81-5025 \$7.98, ⁽⁶⁾ 41-5025 \$7.98.

Performance: Maudlin Recording: Good

I think this is a lugubrious mistake by the great George Burns. When the album arrived I had happy expectations that it would be one of his hilarious duba-duba-doo runthroughs of songs that killed vaudeville—an act he's been doing, and delighting millions with, since shortly after Appomattox. Instead, it seems to be a half-serious attempt to actually *sing*.

I'd like to draw a discreet curtain over the whole thing, but the title song has been getting some chart action. It's one of those

maudlin, sunset-years pieces of special material that would probably send Burns' fellow octogenarian stars (Fred Astaire, Ruth Gordon, Gloria Swanson) directly to their local roller-discos to skate off their disgust. And the rest of the album is full of the sort of commercial, cornball stuff that would seem a lot more plausible coming from some anonymous c-&-w hack than from George Burns. That cigar-flicking, horny, mellowed-out old dandy that he's played to our delight all these years-everyone's ideal reprobate uncle or grandfather----is so much more appealing than the saccharine sentimentalist he's impersonating here that I can only surmise someone must have slipped a tranquilizer into his cigar. Say you're sorry, P.R.George.

LACY J. DALTON (see Best of the Month, page 79)

RECORDING OF SPECIAL MERIT

DARTS. Darts (vocals and instrumentals). Get It (While You Can); Don't Say Yes; Cool Jerk; Don't Look Back; Don't Let It Fade Away; Can't Get Enough of Your Love; and five others. POLYDOR PD-1-6250 \$7.98, [®] 8T-1-6250 \$7.98, [©] CT-1-6250 \$7.98.

Performance: Bull's-eye! Recording: Very good

Darts is an English group that somewhat resembles our Sha Na Na—but with a difference. Sha Na Na takes on Fifties/Sixties rock as a joke, an excuse for a burlesque stage show. Darts, going over the same material, treats it in music-hall fashion, striking a delicate balance between nostalgia and satire. They seem genuinely interested in these songs as vehicles for performance and sentiment, whereas Sha Na Na uses them for knockabout buffoonery. Darts has had three hit albums and seven hit singles in England.

The tracks on this first American release are selected from Darts' three British albums. Half of them were produced by Tommy Boyce, an American who, in partnership with Bobby Hart, used to write material for the Monkees. The others, which are far more interesting, were produced by that brilliant zany Roy Wood, the original mover of the Move. Though he is not credited on the jacket, I suspect that Wood is also responsible for some of the arrangements and the multitracked saxophones, especially on the entrancing Can't Get Enough of Your Love, a Darts original. Other standout tracks are It's Raining, one of the group's hit singles; Get It (While You Can), a happy evocation of the old Motown sound (the same that producer Richard Perry has lately been applying to Bonnie Pointer's solo records); and Don't Say Yes, a re-creation of late-Forties rhythm-and-blues composed by the group's resident saxophonist, Horatio Hornblower. As a digestif there is a short but exhilarating example of boiling boogie piano, One off the Wrists, by Mike Deacon. Darts peddles outstanding folderol, and I wish you much enjoyment of them. J.V.

THE FLYING LIZARDS. The Flying Lizards (vocals and instrumentals). Der Song von Mandelay; Her Story; Russia; Summertime Blues; Money (That's What I *Want)*; and five others. VIRGIN VA 13137 \$7.98, ^(a) TP 13137 \$7.98, ^(c) CS 13137 \$7.98.

Performance: Genius at work? Recording: Average

How's this for a movie scenario? An enterprising young English art student named David Cunningham, puttering with a fourtrack tape deck, decides that if Sid Vicious can make a buck with this new-fangled rock-and-roll stuff, so can he. He then makes a crude-as-can-be demo tape of the instrumental part of the old Motown classic *Money* and asks his girl friend in to sing it. After about an hour it becomes obvious that she couldn't carry a tune in a lorry, so in exasperation he asks her merely to recite the lyrics. When he listens to the playback he realizes that it is off the wall enough to be a hit and that overeducated critics would undoubtedly bury each other in reams of impenetrable prose declaring it to be Art. So he takes it to Virgin Records, who concur, and before you can say "semiotics," it's a world-wide disco smash with great reviews---all at a production cost of about \$35.

This is an especially inspiring tale since it's all true. Now we have a full album's worth of Mr. Cunningham's low-budget productions, and while I do think Virgin should be selling it at a reduced price (fair's fair), that in itself may be the cream of the jest. In any case, some of it is what you'd expect from a guy who's let his reviews go to



Introducing Teresa

T HE ingredients of Teresa's "Class Reunion" are as mixed as they come, but the results are very good: a winning set of performances all around. It starts with a boy-next-door ballad called Steal Him Away sporting fresh lyrics about the guy in the adjoining apartment. Add Be Bop Betty, a lindy hop complete with "bop-shoobops" that's a gloss on every third Fifties song ("They call me Be-Bop Betty, but my real name is Teresa"). Then there's a whoopin', hollerin' winner called The Happiest Day of My Life that's almost as infectious a dance number as the tille suggests.

My favorite track is practically impossible to categorize. Like an Old Time Melody is an old-time melody with the flavor of the Caribbean and a touch of the Forties, but it's also a stunning contemporary number. All kinds of things are going on behind Teresa's very effective vocal—Betty Grable back-ups, jazzy syncopations, Glenn Miller horns—yet it all hangs together with the utmost charm. Much of the credit for this delicious stew belongs to producer/songwriter Sandy Linzer, who has done similar work with Dr. Buzzard's Original Savannah Band and who has written hit songs for numerous other pop artists.

WHICH brings us to Teresa herself. Her voice lies somewhere between Donna Summer's (warmth and tone) and Stephanie Mills' (focus and projection), and that's a nice place to be. She never pushes; she has power enough without need for excess head tones. She's also very comfortable with lyrics, inspiring real belief both as Be Bop Betty and as the serious, sad young woman of I Got Love for You Ruby. Teresa's a new artist to be watched. —Edward Buxbaum

TERESA: Class Reunion. Teresa (vocals); vocal and instrumental accompaniment. South Side High School Class Reunion; Be Bop Betty; Like an Old Time Melody; Steal Him Away; Happiest Day of My Life; I Got Love for You Ruby; You Can Do Magic. DREAM DA 3502 \$7.98, @ D8 3502 \$7.98, @ DC 3502 \$7.98. his head, and some of it is absolutely inspired lunacy (the version of Summertime Blues is the funniest thing I've heard since Stan Freberg). This kid is either a genius or the sharpest con man since P. T. Barnum sold tickets to the Egress. S.S.

DAVID GATES: Falling in Love Again. David Gates (vocals); instrumental accompaniment. Can I Call You; Where Does the Lovin' Go; She Was So Young; Silky; and six others. ELEKTRA 6E-251 \$7.98, [®] ET8-251 \$7.98, [®] TC5-251 \$7.98.

Performance: From silly to sturdy Recording: Very good

David Gates, former lead singer of Bread, is shown on his album cover tanned and grin-

ning and wearing a fur jacket that must be the envy of all his friends. He has a healthy respect for the words of his own songs-a respect they only infrequently deserve. They're mostly about love (what else?): love of a strange lady "sitting down in the front row" at one of his performances who "sets [his] soul on fire"; love of some woman he just can't get up the courage to call on the phone; and so forth. None of these ballads ever rises much above the commonplace, and Gates' peculiarly nasal voice is of little help. When he gets off That Subject, though-as in the sturdily constructed ballad 20th Century Man, with its bitter words about the world's takers; Chingo, a paean of gratitude to a hustling helper; and Starship Ride, with its offer of an interstellar voyage

winding up at the singer's place, "a little cavern in the desert out of Venus City" the material sounds less silly and more absorbing, and he somehow manages also to do it more justice. *P.K.*

ANDY GIBB: After Dark. Andy Gibb, Olivia Newton-John (vocals); instrumental accompaniment. Desire; After Dark; Warm Ride; Dreamin' On; Someone I Ain't; and five others. RSO RS-1-3069 \$7.98, ⁽¹⁾ 8T-1-3069 \$7.98, ⁽²⁾ CT-1-3069 \$7.98.

Performance: Schlock art Recording: Expensive

And here we have another Art Schlocko release, courtesy of the Stigwood Organiza-(Continued on page 89)

"DON'T know why you can't see that he is only the imposter," Elvis Costello sings (possibly about himself) in his latest, "Get Happy!!" A bit later, after burying some words under the instruments, he adds: "When I said I was lying, I might have been lying."

Could be. "Get Happy!!" does seem intent on chasing you around in circles. Producer Nick Lowe talks in the liner notes about the "extra music time" you're getting; the album does contain twenty pieces, but it turns out that only four run longer than 21/2 minutes. In all, there are 381/2 minutes of music, more than most pop albums contain but not all that much more, and less than you'll find on some. Then there's the gamesmanship about which side is which: what's listed as side one on the jacket is side two on the label, and vice versa. The cover has such a cheap, gaudy, ultra-simple, instant-remainder-bin look to it that you know it took some planning, and the music has a similarly contrived offhandedness.

Superficially, some of it might be taken as a passing nod to rhythm-and-blues. Everybody else with Establishment approval is dabbling in r-&-b, it seems, preparing a listener's mind-set. This one leaves the impression that it was consistently rhythmic at the expense of other elements, rhythmic to the point of being choppy, and that a lot of it was wrapped in Booker T-style organ lines. And there is a cover of a Sam and Dave tune, I Can't Stand Up for Falling Down, in there (the only other one Costello didn't write is I Stand Accused, and it goes back to the Merseybeats), and Elvis is caught a few times (check out Riot Act) seemingly trying on a "soul" voice.

But those are merely trappings. In fact, the core of the thing is a decidedly white kind of play on language. What it sounds more like than anything else to me is middle-period, full-tilt-glitter David Bowie with echoes of Costello's stylistic antecedent, Buddy Holly. Costello and the Attractions don't sound much like Holly and the Crickets, but the shift here from their usual somewhat grandiose approach to the realm of wham-bam-thank-you-ma'am does bring Elvis' horn-rim glasses, narrow ties, and peg pants into sharper focus, and so does the subject matter. Like Holly's, it doesn't at-



Contrived Costello

tempt much beyond straightening out highschool romance. Holly wrote bubblegum before we had the term, and Costello's written some now that we've dropped it.

Costello infests his with puns and oneliners, and occasionally he and Lowe deign to part the instrumentation so you can hear them. Often, like the album cover, they turn out to be deliberately unsophisticated (the riot act, for example, is merely what his girl friend is going to read to him). New Amsterdam presents a geographical problem both figuratively and literally: it was the former name of New York City, but, on the other hand, the album was recorded in Holland. The song's zingiest lines are the fairly reined-in "I step on the brake to get out of her clutches" and "I talk double-Dutch to a real double duchess" (there is no double-Dutch in Old Amsterdam, of course, as anyone from P.S. 101 could tell you). In some ways it is like a hickory nut; the shell is hard to crack, and, once you get inside, the kernel is smaller and more commonplace than you expected.

There is also less to the presentation than there's made out to be. Costello's vocals do contain emotionalism, almost an overwrought sound a couple of times, but not all that much actual passion. This, I think, is why I am reminded of Bowie. The main difference in how Costello sounds, from one song or vignette to another, seems to depend on how loudly he's singing; when he quiets down you hear more texture and nuance. I think he sings with some abandon in Motel Matches, which is head and shoulders above everything else on the record, but most of the other stuff seems to be actedwhich seems somehow to go with so many of the pieces being taken at the same tempo. Lowe's production is unfussy, but the sound varies from clear to somewhat tinny around the vocals. In keeping with the tail-chasing nature of the project, I can't tell whether that's from doctoring or neglect.

WHAT I think happened was that Costello and Lowe saw the "danger" of becoming too smooth for the latest thing in Now, which seems to want much wilder, woolier, more primitive New Wave antics than Yesterday would have dreamed, and they've gone out of their way to roughen up their edges. New Wave is now in demand on the dance floor, which means the fashions that go with it have to be increasingly outrageous in order to top themselves. A wouldbe point rider has to move fast to stay ahead of the increasingly commercial herd that's building up behind. Costello's energy and verve are not exactly compromised in "Get Happy!!", but they are too often subverted to contrivances. -Noel Coppage

ELVIS COSTELLO AND THE ATTRAC-TIONS: Get Happy!! Elvis Costello and the Attractions (vocals and instrumentals). I Can't Stand Up for Falling Down; Black and White World; Sive Gears in Reverse; B Movie; Motel Matches; Human Touch; Beaten to the Punch; Temptation; I Stand Accused; Riot Act; Love for Tender; Opportunity; The Imposter; Secondary Modern; King Horse; Possession; Man Called Uncle; Clowntime Is Over; New Amsterdam; High Fidelity. COLUMBIA JC 36347 \$7.98, © JCA 36347 \$7.98, © JCT 36347 \$7.98.



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GORDON LIGHTFOOT takes a turn for the quiet in "Dream Street Rose," a subtle album that at first seems oddly impersonal coming from Lightfoot, a private man who, as private men sometimes do, tends to make his work intensely personal. And at first it seems regressive; the songs sound (superficially) like some he was writing ten years ago, and the instrumentation, including the return of acoustic guitars to prominence, sounds (superficially) like the pre-"Endless Wire" stuff. A casual first impression might be that it is some kind of retreat from the experimentation of that last album.

That impression would be wrong, for this is the musicianly side of Lightfoot stretching out to bring you a lot of little new things rather than a few big new things. In fact, it represents a refinement of the lyrical aspect of his lyrics. The words of Sea of Tranquility, which at first seem so ignorably casual, gradually ingratiate themselves because they have an easy rhythm reminiscent of one of our better poets: "There's rivers of rainbow and grey mountain trout/And little dark holes where the varmints hang out. . . ." Sea is a fantasy, if, on the surface, a still-obtainable one-a place of otters and frogs and spotted groundhogs-but the song's language is both literal and symbolic at once. Make Way purports to be offhandedly autobiographical while it points out one of the ways (practice!). But it, too, is symbolic; it uses a bluesy tune to keep its optimism under control, and there's an under-the-surface tension in it. Mister Rock of Ages is a sort of prayer Lightfoot does now and then (Too Late for Praying is a prime example), and it is also talkative between the lines. It shows that Lightfoot has distanced himself more than the usual amount from this type of material. It is nonlinear the way the blues can be, a series of couplets that don't seem to need to be in any particular order.

That song and several others, including Hey You ("Hey you, upon this ship of fools/1 think 1 found you bending your own rules"), also represent refinements in Light-

foot's way of lifting clichés out of everyday language (or, in the case of Whisper My Name, everyday tunes), mixing them up into his own special blend, and giving them another dimension of meaning. This, of course, is what the fine arts have always done with the folk arts. One of the ways Lightfoot shows that he's more artist than journalist is pretty much to ignore the transitory cliché (his language is never super whatchacall hip) in favor of the long-term one: "bless my soul," "sad repair," "time on your hands," even "beneath the halo'd moon"-stuff the old folks and the young folks can understand. Not to mention the future folks.

The same is true of the melodic archetypes he recycles, such as the upbeat Anglo-Saxon one in Whisper My Name or the two (beautifully fitted together) sea chanteys in Ghosts of Cape Horn. These aren't up-tothe-minute musical clichés like the Little River Band is working with, but old-timers that have proved themselves. It is Ghosts. however, that is all but a clinic in how (and how well) this sort of thing can be done. I believe somebody commissioned Lightfoot to write it to go with some visuals and it providentially came out both timeless and new; it captures its subject so well that you can't separate how it's done from what it's doing

The album also represents a refinement in instrumentation and sound. The rakish synthesizer wail scraping against Pee Wee Charles' steel guitar, born in The Wreck of the Edmund Fitzgerald, is here set off against more acoustic than electric guitars, providing for greater contrast and making it easier to hear the lyrics. This particular album has all this enhanced, plus a good, clean background, plus a spectacularly transparent bass and terrific stereo imaging, thanks to a digitally recorded master tape. There are, in fact, two ways to go about greatly hastening your appreciation of it, and you can choose according to whether your thing is style or content. One way is to play some of it on the old guitar or something, noting such things as how unexpectedly satisfying the chord changes in On the High Seas are, and the other way is to listen to the tape in an automobile system set up for whiz-bang stereo effects. The metallic part of the evolving ensemble sound is lonesome and nautical, suggesting chains clanking in the wind. The acoustic part is more open and flexible than the pre-"Endless Wire" sounds were, with Lightfoot more often finger-picking the rhythm on a six-string guitar instead of using his familiar flat-pick roll on the twelve-string. But I did say evolving. There are no radical changes-the twelve-string is still there, on the appropriate songs, augmented with an autoharp, and the "new" sound is a step, not a jump, beyond what we have heard before

JF course it isn't the perfect album for all seasons. The kids can't very well bop to it, if that's what you want. And the inclusion of Leroy Van Dyke's The Auctioneerwhich Lightfoot's been doing live, faster than this, for years-has a tacked-on quality. It's one of those songs best kept on the stage and out of albums. Apart from that, the album's biggest "failing" is that it can sound like background music if you want it to. It doesn't break down any barricades to get through to you. It has a way, though, of sneaking around them. By the time you realize you're really listening, you may be hooked. -Noel Coppage

GORDON LIGHTFOOT: Dream Street Rose. Gordon Lightfoot (vocals, guitar); Terry Clements (guitar); Rick Haynes (bass); Pee Wee Charles (pedal steel guitar); Barry Keane (drums); Michael Omartian (synthesizer, accordion, organ); other musicians. Sea of Tranquility; Ghosts of Cape Horn; Dream Street Rose; On the High Seas; Whisper My Name; If You Need Me; Hey You; Make Way for the Lady; Mister Rock of Ages; The Auctioneer. WARNER BROS. O HS 3426 \$8.98, @ W8 3426 \$8.98, @ W5 3426 \$8.98. tion, Andy Gibb, youngest of the Bros, Gibb (though never a Bee Gee), whose adolescent looks, voice, and appeal seem to be stretching into his early middle age, now appears in his third solo album. Almost solo, that is, because his decorative female counterpart, the even more ever-youthful Olivia Newton-John, appears with him on two tracks, Rest Your Love on Me and I Can't Help It. Somehow, in the midst of all the grandeur befitting their status as clean-cut pop zillionaires, they still manage to come across as a cute, trendy couple who've just bought their first house in a development in Erehwon, New Jersey. After all, they are positioned in the market at the same place James Stewart and June Allyson were twenty years ago, aren't they? On his own, Andy contributes his pop single hit Desire. which in his boyish performance turns out to be more of a slight yen. The entire production is as grandly unbelievable as one of those thousand-dollar pinafores Metro used to whip up for Miss Allyson. PR

DARYL HALL: Sacred Songs. Daryl Hall (vocals, keyboards, synthesizer, mandar); vocal and instrumental accompaniment. Sacred Songs; Something in 4/4 Time; Babs and Babs; Urban Landscape; and six others. RCA AFL1-3573 \$7.98, [®] AFS1-3573 \$7.98, [®] AFK1-3573 \$7.98.

Performance: Chaotic Recording: Thick mix

In 1971 John Lennon released a solo album with much primal screaming on such ditties

as *Mother* and *God*. He was later quoted as saying that at times he thought it was his best work and at others he was embarrassed to listen to it. I don't know if Daryl Hall does or will feel the same about "Sacred Songs," which he recorded in 1977 under the direction of producer Robert Fripp, but I find it an embarrassing album.

Listeners familiar with the r-&-b flavor of records by Hall and Oates may be startled by the material on this disc, all of which was evidently strongly influenced by Fripp. The songs are highly emotive without being explicit about what they are supposed to reveal. The arrangements are hyperactivenot to say manic-and Hall's singing, especially on such ghastly items as Without Tears, is simply haywire. I have the impression that Hall felt he was being direct and simple and, above all, sincere. But he seems overwhelmed by his emotions and thus out of control as a performer. Perhaps making the album was a cathartic experience that left him cleansed, but that's no reason to inflict it on listeners. IV

RICHIE HAVENS: Connections. Richie Havens (vocals, guitar); instrumental accompaniment. Every Night; You Send Me; Dreams; Here's a Song; Fire Down Below; and five others. ELEKTRA 6E-242 \$7.98, ET8-242 \$7.98, TC5-242 \$7.98.

Performance: Loud Recording: Good

Richie Havens' latest is one of those overly extended, overly processed, overly calcu-

lated efforts that strain for importance and relevance but end up sounding empty. Havens is still an awesome guitarist, as he proves easily on Mama, We're Gonna Dance or any of the other tracks. Vocally he's always made more sound and fury than meaning, and nothing's changed in that department. Even with the run-of-the-mill songs here there's the gnawing distraction of Havens' pretentious tendency to inflate his own musical rhetoric, treating even the most up-front lyric as if it were crammed with cryptic symbols. Well, as far as I'm concerned it's the aural equivalent of Velveeta. With pimientos, maybe. P.R.

BILLY JOEL: *Glass Houses* (see Best of the Month, page 75)

RECORDING OF SPECIAL MERIT

THE LONELY BOYS. The Lonely Boys (vocals and instrumentals). Take 1t Easy; The Lover; Hot Summer; New Town; Lonely Boys; I'm Confused; It's Only Love; and five others. HARVEST ST-12030 \$7.98, @ 8XT-12030 \$7.98, @ 4XT-12030 \$7.98.

Performance: Excellent Recording: Very good

With lower-class British accents so thick you could spread them on a crumpet, the Lonely Boys charge out of the grooves and into the realm of happy caprice. Basically, they are a pub band—funny, entertaining, and straightforward. They are a classic ex-*(Continued on page 92)*



CIRCLE NO. 36 ON READER SERVICE CARD



The Clash: l. to r., Mick Jones, Paul Simonon, Joe Strummer, Topper Headon

Ramones / The Clash

Most of the original punk-rock bands are by now long gone, but the Ramones and the Clash, pioneer punk standard-bearers in America and England, respectively, are doing more than just hanging in there (knock wood). Both have enjoyed good press, and both have built followings just large enough to suggest to their record companies that they are only one album—or single—away from that all-important commercial breakthrough. And with the Ramones' "End of the Century" (Sire) and the Clash's "London Calling" (Epic), both have released what could well be that one album.

Yet the two bands have less in common than either their greatest fans or their greatest detractors care to admit. To give but one example of this difference: when the Ramones sing about war, as they often do on their new album, they are talking about something that happens in comic books; when the Clash addresses the same subject, they are talking about what they see as a historic inevitability. In England punk was the sound of the street, a polemical music made by and for the hard-core unemployed (maybe even unemployable) who never had the luxury of dropping out. The Clash's problem was how to harness their righteous wrath so that people not in that same situation could identify with it. But in the U.S. punk was basically a middle-class pop-art movement, often intentionally frivolous. What the Ramones needed was a way of presenting their reductio ad absurdum scenarios so more people would get the joke.

For this the Ramones turned to Phil Spector, the early-Sixties producer whose famous "wall of sound" technique was an antecedent of the group's own sonic blitz. "End of the Century" is a triumph for Spector as much as for the Ramones; for the first time since his production of solo albums by John Lennon and George Harrison a decade ago, he shows sympathy with a currently popular musical style rather than simply imposing his old form on a new artist.

Underneath that fuzzy guitar and blurry rhythm section, the Ramones were always a pop group at heart. Their allegiance was to the two-minute single, but their albums were always carefully, if not conspicuously, polished. Those brief guitar breaks (not even solos, really), the occasional harmony—these were not whims but calculated effects. But on "End of the Century" the Ramones are for the first time a hard-rock band with soloists, with accompanying musicians, and with overdubs of double-timed acoustic guitars and double-tracked lead vocals from Joey Ramone.

His extra production polish is Phil Spector's doing, and he and the band make their intentions clear with the very first track, *Do You Remember Rock 'n' Roll Radio?* The drums are deeper and crisper, more syncopated than ever, and an organ, a saxophone, and guitars kick right in with a glorious jukebox roar. In lamenting the sameness of current radio, the song recalls various rock icons, and of course it's an obvious bid to be played on radio itself. There's no reason it shouldn't be, either, for it's tuneful, it's full of sharp lyric and instrumental hooks, and Joey sings it with all he's got.

The rest of side one is on the same high level. I'm Affected flaunts Who-like power chording and weeping guitar lines from Johnny Ramone. *Danny Says* is the sweetest ballad the Ramones have recorded, a perfect balance of the tongue-in-cheek and the sincere. *Chinese Rock*, a much older song, sounds more like the group's previous recordings.

If the second side of the album had only half the majesty of the first, I'd make no complaint. But there is a very steep falling off, beginning with a remake of the Spector/Ronettes classic Baby, I Love You, The cheesy string arrangement is an act of selfmutilation on Spector's part, and Joey's lead vocal is embarrassingly inept. Even so, there are encouraging signs. On this and several other tracks Joey at least attempts to strike some vocal pose other than irony, previously his only stock in trade. Besides Baby, I Love You, his only major failure on this side is in the scurrilous This Ain't Havana-which a little irony might, ironically, have saved from the implications of its blatant (though trendy) anti-Latin stance. Side two also has a remake of the Ramones' movie theme song, Rock 'n' Roll High School, which would be quite superfluous except (influence tracers please note) that it makes more explicit the group's debt to the Beach Boys.

LIKE the Ramones, the Clash wastes no time in getting down to business on "London Calling." It is obvious right off, with the title song, how much the Clash's rhythm section has tightened up; bassist Paul Simonon and drummer Topper Headon pound this one home, the doomsday bass complementing Mick Jones' menacing guitar.

From the raw rage of their epochal first album to the fiery precision of this third one, the evolution of the Clash has been one of the most engrossing spectacles in recent pop music. All along they have been voraciously absorbing old styles and techniques and appropriating new ones. Although nothing on "London Calling" quite comes up to the three British singles (particularly *Complete Control*) the group released between their first two albums, it would take a real nit-picker to find much wrong with this two-disc set.

The Clash's new producer, Guy Stevens, makes a difference here, as do the accompanying horns and keyboards, but most of the progress can be attributed directly to the band. Jones has become one of our most powerful hard-rock guitarists, and lead singer Joe Strummer, though he can still shout with the best of them, is continually developing new shadings in his vocals (*Jimmy Jazz* here is his most effectively *under*stated performance yet). As a songwriting team, the two are unwaveringly inventive, capable of pouring lots of detail into a song without slowing its pace.

The Clash draws on nearly everything that has come before them, but without really aping anything. Reggae, which they have always worked with so knowingly, is represented here by *Rudie Can't Fail*, *Lov*er's Rock, and Revolution Rock. But, on both Jimmy Jazz and Wrong 'Em Boyo, they also dig back into the r-&-b that helped shape reggae. Boyo is a classy piece of rock phrasemaking as good as the title song; it gives a new twist to the Stagger Lee legend, a New Orleans musical staple, and supports it with horn charts drawn from Frankie Ford's *Sea Cruise. Brand New Cadillac* is updated rockabilly, and the music (though not the lyrics) of *I'm Not Down* sounds like it could have been written by Jimi Hendrix. On *The Card Cheat* the group takes a few tips from Phil Spector. Yet, despite all these easily traceable influences, the Clash still sounds like no one else.

Thematically the new songs are also more expansive, in this respect continuing the progress the Clash's second album made over their first. The lyrics are much less specifically British, more international, with almost as many references to nuclear meltdowns as to war. They manage to draw morals (as in Wrong 'Em Boyo and Death or Glory) without being overly moralistic; they condemn drug consumption among the upper crust (Koka Kola) without ignoring its devastating presence among their own former peers (Hateful). And though Four Horsemen may ascribe a presumptuous mythic status to the Clash, Spanish Bombs provocatively juxtaposes the luxury they enjoy as rock stars with a less attractive imagery: that of the civil war in Spain and the urban guerrilla warfare in Northern Ireland today. And in Train in Vain (the last song on the album, though it's listed on neither the label nor the cover) they tackle relationships between men and women with the same guts and intelligence they apply to other subjects.

ALL it "punk" if you must, or just call it "contemporary rock." The Ramones and the Clash have both built convincingly on their original premises and have managed to reach their audiences without compromising. The Ramones may stumble more often than the Clash, but they're still growing. The continuing vitality of both bands proves what their early fans knew all along: these groups were built to last.

–John Morthland

RAMONES: End of the Century. Ramones (vocals and instrumentals); vocal and instrumental accompaniment. Do You Remember Rock 'n' Roll Radio?; I'm Affected; Danny Says; Chinese Rock; The Return of Jackie and Judy; Let's Go; Baby, I Love You; I Can't Make It on Time; This Ain't Havana; Rock 'n' Roll High School; All the Way; High Risk Insurance. SIRE SRK 6077 \$7.98, ^(IIII) M8S 6077 \$7.98, ^(IIIIII) M5S 6077 \$7.98.

THE CLASH: London Calling. The Clash (vocals and instrumentals); vocal and instrumental accompaniment. London Calling; Brand New Cadillac; Jimmy Jazz; Hateful; Rudie Can't Fail; Spanish Bombs; The Right Profile; Lost in the Supermarket; Clampdown; The Guns of Brixton; Wrong 'Em Boyo; Death or Glory; Koka Kola; The Card Cheat; Lover's Rock; Four Horsemen; I'm Not Down; Revolution Rock; Train in Vain. EPIC E2 36238 two discs \$9.98, © E2A 36238 \$9.98, © E2T 36238 \$9.98.



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John Denver's "Autograph"

JOHN DENVER may be a celebrity and a pop favorite of yours of several years' standing, but until his latest album-"Autograph" on RCA-I fear I kept my opinion of him stacked rather carelessly in the limbo of my mental trivia bank. It was not that I disliked him, only that I had very little opinion about him at all. And if I did think of him, it certainly wasn't while going around (for days) humming Sweet Surrender or reveling in his Christmas album with the Muppets. No, he was more likely to come to my mind at stray, odd times, such as while I watched TV's dear old Aunt Cora peddle her good-to-the-last-drop coffee with such cheerful, wholesome, businesslike aplomb. Somehow I suspected that John Denver might be her nephew, and I very much liked my mental picture of them both jes' settin' around the general store makin' millions the American Way. All this, of course, was before I heard "Autograph.

What suddenly focused me in on John Denver and his work was that, listening to "Autograph," I realized the guy is an authentic American pop talent who has enough savvy, professionalism, and musicianship to do pretty much what he wants to do. With the exception of the title song-a lovely, intimate ballad (and one of the five songs on the album Denver wrote himself)-most of the material here is arranged, played, and sung in a style I can only call Wide Open Bluegrass. By that I mean that the basic vocal and instrumental sound seems to have roots in Eastern bluegrass, but in the hands of Denver and his producer Milt Okun it takes on a very contemporary, very Western spaciousness. In such songs as *Dancing with the Mountains*, *How Mountain Girls Can Love*, or *Whalebone and Crosses*, the faintly formal, Elizabethan-reel-like quality that's always present in authentic bluegrass fades completely, to be replaced by an airily taut sound that's as bracing as the cold air in the Arctic regions *Wrangell Mountain Song* is about. Denver and Okun have drawn some interesting developments out of a standard American form, and I wonder where else they, and others, will take it.

Denver's voice here is still full of the kind of just plain happiness and high spirits that made him a star in the dour Seventies, and that has a lot to do with why I am impressed with the whole album. Now, if he would only refrain from flashing that ear-to-ear smile quite so much (luckily, the album cover shows him with his mcuth closed) every time he appears on TV (where he seems to be advertising some as yet unintroduced brand of miracle toothpaste), I think I could find it within myself to become a fan. On second thought, maybe I always was and didn't know it. — Peter Reilly

JOHN DENVER: Autograph. John Denver (vocals, guitar); orchestra. Dancing with the Mountains; The Mountain Song; How Mountain Girls Can Love; Song for the Life; The Ballad of St. Anne's Reel; In My Heart; Wrangell Mountain Song; Whalebones and Crosses; American Child; You Say That the Battle Is Over; Autograph. RCA AQL1-3449 \$8.98, @ AQS1-3449 \$8.98, © AQK1-3449 \$8.98.

ample of what we understand as the British "muddle through" outlook: "See here, we all have to get on with it as best we can, so let's get on with it." The Lonely Boys get on with it very well. It's been a long time since I've heard a band with such confidence and businesslike energy. Whether their subject is a national crisis with which the government cannot cope (Take It Easy) or listening to records with the volume up high (Annoying All the Neighbours), the band has learned not only what pleases them but what the folks in the pub want to hear. It's been an even longer time since I've heard a band that sounded like they gave a damn about the audience. The Lonely Boys may be the ultimate pub band, so lean back, have a pint or two, and make the most of them IV

RECORDING OF SPECIAL MERIT

MADNESS: One Step Beyond. Madness (vocals and instrumentals). One Step Beyond; My Girl; Night Boat to Cairo; Believe Me; Land of Hope and Glory; The Prince; Tarzan's Nuts; and eight others. SIRE SRK 6085 \$7.98, ⁽¹⁾ M8 6085 \$7.98, ⁽²⁾ M5 6085 \$7.98.

Performance: **Delightful** Recording: **Good**

Madness plays the Beatles to the Specials' Rolling Stones in the ongoing British ska revival. Which is to say that, rather than dealing in social issues and funk, they play exuberant, sometimes deliberately silly songs with terrific musicianship and flair. They're a cartoon band, really (visions of Heckle and Jeckle danced in my head by the middle of side two), and, though I have no idea how accurately they've caught the essence of the genre, they sound wonderfully right to me. Questions of purism aside, if you're looking for something unlike anything else you've probably been hearing lately (in New York City they actually play this stuff on the radio all the time), you should grab this album immediately. S.S.

RECORDING OF SPECIAL MERIT

MAMMATAPEE. Mammatapee (vocals and instrumentals); instrumental accompaniment. Sweet Poison; Girl, I Wanna Get Right Up Next to You; Something on Your Mind; Don't Bite the Hand (That Feeds You); Rock Across the Nation; Caught Up in the Race; and four others. WARNER BROS./WHITFIELD WHK 3171 \$7.98, ^(®) M8 3171 \$7.98, ^(®) M5 3171 \$7.98.

Performance: Monstrously good Recording: Good

Never having heard of a mammatapee, I was led by the cover illustration of this album to believe it must be one of Godzilla's more violent winged cousins, one of those terrifying specimens that creep forth from the television set in the wee hours after the sitcoms are safely tucked away. However, a check of the album's contents provided reassuring evidence that Mammatapee is an eight-legged creature, one part female and three parts male, that can sing up a storm of deliciously funky music, especially when it is put through its paces by veteran producer Norman Whitfield. Evidently, it was nur-(Continued on page 94)



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94



MAMMATAPEE: greens, grits, and gravy

tured on greens, grits, and gravy and is descended from similarly constructed soul creatures of the sort that once roamed freely through the primordial valleys of Motown, though those ancients tended to be either all male or all female. So Mammatapee has sprung from a more recent branch of the evolutionary tree, as is indicated by its rambunctious nature. Its playful and spirited music should make it a welcome guest at parties, for though it can cover a wide range of moods, it is at its best when kicking. Mammatapee bears no signs of being the mutant beginning of a radically new breed, but it should be warmly regarded by those who like solid soul sounds. PG

ROGER McGUINN/CHRIS HILLMAN: City. Roger McGuinn (vocals, guitar); Chris Hillman (vocals, guitar, mandolin); Gene Clark (drums, vocals); other musicians. Who Taught the Night; One More Chance; Won't Let You Down; City; and six others. CAPITOL ST-12043 \$7.98, @ 8XT-12043 \$7.98, © 4XT-12043 \$7.98.

Performance: Good Recording: Good

If you'd like to spend some time in a time warp, here's a pleasant way to do it. McGuinn and Hillman miss the Byrds even more than the rest of us old folkies do, and here they proceed more or less as if nothing else had happened between then and now. When they sound best-in One More Chance, Let Me Down Easy, and special guest Gene Clark's Won't Let You Downthey might convince you that nothing very important has happened since the Byrds flew. Unfortunately, not very much is happening on the other cuts of this record; mostly they're okay but routine, the songs themselves being steadfastly unimportant, an un-Byrdlike characteristic. I think Mc-Guinn particularly needs a group to be inhis voice, which always sounds like it's being pinched, is not that wonderful on solos but has the faculty of sounding like two or three voices in a group-and I suppose whatever group that is will sound something like the Byrds. So be it, but the ghosts would be easier to deal with if the songs mattered a little more. NC

JANE OLIVOR: The Best Side of Goodbye. Jane Olivor (vocals); orchestra. Manchild Lullaby; Love This Time; The Greatest Love of All; Golden Pony; Vagabond; and five others. COLUMBIA JC 36335 \$7.98, JCA 36335 \$7.98, © JCT 36335 \$7.98.

Performance: **Distraught** Recording: **Tasteful**

Not even her airless, whiplash performances, fraught, simply fraught, with sophisticated and worldly emotional pain, can convince me that Jane Olivor is much more than a clever little girl clacking around in Ma's ankle-strap shoes doing her Faye Dunaway imitation. Nor does her habit of eviscerating every semicolon in a lyric to drag out its meaning persuade me that she's an actress of much depth. Time and again here, as Olivor struck one Delsartian vocal pose after another (her big number is Distraught, very Distraught), I got the impression that she was sashaying in front of a mental image of herself as the Greatest Star in the World. Even a couple of bands of that sort of fluff from a Streisand or a Parton is enough already. In Olivor's case it is also assuming something that isn't true. Her best effort is on Manchild Lullabye, the first track, after which it's all fairly repetitious. The production, by a variety of lov-ing hands, is so "tasteful" that a Vivaldi concerto might sound like rude noise in comparison. P.R.

JOHNNY RODRIGUEZ: Through My Eyes. Johnny Rodriguez (vocals); instrumental accompaniment. What'll I Tell Virginia; One Sided Love Affair; One Affair Later; Where Did It Go; I'll Go Back to Her; and five others. EPIC JE 36274 \$7.98, ^(a) JEA 36274 \$7.98, ^(b) JET 36274 \$7.98.

Performance: Good Recording: Good

This is probably the most honest and straightforward packaging of Johnny Rodriguez to date, and it's much more satisfying than most of his albums. Billy Sherrill's production is not without tricks of the trade and fancy little spectacles, yet it bends from song to song and always features Rodriguez—or, where it bends to sound like Waylon Jennings' band (in *I'll Go Back to Her*, written by Waylon), Rodriguez and Jennings singing harmony. Rodriguez has been teetering for some time on the brink of going either way in country music. A pro-

tégé of Tom T. Hall, he seems to have the stuff to join Hall and Waylon and Willie and Mickey Newbury and a few others in the faction worth saving, but most of his previous recordings have cast him in the Conway Twitty anything-for-a-hit mold, all gimmick songs and Nashville Sound. Here the turn is definitely toward songs worth doing and, a little less definitely, toward keeping production small enough for its britches, and in this environment Rodriguez shows us a good, honest baritone and some little feeling for lyrics. He should do it again, only more so. N.C.

SUE SAAD AND THE NEXT. Sue Saad and the Next (vocals and instrumentals). Gimme Love/Gimme Pain; It's Gotcha; Prisoner; Young Girl; I Me Me; and five others. PLANET P-4 \$7.98, [®] PT-4 \$7.98, [©] PC-4 \$7.98.

Performance: Plastic Recording: Excellent

There are, unfortunately, going to be a lot of albums like this one in the near future, most of them (but hardly all) from Planet Records, which, as you may know, is the creation of Richard Perry, heretofore responsible for the world's most opulent, sterile overproductions (for the likes of Leo Sayer, Carly Simon, and others) but now a Born Again Punk Rocker. Perry's conception of punk rock, however, amounts to getting a bunch of slick session players to affect leather jackets and sneers, then to record lightweight pop songs that sound more like Jay and the Americans than the Sex Pistols. In the case of Sue Saad and Company, the results are not entirely unattractive: in another life, Ms. Saad would have been Lesley Gore (I mean that as a compliment). and the band makes reasonably attractive noises. But the whole thing is so L.A. Plastic, so calculated about being streetwise, that these minor virtues are pretty much irrelevant. 2.2.

SHOOTING STAR. Shooting Star (vocals and instrumentals). You Got What I Need; Don't Stop Now; Higher; Just Friends; Bring It On; Tonight; and four others. VIR-GIN VA 13133 \$7.98, @ TP 13133 \$7.98, @ CS 13133 \$7.98.

Performance: Tedious Recording: Fine

Virgin has a (deserved) reputation for being one of the more esoteric labels, but since the record biz does not live by esoterica alone, it was only a matter of time until even they had to sign somebody really commercial. Shooting Star, their first American acquisition, is that somebody-in fact, six somebodies. They're a Midwest stadium band with techno-rock overtones in the grand tradition of Foreigner and Kansas. To their credit, Shooting Star does not wallow in Foreigner's repulsive misogyny, and they're nowhere near as cosmic or flaky as Kansas. But, by the same token, they're working a genre that's about as played out as one can get, and I dearly wish bands like this would just go away for good. Of course, if I were sixteen I'd probably love them. Hmm . . . maybe it's time record stores insisted on a proof of age for customers. S.S.



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(Continued overleaf)

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RACHEL SWEET is an eighteen-year-old mighty mite from Akron, Ohio, who hit it big in London but has now returned home to favor us with a series of road tours. Her first album ("Fool Around," Stiff/Columbia JC 36101), released last year, was captivating and multidirectional. Much of it was gritty rock, but it also dealt easily with Top-40 pop, country, and a peculiar musical-lyric form I shall call "nymphet gothic"—a bizarre, eerie mix of cabaretstyle world-weariness and pre-adolescent

Sweet is such a good actress it's hard to tell; her voice is pitched lower than usual and is very breathy, with an occasional rasp—all of which makes her sound like a Lolita whose vocal cords have been pickled in cheap gin. Hilarious and slightly embarrassing at the same time, *Tonight Ricky* raises aural kiddie porn to the level of art almost.

Though I prefer her as a balladeer, Sweet is also an exceptional belter, as most of the album's contemporary songs (such as *Jeal*-



romanticism. Sweet's producer and principal songwriter for that album was Liam Sternberg, and repeated hearings gave me the impression that there might have been a kind of Svengali/Trilby relationship between him and Sweet.

But Rachel Sweet's new album, "Protect the Innocent," shows that she is very much her own woman. The production is now by the team of Martin Rushent and Alan Winstanley, and the album is almost totally rock-and-roll. Sweet sings with real personality, adding to it an actress' skill in representing the characters and situations of any given song. Outstanding are three she wrote herself: Tonight, a straight-ahead rocker about a girl declaring her . . . um . intentions; Lover's Lane (which owes its opening melody line to Neil Young), about a long-term relationship that hasn't gone anywhere; and Tonight Ricky, a devilish item about a tryst between consenting minors. The oddball arrangement of the last, with instrumentals more suited to a night club than a rock arena, contributes to its puzzling but fascinating atmosphere. Is it a joke? Is the writer/singer serious?

ous, I've Got a Reason, and Foul Play) demonstrate. And she can also work over older material and make it her own, as she does with New Rose (written and first recorded by the Damned), Baby, Let's Play House (cut by Elvis Presley at his 1954 Sun dates), and New Age (a Lou Reed song from the Velvet Underground days).

N fact, the only complaint I have about "Protect the Innocent" is that the back-up musicians—all British—are not identified. This is a serious error, since they are absolutely first-rate and their contribution to the album's success is a major one. But Rachel, you're remarkable. Stay as Sweet as you are. —Joel Vance

RACHEL SWEET: Protect the Innocent. Rachel Sweet (vocals); instrumental accompaniment. Tonight; Jealous; I've Got a Reason; New Age; Baby, Let's Play House; New Rose; Fool's Gold; Take Good Care of Me; Spellbound; Lover's Lane; Foul Play; Tonight Ricky. STIFF/COLUMBIA JC 36337 \$7.98, @ JCA 36337 \$7.98, @ JCT 36337 \$7.98. THE SINGERS UNLIMITED: Just in Time. The Singers Unlimited (vocals); instrumental accompaniment. Just in Time; My Foolish Heart; Stone Ground Seven; Sleep Loved; Someone to Watch over Me; and five others. PAUSA 7048 \$7.98.

Performance: **Soggy** Recording: **Very good**

The quartet of vocalists whose disembodied faces shine forth from the cover of this album have a way of taking such perfectly good, time-honored ballads as Comden and Green's Just in Time and, with the help of arranger Gene Puerling, turning them into pure mush. A wilting Honeysuckle Rose, a Someone to Watch over Me you couldn't trust to stay awake that long, a My Foolish Heart rather more foolish than most, and a Zip-a-Dee Doo-Dah entirely devoid of the high spirits it exuded in the Disney movie are also among the casualties. P.K.

RECORDING OF SPECIAL MERIT

STONE CITY BAND: In 'n' Out. Stone City Band (vocals and instrumentals); instrumental accompaniment. In 'n' Out; Little Runaway; Strut Your Stuff; Havin' You Around; and four others. GORDY G7-991R1 \$7.98, @ G8-991HT \$7.98, © G75-991HC \$7.98.

Performance: Good and very good Recording: Good

Rick James, the latest *Wunderkind* to burst from the Motown stable, is said to produce a kind of music called "punk funk" (or funk punk?). To me it sounds like nothing more than disco-flavored popular soul with a few extra references to drugs and freaking-out in the lyrics. And the members of the James gang look more like peacocks than punks. Oh, well, it's the music that really counts.

This album features James' back-up group, the Stone City Band, in a set that is at least halfway exciting. The first side, all glossily professional disco-derived fare, does not generate much heat in spite of the steady pulse. But on the second side, the one that accounts for the "Special Merit" rating, all the selections are underscored with a Los Angeles Latin flavor that gives the music real buoyancy and brightness. The use of a minor key in the title track, In 'n' Out, is pulled off with exceptional cleverness, and the melody is hauntingly lovely. At times the music is reminiscent of War's earlier efforts. The entire side is such a delight that I can forgive Rick James, as producer and arranger, for the utter bombast of the opening "overture." P.G.

MARC TANNER BAND: Temptation. Marc Tanner Band (vocals and instrumentals). Hold Your Head Up; Hot and Cold; And You Do; Lonely Street; Temptation; and four others. ELEKTRA 6E-240 \$7.98, @ ET8-240 \$7.98, @ TC5-240 \$7.98.

Performance: Good Recording: Very good

This album demonstrates that Marc Tanner and his band are hard-working and conscientious, but they don't always connect emotionally. Much of the material, despite its studied craftsmanship, is still on the apprentice level: the ideas are there, and the *(Continued on page 98)*

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words come through, but something lacking, some indefinable x factor, prevents it from clicking.

There is one notable exception, however: Hot and Cold does indeed click in every way—melody, hook, arrangement, sentiment. It should have been the single from the album, but for reasons unknown the single release is a rehash of Rod Argent's Hold Your Head Up, a literal remake of the original that neither betters nor even equals it. Tanner needs another two or three albums to break through, and I hope his label will sustain him because I have the feeling the results will be worth the wait. J.V.

TIM WEISBERG: Tip of the Weisberg. Tim Weisberg (flute); David Minor (bass); Rick Jaeger (drums); Bobby Wright (keyboards); Todd Robinson (guitar). Pork Chops; La Paz; Intimidation; Do Dah; and four others. NAUTILUS **O** NR7 \$16.50.

Performance: **Good** Recording: **Glorious**

Here you have a live-mixed, digitally mastered rock instrumental album. Surely a first. Unfortunately, rock instrumentals are basically boring. Oh, I liked those in Tommy, but only because I knew that in a minute we'd get back to our story. That these are rock is attested to by their simple construction and underscored by emphasis and quotes in the liner notes to the effect that Tim Weisberg considers himself a rock musician and not a jazz musician. As far as really getting up and rocking goes, they don't do that. They'd probably be more boring if they did. But I could see some of the pieces working in radio programming-and of course the engineering is simply glorious, achieving an extraordinary spaciousness and clarity. Pop flutists tend to be breathy, choppy, and funky, but Weisberg is smooth and accomplished and probably could be not only a jazz musician but a classical musician if he wanted to. That smoothness translates here as coolness, though, which just eggs you one step closer to muttering about elevator music with a beat. N.C.

STEPHANIE WINSLOW: Crying. Stephanie Winslow (vocals); instrumental accompaniment. Oh Mister; Don't Go; I Can't Remember; I've Been a Fool; Say You Love Me; and five others. WARNER BROS. BSK 3406 \$7.98, [®] M8 3406 \$7.98, [®] M5 3406 \$7.98.

Performance. Good Recording: Good

C-&-W ham seems to be Stephanie Winslow's staple dish, to judge by the five songs here that she wrote. Her performance style, however, has a heavy pop-ballad glaze that gets her into Crystal Gayle territory. She's good enough, in a fancied-up way, in such things as the title song and her own Let This Child Sleep Tonight, but the overall flavor is strictly home cookin'. P.R.

COLLECTION

CRYIN' IN THE MORNING: AN AN-THOLOGY OF POST-WAR BLUES. Blind Willie McTell: A to Z Blues. Memphis Minnie: Kid Man Blues. John Lee Hooker: When My Wife Quit Me. Sunnyland Slim: Orphan Boy Blues. Blind Billy Tate: Cryin' in the Morning; Ooh Wee Baby. Curley Weaver: She Don't Treat Me Good No More. St. Louis Jimmy: Trying to Change My Ways. Frank Edwards: Gotta Get a Gettin'. Dennis McMillan: Poor Little Angel Girl. Pee Wee Hughes: I'm a Country Boy. David Wylie: You're Gonna Weep and Moan. MUSE MR 5212 \$6.98.

Performance: From duds to gems Recording: Variable

This grab-bag of postwar blues contains different styles and accompaniments from the primitive to the fairly fancy. All the recordings were quickie sessions for cash on the line, and the attentive reader of record labels may be amused to see that producer Fred Mendelsohn is credited with writing every one of the tunes. Small blues labels of the 1940s and 1950s customarily registered



TIM WEISBERG Smooth and accomplished

copyrights in the names of their staff since blues artists didn't inquire about, didn't know about, or were shortsighted about publishing rights and royalties.

There are gems, duds, and sturdy performances in this collection. Sunnyland Slim and John Lee Hooker are in the sturdy-performances category—always good for a listen. We will pass by the duds to hurry on to the gems. The first is by Blind Willie McTell, using the nom du disque of "Pig 'n' Whistle Red," on A to Z Blues, a catalog of the bodily injuries a cheating girl friend is going to receive. McTell recorded for Victor and its cut-price subsidiary Bluebird in the 1920s and 1930s; A to Z Blues, made at least twenty years later for Savoy, shows he had lost none of his winning vocal and twelve-string-guitar style.

The other standout is *Kid Man Blues* by Memphis Minnie, who not only shouts, but guffaws, squeals, and mutters while her back-up combo takes an instrumental passage. There is a whopping technical flaw in the recording—the sound suddenly dims and then comes up again—but it only adds to the gloriously ramshackle atmosphere. Minnie's singing and the barrelhouse accompaniment are regally sleazy. J.V.



AVA CHERRY: *Ripe!!!* Ava Cherry (vocals); vocal and instrumental accompaniment. Love Is Good News; Single Woman, Married Man; Gimme Your Lovin'; and four others. RSO RS-1-3072 \$7.98, ⁽¹⁾ 8T-1-3072 \$7.98, ⁽²⁾ CT-1-3072 \$7.98.

Performance: **Sincere** Recording: **Very good**

A sincere debut album by a female pop vocalist may not sound like big news, but it is. Ava Cherry sings her way through seven songs in this album, five of them in the contemporary dance-music mold and two ballads, Curtis Mayfield's Love Is Good News and the rather obvious Single Woman, Married Man. She has a rich, strong, chesty voice that is easy to listen to, and she avoids that gospel-based freewheeling the current crop of vocal debutantes favors. Her recording has also been intelligently engineered; we can hear just what she sounds like even on the heavier, dancier tracks, such as Gimme Your Lovin', where she introduces a welcome gutsiness.

Where There's Smoke There's Fire ("taking me higher, higher, higher"), a good dance production supported with nonstop bongos and some of the more obvious disco tricks, shows some signs of life, but in general the material here isn't good enough to lift all of the vocalist's sincerity to special heights. Still, in these days of overproduced and undertalented performers, a decent album like this does count for something. What's yet lacking is a sure instinct for the music, the kind of merging of voice and style that creates a personality. Ava Cherry is promising, but "Ripe!!!" she's not. E.B.

CRISTINA. Cristina Monet (vocals); vocal and instrumental accompaniment. *Jungle Love; Mama Mia; Blame It on Disco;* and three others. ZE ZEA 3300 \$7.98.

Performance: Maybe a joke Recording: Good

Who is Cristina Monet and what does she want? She is clearly no singer. Her waterthin voice wavers and wobbles its way through this record, uncertain in pitch and deficient in power. If someone had told me this was Jacqueline Onassis' debut album, I would have believed it. It's that bad.

But what's going on *behind* Cristina and it's a lot—is to the credit of some very talented people. August Darnell, who wrote all but one song and produced the album, and Andy Hernandez, who arranged and orchestrated it, were both associated with Dr. Buzzard's Savannah Dance Band in the golden Cory Daye days. Their contributions here vary from the so-so Jungle Love to the very exciting fast-tempo Don't Be Greedy, (Continued on page 100)

98

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O^N a March evening back in 1943, a musical called *Away We Go!* opened in New Haven. It was based on an earlier (1931) play by Lynn Riggs called *Green Grow the Lilacs*, the music was by Richard Rodgers, and the book and lyrics by Oscar Hammerstein II dealt with the efforts of a wholesome cowboy named Curly to marry a girl named Laurey 'way out West in Indian territory around 1900.

By the time Away We Go! got to Boston, the title had been changed to Oklahoma, to which an exclamation point was added when the show reached the St. James Theatre in New York. The choreographer, Agnes De Mille, reported later that she was unable even to give away the ten tickets she had bought for the opening on March 31. But that night, and in years to come in theaters all over the world, Oklahoma! was received with rapturous acclaim. Miss De Mille made a victorious return to Broadway by re-creating her original choreography for the show's recent revival, and it's running at the Palace as you read this.

Oklahoma! was a landmark in a number of ways. It was the first show in which Rodgers collaborated with Hammerstein. It was the first musical (unless you count the 1927 Show Boat) in which plot, lyrics, music, and dances appropriate to the locale were truly integrated with each other (some feel the result was the death of the musical as a freewheeling, gloriously irresponsible form of entertainment). And when Decca brought out six 78-rpm records of it in 1943, and then later two more, it was the first time a virtually complete original-cast recording of a musical show was available on discs. An LP transfer of that recordingunfortunately in electronically simulated stereo-is still available on the MCA label, and a high-spirited affair it is, too, with such stars as Alfred Drake, Celeste Holm, Howard da Silva, and Lee Dixon singing most of the songs under the energetic direction of Jay Blackton, the original conductor. The sound is flat, and the rechanneling has introduced a distressing echo, but the performances tingle with life.

The news, however, is that the Broadway revival prompted RCA to record a complete version of the show with the new cast, and the results are exhilarating. The whole

thing flows and pulsates from start to finish. The singers may not be household names, but they're all expert performers'. Laurence Guittard (Curly) and Christine Andreas (Laurey) have full-bodied, fittingly bucolic voices and make the most of their famous duet, People Will Say We're in Love, as well as Curly's opener, Oh, What a Beautiful Mornin', and Laurey's Many a New Day and Out of My Dreams. The Surrey with the Fringe on Top goes clip-clopping along as charmingly as ever, and Harry Groener as Will Parker is convincingly wide-eved when he returns to the farm and expatiates on the wonders of Kansas City. Martin Vidnovic is in glorious form as Jud, the rejected suitor, in his almost operatic soliloquy Lonely Room, and Christine Ebersole is altogether lovable as Ado Annie, the girl who Cain't Say No.

Now, back in 1964 Columbia released a recording of Oklahoma! with a cast that was, if not "original," quite magnificent, including John Raitt as Curly, Florence Henderson as Laurey, Irene Carroll as the butter-churning Aunt Eller, folksinger Jack Elliott as Will Parker, Phyllis Newman as Ado Annie, and Ara Berberian as Jud. It's still in the catalog (OS 2610), and both on a purely musical level and in terms of recorded sound-especially considering its age---it is even more satisfactory than the new RCA release. (Philip J. Lang's orchestrations in particular lend color and tang to the production.) Anyone who has that disc scarcely needs another, although the new one does benefit from a kind of red-blooded, rough-and-tumble healthiness and headlong energy that make it sound less like a concert and more like theater. As for Capitol's original-soundtrack recording from the rather shaky movie version (featuring Gordon MacCrae, Shirley Grahame, Shirley Jones, and Rod Steiger), it is best forgotten-it's not at all in the same league as any of the show albums. -Paul Kresh

OKLAHOMA! (Richard Rodgers-Oscar Hammerstein II). Broadway-cast recording. Laurence Guittard, Christine Andreas, Mary Wickes, others (vocals); chorus and orchestra, Jay Blackton cond. RCA CBL1-3572 \$8.98, © CBK1-3572 \$8.98. which cleverly mixes a very simple tune with syncopated rhythms right out of Dr, Buzzard's jazzy top drawer. "A" for effort also for (*Temporarily*) Yours with its winning combination of a hot dance beat and a dreamy melody. But it doesn't matter how good the support is when center stage is held by an amateurish vocalist. *E.B.*

MECO: Music from "Star Trek" and "The Black Hole." Various instrumentalists. Clearmotion; Meteorites; Space Sentry; Star Trek Medley; and three others. CASA-BLANCA NBLP 7196 \$7.98, [®] NBL8 7196 \$7.98, [©] NBL5 7196 \$7.98.

Performance: Bombastic but fun Recording: Space-age sound

This is a strange recording to be coming from a man who has made a career of creating disco versions of film soundtracks. Every band in this Meco album just trails off at the end, which is a real disservice to dancers. Despite the excitement potential, the net result is a series of downers.

The Love Theme from "Star Trek" opens with a spaced-out intro that demonstrates the superb engineering care that has gone into the recording, and until its unfortunate fadeout it works well enough. And the familiar Theme from "Star Trek", which comes out as a virtually straight reading of the TV soundtrack with lots of bass added, captures the childlike innocence of the whole Trekkie phenomenon. How could it miss?

On the Black Hole side, nothing is developed enough to give us time to work into the spirit of the dance; everything ends in that same distressing fade. Worse, only the first of the four themes is actually from John Barry's film score. That main theme is a bit on the martial side, though arranger Harold Wheeler sees to it that there are enough separate levels to work up some interest. But it's downhill from there. Clearmotion and Space Sentry are tuneless exercises, arranged according to the Meco formula for blaring horns, sweeping strings, and synthesized guitar. The final theme, Meteorites, is given such emphasis on Forties horns that it comes out sounding like Duke Ellington playing disco. I don't know if this was intentional, but it is fun. E.B.

TWO TONS O' FUN. Two Tons o' Fun (vocals); instrumental accompaniment. Do You Wanna Boogie, Hunh?; Just Us; Got the Feeling; Gone Away; and three others. FANTASY F-9584 \$7.98.

Performance: **Bigger than life** Recording: **Good**

If you're a fan of Sylvester, the androgynous darling of the discos, then you already know about Two Tons o' Fun, the pair of generously endowed former gospel singers, Martha Wash and Izora Armstead, who not only back him up quite effectively but also supply much of the oomph and body in his performances. Both of them have big, full, earthy voices that pack as much power as their physical proportions would lead one to expect. They certainly have come a long way from the choir stall.

Most of the material on this debut album is run-of-the-mill disco, or perhaps a little better than average, delivered with the nec-(Continued on page 102) One of Japan's most technologically advanced cars is a Dodge. Dodge Challenger

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essary rhythmic drive and effectively pairing the grittier, lower-pitched tones of one Ton with the lighter, sharper sound of the other. It is a quite workable and appealing mixture, and on one track a greater potential for half of this duo becomes apparent. On *Taking Away Your Space*, a Sylvester original, Martha Wash's soprano voice is featured in a searing, bittersweet solo that overshadows everything else on the album. I like the duo, but I'd certainly like to hear more from *this* Ton on her own. *P.G.*

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RECORDING OF SPECIAL MERIT

ROLLER BOOGIE (Bob Esty). Originalsoundtrack recording. Earth, Wind & Fire, Mavis Vegas Davis, Cher, Bob Esty, Cheeks, others (vocals and instrumentals); instrumental accompaniment. CASABLAN-CA NBLP 2-7194 two discs \$11.98, (B) NBL8 2-7194 \$11.98, (C) NBL5 2-7194 \$11.98.

Performance: Disco dynamite Recording: Superb

I'm going out on a limb with this one, but my advice is to buy this set before it disappears into the "Various Artists" bins. The soundtrack of *Roller Boogie*, the Film That Sank Without a Trace, has a lot more to do with today's pop music than the best-selling soundtrack of a smash such as *The Rose*. Bob Esty—who composed, arranged, conducted, and produced it, as well as performing in several of the numbers—deserves a lot more credit than he's likely to get. This two-disc album is an incredible outpouring of good pop music.

Two of the songs will be familiar. Cher's moaning through Hell on Wheels is forgettable, but Earth, Wind & Fire's classy disco hit Boogie Wonderland (does anyone realize it comes from this film?) still sounds fresh after all these months-and after their instrumental version won them a 1979 Grammy. The rest of the soundtrack is studded with hitherto undiscovered nuggets of pure gold. Bounce into Johnny Coolrock's Good Girls-rock-'n'-roll slicked up a bit for Hollywood but full of genuine energy nonetheless. Discover two rousers by Mavis Vegas Davis, Evil Man and, especially, All for One, One for All. Then listen to Ron Green sail through the uplifting disco song We Got the Power, each verse of which effortlessly builds to an irresistible get-up-and-dance chorus. Green then tops himself with the gospel-driving tempo of Takin' Life in My Own Hands.

For straight disco, there's the catchy pairing of *Electronix* and *Cunga*. The first is sung by Cheeks and Bob Esty himself, accompanied by those electronic talking machines pioneered by German disco musicians, and the second is an instrumental. They're the kind of multifaceted music that rewards both repeated listening and, more important, repeated dancing.

One last point: the multitalented Esty more than holds his own as a singer too. He has a sweet voice, very comfortable on top (even in falsetto), and he uses it freely and skillfully, especially in *First Love*, a stomping duet with fellow-composer Michelle Aller. By the time you read this the album may very well have disappeared from stores. If you can find a copy, grab it. E.B.



RECORDING OF SPECIAL MERIT

MARY O'HARA: Mary O'Hara's Ireland. Mary O'Hara (vocals, Celtic harp). An Crann Ubhall; She Lived Beside the Anner; Cúcúín a Chuaichín; Kitty of Coleraine; Róisín Dubh; Down by the Sally Gardens; and twelve others. TRADITION 2115 \$6.98.

Performance: Tremendously touching Recording: Excellent

Mary O'Hara was already a famous singer of Irish and Scottish folk songs when she married the American poet Richard Selig in 1956. She was twenty-two when he died in his late twenties in 1957; a few years later she decided to enter a monastic order. Happily for us, before Mary O'Hara disappeared from the recital stages and television studios of Ireland and many other lands, she taped enough songs to supply material for several albums. This is one of them, and if you think you know Irish music, just wait until you've heard it. O'Hara accompanies herself on the Celtic harp in (mostly) her own arrangements of eighteen songs, a few in English, most in Gaelic, all of them moving. She has a way with them that is so entirely her own, and so deeply musical, it's as if one had never heard them before. I wish Mary O'Hara would reconsider and return her gift of song to the world.

JEAN RITCHIE: High Hills and Mountains. Jean Ritchie (vocals); Fresno Friends (vocals and instrumentals). Thousand Mile Blues; Sugar on the Floor; When Kitty I'll Go; Little Pack o' Tailors; and nine others. GREENHAYS GR701 \$7.98.

Performance: Gentle Recordina: Excellent

With her vulnerable voice, her accent still redolent of the Kentucky mountains where she grew up, her "mountain dulcimer," and her songs that sound as if they'd been found in some old bare-plank shack, Jean Ritchie has won over a large public and done her home state proud. This new disc is made up largely of reprises of the ballads her admirers love best. Much of it is adapted from "early hillbilly" she heard in her childhood and is almost shamelessly innocent. Assisting the singer are the Fresno Friends, who sing choruses and play such instruments as mandolins, fiddles, guitars, and autoharps. They understand where Ritchie is headed and frequently help her get there. P.K.

RECORDING OF SPECIAL MERIT

JESS WALTERS SINGS CLASSIC FOLKSONGS. Jess Walters (baritone); Hector Garcia, Drew Thomason (guitars). Go Down Moses; Son Montano; Hava Nagilah; Song of the Volga Boatmen; Wayfaring Stranger; Scarborough Fair; Hush Little Baby; and eight others. MUSICAL HERI-TAGE SOCIETY MHS 4107 \$5.95 (plus \$1.25 postage and handling charge from Musical Heritage Society, 14 Park Road, Tinton Falls, N.J. 07724).

Performance: Classy Recording: Very good

Jess Walters was born in Brooklyn in 1908, but he got over his Brooklyn accent and made his way onward and upward as a musical performer until he became a leading baritone with the Royal Opera, Covent Garden in London. He stayed there from 1947 until 1960, spent the next five years singing with the Netherlands Opera, and then went on to teach voice at the University of Texas. In this, recording, devoted entirely to spirituals and traditional folksongs, Mr. Walters shows the value of a trained voice in dealing with even the rawest musical materials. At the same time, he has a strong feeling for the idiom of a song, shifting styles to accommodate every sort of specimen from a Cuban mountain dance to Hava Nagilah, and never patronizing anything, not even Shortnin' Bread, out of which he manages to shape an entire minidrama. The voice is aging and not always true, but the manner is exemplary. P.K.

(Continued overleaf)



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F^{EMALE} instrumentalists, especially pian-ists, have actively contributed to jazz since it first took on a recognizable form, but it was not until the late Seventieswhen the feminist movement made us take a retrospective look at sexism and other forms of discrimination-that the public at large discovered the extent of that contribution. JoAnne Brackeen stands out in the long line of distinguished women pianist/ composers, which today includes Lovie Austin, Lil Armstrong, Mary Lou Williams, Marian McPartland, and Toshiko Akiyoshi. No newcomer to jazz, Brackeen was born in Ventura, California, in 1938. The largely self-taught pianist entered the professional arena on the West Coast (playing with Dexter Gordon, Teddy Edwards, and other tough tenors) and moved to New York in 1965. She began to attract national attention five years later when she joined Art Blakey's Jazz Messengers, and her reputation grew wider still in the mid Seventies when she was a regular member of Stan Getz's group.

Brackeen has been on her own for the past three years or so, performing in clubs (mostly in the New York area), making records of her own compositions (a side of her talent that definitely bears watching), and generally gaining the growing respect of musicians and critics as her following increased. While her recordings have for the most part appeared on small labels, fellow pianist Bob James recently gave Brackeen a boost by recording her for his Columbiadistributed Tappan Zee label ("Keyed In," JC 36075). I don't know how well "Keyed In" has sold, but I would be very much surprised if its association with CBS didn't get JoAnne Brackeen's name into print in quarters where it might otherwise have been overlooked.

"Prism," on Choice, by far the better of her two new albums, features Brackeen with Eddie Gomez, one of today's most consistently rewarding bass players. Gomez's imposing presence obviously has a positive effect on Brackeen, who here all but abandons the Chick Corea figures that tend to

interfere with her solo playing on Pausa's "Mythical Magic" album. I don't mean to dismiss JoAnne Brackeen as a solo force, for it could simply be that the atmosphere at the MPS studio in Germany's Black Forest hampered her spirit (many fine artists have given disappointing performances there for some reason), but a comparison of "Mythical Magic" with either "Prism" or "Keyed In" (where she is aided by Gomez and drummer Jack DeJohnette) strongly suggests that Brackeen plays best in good company. And she does thrive on this Inner City-distributed Choice set, whether splashing her notes onto Gomez's plucky grid to produce the rhythmic excitement of Habitat and If You Dare, braving ripples of bass notes on the semidetached title tune, or taking her partner by the hand for a lyrical stroll through Golden Garden and the aptly titled Evanescent. JoAnne Brackeen once said that she liked "groups of people where there isn't a leader," and here she proves it by making this as much Eddie Gomez's album as her own.

Getting back to "Mythical Magic"—recorded the following month—it is an interesting collection of musical monologues delivered by someone who obviously has a great deal to say, but JoAnne Brackeen gets her message across so much more eloquently in dialogue. To sum up, what we have here is one exceptional album and another "merely" good one from an artist with the kind of experience, skill, and creativity that should keep her around for a long time.

-Chris Albertson

JOANNE BRACKEEN: Prism. JoAnne Brackeen (piano); Eddie Gomez (bass). International Festival; Lost or Found; If You Dare; Golden Garden; Habitat; Evanescent; Prism. CHOICE CRS 1024 \$7.98.

JOANNE BRACKEEN: Mythical Magic. JoAnne Brackeen (piano). Foreign Ray; Mythical Magic; Hobbits; Told You So; Phantom's Forum; Transition; Of Gnomes in Dances; Now or Never; Minuend. PAUSA 7045 \$7.98.



ART BLAKEY AND THE JAZZ MES-SENGERS: Reflections in Blue. Art Blakey (drums); Valerie Ponomarev (trumpet); Robert Watson (alto saxophone); David Schnitter (tenor saxophone); Dennis Irwin (bass); James Williams (piano). E.T.A.; Mishima; Ellington Medley; My Foolish Heart; and four others. TIMELESS/MUSE TI 317 \$7.98.

Performance: Fresh Recording: Deadened

Decades come and decades go, but Art Blakey continues to run that hotbed of new talent called the Jazz Messengers. This latest Blakey release was recorded in Holland toward the end of 1978, with the same personnel as "In This Corner," the excellent set released by Concord Jazz last year. Unlike that set-a live recording from a San Francisco club-this one was made in a studio, but not, I'm afraid, a first-class one; the sound lacks the resiliency of a studio designed with regard for acoustics. That and the lack of a live audience to respond to might account for the disparity between the Concord Jazz release and this one. Still, this is not an album to be totally dismissed. There are fine moments by tenor saxophonist David Schnitter, alto man Robert Watson, and pianist James Williams-all three of whom also contribute compositions-and leader Blakey still propels his ensembles with remarkable drive and precision. I recommend this album, but only if you already have the group's Concord Jazz disc. C.A.

RECORDING OF SPECIAL MERIT

ELLA FITZGERALD: The Duke Ellington Songbook. Ella Fitzgerald (vocals); the Duke Ellington Orchestra. Caravan; Day Dream; Perdido; I Got It Bad and That Ain't Good; and fifteen others. VERVE VE-2-2535 two discs \$8.98, © CT-2-2535 \$8.98.

Performance: None better

Recording: Adequate

This is a reissue of a set of truly classic 1957 performances by Ella Fitzgerald of songs by Duke Ellington. Fitzgerald was in her finest flower vocally at the time, and her collaboration with the Duke on some of his most famous works produced a series of tracks that may stand as her most glowing testament to her own talent. There was plenty of room for critical nit-picking about similar Fitzgerald albums—"The Cole Porter Songbook," "The Rodgers and Hart Songbook," etc.—because if she has one flaw it is probably that she doesn't handle intricate lyrics very well. But with the easy, colloquial words that Ellington's writers provided for his music she rides to the kind of *(Continued on page 106)*

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For the latest information, last, write: SAE, P.O. Box 60271, Terminal Annex, Los Angeles, CA 90060. In Canada. The Pringle Group, 30 Sca:sdale Rd., Don Mills, Ontario, Canada M3B 2R7. CIRCLE NO. 45 ON READER SERVICE CARD triumphs few singers are lucky enough to achieve on records. There's one magic moment after another as she and the Ellington Orchestra make music together with the high, dazzling style and abandon that made them unique. No one is better than Ella Fitzgerald in this repertoire, not even twenty-three years later. *P.R.*

RODNEY FRANKLIN: You'll Never Know (see Best of the Month, page 80)

RECORDING OF SPECIAL MERIT

THE GREAT JAZZ TRIO: Milestones. Hank Jones (piano); Ron Carter (bass); Tony Williams (drums). Lush Life; Hormone; I Remember Clifford; Mr. Biko; and three others. INNER CITY IC 6030 \$7.98.

Performance: Excellent Recording: Good

This two-year-old session is the sixth Inner City release by the Great Jazz Trio, a group that has done much to bring the talent of pianist Hank Jones to the attention of a new generation of jazz writers and fans. After all, when a musician is in a position to join forces, on an equal footing, with such formidable colleagues as Ron Carter and Tony Williams, his talent is obviously not to be taken lightly. Or so, one imagines, the thinking goes. This is not to suggest in any way that Hank Jones (older brother of Thad and Elvin) is great by mere association, but it is an indication of how readily we take for granted such talent as his. Like the trio's previous releases—two of which featured the addition of a saxophonist (Sadao Watanabe and Jackie McLean, respectively)—"Milestones" was originally made by and for the Japanese East Wind label, and that points up another deplorable fact: in a sense, we are having to import our own music. You will find that even more ludicrous after hearing the outstanding performances in "Milestones." It will make you wonder why Hank Jones—or, for that matter, this trio—does not have a long-term contract with an American label. *C.A.*

CHUCK MANGIONE: Fun and Games. Chuck Mangione (flugelhorn, electric and acoustic pianos, vocals); instrumental accompaniment. Give It All You Got; You're the Best There Is; Piña Colada; and three others. A&M SP 3715 \$8.98, ⁽¹⁾ 8T 3715 \$8.98, ⁽²⁾ CS 3715 \$8.98.

Performance: Crisp and funky Recording: Excellent

This lively new album shows that Chuck Mangione and his funky flugelhorn have obviously been busy lately doing more than just Memorex commercials. The high point for me in this assortment is $Pi\hbar a \ Colada$, a long jazzy number with a Latin flavor that really builds to a fevered climax. The low one is the "official Olympic song" (a song without words) called *Give It All You've Got*—advice the composer should have followed on this occasion. But it's hard not to respond with a melting heart to the other tracks: *I Never Missed Someone Before*, a

long, lazy item with a sleepy piano opening of considerable charm; *Give It All You've Got, But Slowly*, the Olympic item in a dreamier, more relaxed, less cliché-ridden setting; and *Fun and Games*, which fools around fecklessly but never loses the crisp edge that is the Mangione hallmark. *P.K.*

RECORDING OF SPECIAL MERIT

JOE VENUTI: Joe Venuti in Chicago, 1978. Joe Venuti (violin); instrumental accompaniment. Samba de Orpheus; After You've Gone; Honeysuckle Rose; Undecided; Fascinating Rhythm; and four others. FLYING FISH 077 \$7.98.

Performance: Unique Recording: Good

Age could not wither nor custom stale the incredible and unique sound Joe Venuti could draw from his fiddle. Just listen to Venuti's performance of Fascinating Rhythm or Honeysuckle Rose or Undecided, and you'll hear wonderful music making, not just unique sounds. When Venuti goes too far from his Twenties roots in attempting to accommodate newer, flossier material, as he does in Alex North's Theme from Spartacus and the Jobim-Bonfa Samba de Orpheus, he makes some quirky performing choices, sounding like a speeded-up Palm Court reject in the former and like a slightly bedizened Nashville sideman, a long way from home, in the latter. But practically everything else here bears the indelible stamp of a pop master. P.K.

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CARTRIDGE TRACKING, HIGH FREQUENCY. Consists of a twotone signal (16,000 and 16,300 Hz) that repeatedly swoops to a high level and returns to a fixed low level. The level and quality of the audible 300-Hz "difference tone" indicates pickup quality and mistracking

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CARTRIDGE TRACKING, LOW FREQUENCY. Uses a single 300-Hz tone that repeatedly swoops to a high level, producing buzzy tones if the cartridge is misadjusted or inferior

CHANNEL BALANCE. Two random-phase noise signals, one in each channel, produce sounds heard separately to allow accurate setting of channel balance

CARTRIDGE AND SPEAKER PHASING. A low-frequency signal alternates in and out of phase in the two channels to allow proper phasing of cartridge and speakers.



LOW-FREQUENCY NOISE. A very-low-level orchestral passage, followed by a section of ''quiet g-oove.'' allows analysis of lowfrequency noise

TURNTABLE FLUTTER. A passage of piano music is recorded three times with increasing amounts of flutter. The degree to which the record player's flutter ''masks'' he test passages indicates the severity of turntable flutter.

FREQUENCY-RESPONSE SWEEP, 500 Hz, TO 20,000 Hz, LEFT CHANNEL. A steady tone rises from 500 Hz to 20 kHz, allowing evaluation of system electrical response by instrument.

FREQUENCY-RESPONSE SWEEP, 500 Hz TO 20,000 Hz, RIGHT CHANNEL. Same as Test 10, but in right channel

TONE-BURST. The test signal is sixteen cycles on, same period off sweeping from 500 Hz to 20 kHz, allowing evaluation of transient response of phono cartridges.

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□ Seen here perfecting their Ayatollah Khomeiri impressions at New York's Studio 54 are none other than superstars **DIANA ROSS** and **LIZA MINNELLI** (both between albums at the moment, but hang in there, sports fans). The

occas on: a bon voyage party for (temporarily) departing co-owners Steve Rubell and 'ar Schrager, mere hours before they were to accept the hospitality of the state. Can't tell you how sorry I was to miss it.



Paging George Raft! The INMATES, England's blues-wailing revivalists ("First Offense," Polydor PD-1-6241), are posed against the dank, forbidding walls of Hollywood's favorite correc-

□ Country-rock heart throb MARSHALL CHAPMAN ("Marshall," Epic JE 35192) is caught live at the Blueb rd in Bloomingtor, Indiana (immortalized in that matchless movie Breaking Away). For those of you who ve never seen Ms. Chapman work, it should be noted that she's caughthere about to go into a dance called the Alligator, which may be described as suggestive in the same sense that Hiter could have been described as right-wing. Guess you'll have to wait for the videodisc.



tional institution, Sing Sing. No jokes about captive audiences *or* reged birds, please.





It's Got a Good Beat and You Can Dance to It Department: Yes, that's (almost) ageless pimp e-cream salesman DICK CLARK welcoming (who else?) the BEAT (Columbia C 36195) to a recent segment of American Bandstand Dick. of course, is clearly miffed to find that these cays

aren't John, Paul, George, and whatshisname. Nevertheless, the Beat went on, performing two scngs from their debut album.



That's the Godfather of Scul, funkmeister JAMES BROWN ("The Original Disco Man," Polydor PD-1-6212), in the company of New York City Mayor Ed Koch at City Hall, where Brown received the Martin Luther Eing Entertainer of the Year award recently. If clothes are any guice, it would appear that Brown's business is doing better than Koch's these days.

Billy Gibbons of a. Z. TOP "Dequello," Narne 3-os. HS 381 proud y displays his atest toy, a customizec, Texas-shaped guitar with an unprecedented Gibson serial number: #". Me, I want one snaped like Bo Derek.





The mod-ishly dressed young adult attempting to bite the head off a live microphone here is, of course, the Who's ROGER DALTREY, caught in the act during his band's most recent performance at the New Haver Coliseum. The smiling face adorning Daltrey's chest badge is a bit of a memorial: look closely and you might be able to see that it's the late Keith Moon Gone but not forgotten.

And in a related incident later that very night, we find the Who's PETE TOWNSHEND snuggling up to Meatloaf back-up sincer KARLA DAYITD in the palatial dressing room of New Haven's Tead's

Place. Townshend's putton celebrates not his late drummer but a tour by another of Mr. Loaf's back-up singers, Eller Foley (not pictured): Well, it's not over his heart



Classical Discs and Tapes



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

BABBITT: Arie da Capo (see MARTINO)

C. P. E. BACH: *The Four Hamburg Symphonies* (see Best of the Month, page 83)

J. S. BACH: Sonatas for Violin and Harpsichord Nos. 1-6 (BWV 1014-1019). Arthur Grumiaux (violin); Christiane Jaccottet (harpsichord). PHILIPS 6769 017 two discs \$19.96.

Performance: Incompatible Recording: Good

RECORDING OF SPECIAL MERIT

J. S. BACH: Sonatas for Violin and Harpsichord Nos. 1-6 (BWV 1014-1019). Carol Lieberman (Baroque violin); Mark Kroll (harpsichord). TITANIC Ti-33/34 two discs \$18.

Performance: Fresh Recording: Right there

Arthur Grumiaux plays Bach beautifully. Within the framework of a rigid beat, he offers a luxuriant tone, long lines, and carefully conceived dynamics. But in these works his line is only one of three, not a single line with an accompaniment. Now, the harpsichord, which plays two of these three lines, cannot produce dynamic variation and depends on articulation and rhythmic fluidity to shape its lines. Grumiaux main-

Explanation of symbols:

- 8 = eight-track stereo cartridge
- $\odot = stereo \ cassette$
- $\Box = quadraphonic disc$
- $\mathbf{O} = digital$ -master recording
- $\mathbb{O} = direct-to-disc$

Monophonic recordings are indicated by the symbol \circledast

The first listing is the one reviewed; other formats, if available, follow it. tains such a rigid beat that he forces an inappropriate rhythmic stiffness on the harpsichord, and by using a constantly rich tone that is seldom articulated, he produces a sound barrier that clogs anything the harpsichord does. From what can be heard of it, Christiane Jaccottet's playing is highly articulate and brittle. Thus, although both artists are very fine indeed, their approaches to the music are incompatible and as a result one hears much less than what Bach wrote.

With the Titanic album by Carol Lieberman and Mark Kroll, one enters quite a different world. Lieberman uses an English violin and bow from the mid eighteenth century and with them produces a beautifully focused, sweet sound that balances perfectly with the harpsichord, thus enabling us to hear all three parts of the music on an equal footing. Both artists play simply, with a natural approach to articulation that avoids fussy mannerisms. The sonatas sound fresh and wholesome; Bach speaks for himself. Many artists have addressed themselves to these wonderful sonatas, but very few have solved the problems of balance and incompatibility of the means of expression of the two instruments. Miss Lieberman and Mr. Kroll have, and at last we can enjoy these works in their full richness. SL.

BARTÓK: String Quartet No. 3 (see RA-VEL)

RECORDING OF SPECIAL MERIT

BEETHOVEN: *Piano Sonata No. 28, in A Major, Op. 101; Piano Sonata No. 30, in E Major, Op. 109.* Stephen Bishop Kovacevich (piano). PHILIPS 9500 569 \$9.98, © 7300 702 \$9.98.

Performance: Richly satisfying Recording: Topnotch

In company with Vladimir Ashkenazy and Maurizio Pollini, Stephen Bishop Kovacevich (just Stephen Bishop before 1975) typifies the younger generation of pianists who have become total masters of their art and

craft. Judging from his recordings thus far, Kovacevich appears to be the classicist of this particular trinity, and he seems to be embarked on a Beethoven piano-sonata cycle for Philips that may provide something of a foil to the older Claudio Arrau's cycle on the same label. Kovacevich has the notes, structure, and communicative substance of Opp. 101 and 109 wonderfully in hand: the tenderness, the fierce quirkiness, the intellectual challenge (as in the Op. 101 fugue), the humor (as in the third variation of the Op. 109 finale)-all are there and in beautiful proportion. Topping off the musical satisfactions of this disc is the presence, under Kovacevich's hands, of a superb piano superbly recorded. D.H.

CHAUSSON: Songs (see Best of the Month, page 79)

CHOPIN: *Nocturnes Nos. 1-21.* Garrick Ohlsson (piano). ANGEL SZB-3889 two discs \$17.98, © 4Z2X-3889 \$17.98.

Performance: Straightforward Recording: Very good

I have enjoyed all of Garrick Ohlsson's Chopin recordings, and I found much to enjoy in this one, though a little less than I hoped for. The nocturnes, I think, must be the trickiest of all Chopin categories to bring off as a single body of works, and Ohlsson's approach is an eminently sensible one. I like his straightforwardness: there is no heaving or swooning here, and such solid musical integrity as Ohlsson displays serves any music well. But what is comfortable straightforwardness to one listener may well be a lack of personality to another, and I have to confess finding some of the pieces rather prosaic as presented here. Not Op. 55, No. 1, in F Minor, surely, which is a model of exquisite sensitivity and balance, but Op. 32, No. 2, in A-flat, to take another example, seems overly reticent, as if Ohlsson had been intimidated by the piece's balletic association (it is the nocturne used in Les Sylphides).

Ivan Moravec, on his now deleted Con-

noisseur Society discs, brought more poetry and conviction to the nocturnes than any other pianist who has recorded them-yes, even a bit more than Rubinstein, if that is possible. Anyone fortunate enough to have the Moravec discs must surely treasure them, and anyone else must surely treasure the still current Rubinstein set (RCA LSC-7050), which is far and away the most elegant realization of this music available now. Rubinstein, like Moravec, recorded only the nineteen nocturnes assigned opus numbers, while Ohlsson, like Claudio Arrau (Philips 6747.485), includes the two early ones published posthumously without numbers. I don't think their presence makes a great deal of difference, though, particularly as the one in C-sharp Minor seems a patchwork affair with its citations of the F Minor Concerto and one of Chopin's songs. Angel's sonic focus is well judged (I wonder which piano Ohlsson plays-he has been conspicuously endorsing the Bösendorfer, but the liner photo shows him at a Steinway), and the set includes superb annotation by Joan Chissell. R.F.

RECORDING OF SPECIAL MERIT

CHOPIN: Polonaises: No. 1, in C-sharp Minor, Op. 26, No. 1; No. 2, in E-flat Minor, Op. 26, No. 2; No. 3, in A Major, Op. 40, No. 1 ("Military"); No. 4, in C Minor, Op. 40, No. 2; No. 5, in F-sharp Minor, Op. 44; No. 6, in A-flat Major, Op. 53 ("Heroic"). Lazar Berman (piano). DEUTSCHE GRAMMOPHON 2531 094 \$9.98, © 3301 094 \$9.98.

Performance: Moving, overwhelming Recording: Dark

These first six of Chopin's eleven polonaises are performed with just the right amount of bravura and Slavic melancholia. Chopin used only two traditional Polish forms, the mazurka and the polonaise; both are in 3/4meter but differ in tempo and rhythmic accent. Chopin's mazurkas stay fairly close to their dance origins and are generally short. His polonaises, fewer in number, are much more extended compositions-often miniature tone poems that take off from the dance and range far afield. They are not fantasies or sonatas but quite formalized, extended dance forms filled to bursting. The polonaise was, in fact, a court dance (the mazurka was a peasant dance), and for Chopin it reflected the tragic history of his country. The proud, vigorous, formal, tragic accent, worked through with tremendous power, is the key to the Chopin polonaise.

Lazar Berman sustains this accent vigorously. He has more power than any other pianist alive and the most tragic, melancholic rubato since the good old days. I don't like the dark piano sound in which single right-hand melodic notes are occasionally swallowed up in bass rumblings, but everything else about this recording I find overwhelmingly moving. E.S.

DALLAPICCOLA: Goethe Songs (see WE-BERN)

RECORDING OF SPECIAL MERIT

DUPARC: *Mélodies.* L'Invitation au Voyage; Sérénade Florentine; La Vague et la Cloche; Extase; Chanson Triste; Lamen-



Peter Salaff, Donald Weilerstein, Martha Strongin Katz, Paul Katz

The Cleveland's Beethoven

y reaction to the Cleveland Quartet's recently released RCA recording of Beethoven's six early quartets, the Op. 18 set, closely parallels that of my colleague Eric Salzman in his "Best of the Month" review last November of the same group's album of the middle quartets. I am thoroughly taken with the combination of (seemingly) effortless agilità, rhythmic vitality and flexibility, and feel for structure and the big line that are displayed here. To add to the bargain, producer Jay David Saks and his engineers have come up with the best recorded string-quartet sound I have heard since Vanguard's remarkable series with the Yale Quartet some eight years ago. There is fine body in the full-ensemble passages, excellent separation of the individual voices, beautifully gauged room tone, and, above all, a proper sense of scale to give us the impression of the actual sound of the instruments rather than one magnified out of all proportion. The tonal quality, moreover, is just right in terms of warmth and brightness.

Musically, the performances are splendidly satisfying: from the very opening of the Quartet No. 1, in F Major, one has the feeling that things are going to go well. Donald Weilerstein's first violin has great sweetness of tone, but it never sounds cloying and it never becomes assertively dominant. The superbly blended sonority of the group as a whole achieves a most impressive peak in the dramatic climaxes of the slow movement of the F Major. The opening of No. 2 is a model of grace and suavity, and in the middle section of its scherzo I was struck by the unerring unanimity of attack and accentuation. Indeed, subtle accenting, ensemble rubato, and dynamic shading are outstanding features of all these performances. The *agilità* element I mentioned earlier is most obvious in the whirlwind finale of No. 3, but for sheer excitement I'd pick the scherzo of No. 6, in B-flat Major, which is taken at a dizzying clip yet with nary a dropped stitch. All in all, the F Major and B-flat Major performances are my favorites here—but they reflect my musical preferences as, well.

A word is in order concerning the program notes, which for both the middlequartets album and this one are of exceptional quality, thanks to the articulateness and finely honed intelligence of Cleveland Quartet cellist Paul Katz. He does a wonderful job of letting us in on what it takes to develop a meaningful and (collectively) personal interpretation of masterpieces that have, over the past generation, been recorded by virtually every major string quartet in the world. His commentary on the whys and wherefores of tempos and dynamics-taken both from Beethoven's manuscripts and early editions of these works-is not only illuminating in itself but convincingly explains the rationale behind the group's performances.

I await with more than usual interest the Cleveland Quartet's response to the greatest challenge of all—Beethoven's late quartets. —David Hall

BEETHOVEN: String Quartets, Op. 18: No. 1, in F Major; No. 2, in G Major; No. 3, in D Major; No. 4, in C Minor; No. 5, in A Major; No. 6, in B-flat Major. Cleveland Quartet. RCA ARL3-3486 three discs \$26.94, © ARK3-3486 \$26.94.





1 1.18

to; Testament; Phydilé; Soupir; Le Manoir de Rosemonde; Élégie; La Vie Antérieure; Au Pays Où Se Fait la Guerre. Bernard Kruysen (baritone); Danielle Galland (soprano, in Au Pays); Noël Lee (piano). TELEFUNKEN 6.42113 AS \$9.98.

Performance: Exquisite Recording: Ideal

I can fairly well promise that if you want to own a recording of Duparc's songs you're not likely to find a better one than this. There have been others in the past (most no longer available) that might be said to be equally good—but not better. For those who don't know the Duparc songs, then, the question becomes one of why they should want to own *any* recording of them.

As an advocate, I find it helpful to be able to say that they are, almost every one, masterpieces, among the greatest songs in the French language. But, at least to non-Frenchmen, this is not the most immediately appealing music. You have to get into it, you have to hear it over a few times, you have to understand the text and appreciate the way words and music have been woven together into a tapestry-like art form. One willing and able to do this will find in the mélodie, and in Duparc's in particular, an exotic and individual view of the world coupled with a mode of expression that, on its own terms, is as natural, unforced, and idiomatic as folk song-and a good bit more sensually beautiful.

Duparc left little to posterity: seventeen songs (thirteen are here), an orchestral piece, a few minor works. His was a strange career, ending in mid-life, and he was no born musical creative genius. But he learned the techniques of expression well enough to get down, in some works, exactly what he wanted, and he left us gorgeous songs which, though their idiom might be said to range from Schumann to Debussy (not excluding Wagner), could not have been composed by anyone except Henri Duparc.

This record was made by Valois in France in 1971, and it may even have appeared here before on another label (I remember specifically several of Kruysen's records, though not this one). Certainly at the time of recording Kruysen had the ideal voice for this music and all the sensitivity and intelligence one could want in a singer. The accompaniments that Noël Lee gives him are simply brilliant. Granted, a part of the effect is due to the fine Bösendorfer piano and a part to a just recording, but Lee is one of the most underappreciated artists in the world today and his playing here is stunningly good.

With all this, it's a pity to report that though French texts are supplied with the record, English translations are not. Brush up your Baudelaire. —James Goodfriend

FRANCK: Violin Sonata in A Major (see SAINT-SAËNS)

GRECHANINOV: The Lane, Op. 89 (see Collections—Elisabeth Söderström and Vladimir Ashkenazy)

RECORDING OF SPECIAL MERIT

GRIEG: Olav Trygvason, Operatic Fragments, Op. 50; Landkjenning, Op. 31. Asbjørn Hansli (baritone); Toril Carlsen (soprano, in *Olav*); Vessa Hanssen (mezzo-soprano, in *Olav*); Oslo Philharmonic Chorus; London Symphony Orchestra, Per Dreier cond. UNICORN RHS 364 \$10.98 (from Euroclass Record Distributors, Inc., 155 Avenue of the Americas, New York, N.Y. 10013).

Performance: **Committed** Recording: **First-rate**

Edvard Grieg twice composed music celebrating Olav Trygvason, the Norwegian warrior-king who attempted to bring Christianity to his country during his brief but eventful reign (995-1000). In both cases Grieg's collaborator was the poet-novelistplaywright Bjørnstjerne Bjørnson, who provided the text for a brief cantata (so brief it might be called simply a choral festival song) in 1872 and the following year began writing an opera libretto. Though the opera project, for various reasons, was never taken beyond the first three scenes (which do not even constitute a complete act), Grieg felt that the music he wrote for it was worth preserving, and in 1889 he orchestrated the three scenes for concert performance as a sort of dramatic cantata. Eight years earlier he had revised and orchestrated the earlier piece, Landkjenning (Landfall), which describes Olav's resolve as he nears the end of his voyage home to begin his reign. This performance of Olav Trygvason is apparently the first one on records, at least on records available in this country.

It is intriguing, of course, to hear Grieg's only effort in the realm of opera. These three choral scenes portray the pagans observing their rituals and preparing to deal with the newly arrived Olav; the last scene is a series of choral dances, a sort of Nordic counterpart to Borodin's famous Polovtsian Dances. While most of the earlier material is more declamatory than really dramatic, all of the music is touching in its lyricism and exciting in its vigor and color. In the big chorus at the end of Scene 2 there is a passage that will remind everyone of the March of the Peers in Gilbert and Sullivan's Iolanthe, but what follows in the dance scene reminds us of no one but Grieg himself.

The performances, taped at the same sessions that yielded Unicorn's magnificent set of the complete Peer Gynt music, are all one could ask for in almost every respect. If Olav Trygvason fails to make the same sort of impact as that thirty-two-number Peer Gynt, it is not Per Dreier's fault-the degree of commitment and eloquence he exhibits on Grieg's behalf is the same here as in that earlier release. Perhaps the ceremonial/historical nature of this epic did not ignite Grieg's imagination to the same level of intensity as the freer fantasy of Ibsen did in the creation of a different kind of national epic. In Landkjenning, Asbjørn Hansli does not quite match the unforgettable Erik Saedén's singing of the solo part in the old Swedish Discofil recording conducted by Einar Ralf, and the piece itself is a little less interesting than Olav Trygvason because it is so tidy and predictable. By any standard, though, this release is a worthwhile and most enjoyable discovery, with first-rate sound, full texts, and a glossary. R.F.

(Continued on page 115)

CIRCLE NO. 24 ON READER SERVICE CARD 112

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GRIEG: *Slåtter, Op. 72.* Eva Knardahl (piano). Bis LP-114 \$9.98 (from Qualiton Records, Ltd., 39-28 Crescent Street, Long Island City, N.Y. 11101).

Performance: Effective Recording: Excellent

Some of Edvard Grieg's best music is to be found in the *Slåtter*, but it is not of the "pink bonbon filled with snow" type that has most often represented the Norwegian master. The *Slåtter* are Grieg's arrangements of Norwegian Hardanger fiddle dances, and in arranging them he engaged in no bowdlerization or prettifying but dug into the tunes like a Bartók. In fact, though, the *Slåtter* were published in 1903, and Bartók and Kodály's first work in the folkmusic field did not appear until 1906.

Lyrical melody is abundant in the Slåtter but it is married to a wealth of complex melodic ornamentation and supported by drone basses, modal harmonies, polytonality, and free dissonances. This is both extraordinarily beautiful and very gutsy music that is distinctly of our century and draws very little, if at all, on the Classical-Romantic tradition. A certain amount of sameness of key and rhythm (there are four main types of dance music represented here) is inevitable, but Grieg's methods of contrast and variation are most effective in their own way, and since there are seventeen individual dances, no single one goes on too long.

Eva Knardahl (this is Volume 11 in her complete set of Grieg's piano music) plays here not only with the clean technique, musicality, and delicacy of her earlier records, but with a power and gusto that ideally suit the music, and the sound of her Bösendorfer has been cleanly and vibrantly captured.

--James Goodfriend

GRIEG: Violin Sonata No. 2, in G Major, Op. 13 (see SAINT-SAËNS)

GRUNENWALD: Hymne aux Mémoires Héroïques; Diptyque Liturgique. LANG-LAIS: Pasticcio (Organ Book, X). Poèmes Évangéliques: L'Annonciation; Nativité; Les Rameaux. David Britton (organ). DELOS DEL-25443 \$7.98.

Performance: Strong Recording: Beautiful

Continuing in the French organ tradition of César Franck and Marcel Dupré, the works of Jean Langlais and Jean-Jacques Grunenwald are liturgically oriented tone poems in which sensual visions are translated into voluptuous sonorities. Although lesser practitioners of this art are all too apt to produce things that sound like selections from *The Phantom of the Opera*, the tradition has produced many stunning works. David Britton's disc features some of the finest music of the genre.

Playing the splendid organ of the First Presbyterian Church in Trenton, New Jersey, Britton makes full use of its tremendous variety of stops. Despite some of the thick textures and dense harmonies of the music, the sound Britton produces is always bright and clear. He never wallows in the sound for its own lush sake but pushes through to the climaxes, thus shaping the works according to their structure. With a crisp rhythmic approach and a keen sense of phrasing, he brings out the underlying logic of this music, often so clouded by coloristic devices that one feels stifled in amorphousness. Britton brings a clarity to these works which forces one to consider them in a new light. Recommended. S.L.

HAYDN: String Quartets: Op. 71, No. 1, in B-flat Major; Op. 71, No. 2, in D Major; Op. 71, No. 3, in E-flat Major; Op. 74, No. 1, in C Major; Op. 74, No. 2, in F Major; Op. 74, No. 3, in G Minor. Amadeus Quartet. DEUTSCHE GRAMMOPHON 2709 090 three discs \$29.94.

Performance: Elegant Recording: Soft-focused

The six quartets of Opp. 71 and 74 actually constitute a single set that Haydn composed in 1793 for his second visit to London, although they were dedicated to Count Apponyi and have been known as the "Apponyi Quartets." But they haven't been known enough by any name: several of Havdn's earlier quartets, particularly those of Opp. 20 and 33, have enjoyed a great deal more circulation, while these, the first quartets he conceived for performance in a concert hall rather than a drawing room, with an intensity and symphonic character that identify them as companion works to the London symphonies, have tended to be relatively neglected. The last of the six, the splendid G Minor known as The Horseman or The Rider, in which Beethoven's roots seem especially clear, has enjoyed more exposure than the other five. The Alban Berg Quartet's recording of the G Minor (Telefunken 6.41302 or Aspekte AF6.42283) remains incomparable, but the Amadeus Quartet, which recorded Op. 74, Nos. 1 and 3, for Deutsche Grammophon more than twenty years ago, brings a great deal of distinction to its performances of these works. For more than three decades without a change in personnel, the Amadeus has exhibited an elegance especially suited to this repertoire, and it is very much in evidence here, especially in the inner movements. The nobility of the slow movements and geniality of the minuets are realized here as perhaps no other quartet active today could do, and there is a similar showing of enlivening wit in the outer movements. In sum, a highly enjoyable set, if perhaps not quite the last word. Before spending as much as thirty dollars for these quartets, it might be in order to consider alternative recordings, available at one-half to one-third of that price.

There is, first of all, a similar set by the Aeolian Quartet in its complete Haydn series (London STS-15325/15327). Here the inner movements may seem somewhat prosaic after the Amadeus performances, but the Aeolian brings greater crispness and dash to the outer movements almost without exception, and the London recording is much brighter-sounding (the DG set is conspicuously less vivid in this respect). For super-economy, there is the Griller Quartet on two discs instead of three (Bach Guild HM-41 and 42SD). The Griller has a few problems with intonation (very few), and of course the second work in each opus group is sandwiched between the other two, with an interruption for turnover between its movements, but there is great spirit in these performances, and the sound, for all its (Continued on page 117)



CIRCLE NO. 54 ON READER SERVICE CARD



Previn's Digital Debussy

D_{EBUSSY's Images pour Orchestre (a set of three) is his most difficult orchestral work—difficult for the performer and difficult for the hearer. Not that it is hard simply to listen to it—the music sweeps by like a wind-blown cloud—but it is hard to hear it as one of Debussy's great masterpieces (which it undoubtedly is) because the music seldom comes off that way in performance. What we commonly get is a rather flashy showpiece flanked by two rather pallid grisailles—if, in fact, the conductor involved chooses to give us the grisailles (Gigues and Rondes de Printemps) at all.}

It is fascinating, therefore, that Angel chose the Debussy set as the repertoire for its first digitally recorded release, for the digital technique allows us to hear the music as never before on records (and only rarely in the concert hall). The three Images, though not predominantly pianissimo music, beg for an extension of the dynamic range downward, allowing us to hear degrees of quietness, silence, and near silence, to distinguish related but not identical timbres at a low dynamic level. This is precisely what the digital technique offers, and I would call Angel's first use of it an almost unqualified success. If there are flaws they lie in the music's dropping, at times, too precipitously into silence (a characteristic, perhaps, of the technique) and a rather subtle favoritism toward the winds at the expense of the strings (a decision of the producer). The surfaces of the disc (analog, of course) are remarkably good, but they are not really good *enough* for this recording technique.

I don't think I have ever heard André Previn's Debussy before; he certainly has not recorded much of it. If this disc is any sample, I hope he goes through the whole canon, for I don't know any conductor around today who plays it this well apart from Boulez and (in a special way) Karajan. To a certain extent, Previn here is feeling out this music, exploring for himself what there is in it. He looks for subtleties of color and shading in the Images-and finds them everywhere, for minute distinctions of timbre are one of the things this music is all about. In spite of the fact that Debussy initially planned the Images for keyboard, the richness of orchestral detail and the counterpoint of colors is almost overwhelming. There are seldom less than five or six things going on simultaneously on different pitch and dynamic levels, and in the metamorphosis of a single line from one instrumental color to another one can hear the birth of such musical concepts as those of Varèse. Previn carries us along with him on this exploration, and if there are still things in the score that are not heard, unquestionably he (and the recording) gives us more than we've ever had before.

The recorded competition in the *Images* is the Columbia recording by Boulez and

the Cleveland Orchestra, an out-and-out astonishing record when it first appeared. Boulez's tempos are faster (Previn's tend toward the slow, and the music sometimes takes on a tentative feeling), he manages some of the tricky rhythmic transitions a mite better than Previn, and he has a way of snapping off phrases with an assurance that Previn does not even attempt. There is no question that he is a master of this music, but, whatever he actually got out of the orchestra, what finally ended up on the disc is no match in coloristic subtlety for what Previn gets. The Columbia recording, actually, is quite good, but it does not explore the subtle distinctions as Previn's does: the quiet percussive elements are either inaudible or almost vulgarly apparent, and when the music gets really complex, the individual sounds tend to come together in a neutral mass rather than retaining any individuality. Still, Boulez's is not a recording to be without.

There is, by the way, a certain confusion about the correct order of the Images. Both Previn and Boulez place them according to the indications in the printed scores, but the three works were composed in the opposite order, and Jean Barraqué, in his often probing book on Debussy, actually cites them in that reverse order. The three all had premières independent of one another, and it is altogether possible that Debussy himself never heard the complete set in an orchestral performance. Still, the scores have a point. To end with Gigues is anticlimactic. To end with Ibéria requires a vulgarization of the last measures (which is what we all too often hear when it is performed alone). Only Rondes de Printemps ends naturally. and in some ways that whole work seems to be a kind of gigantic coda to all the preceding music.

PROBABLY nothing so shows off the richness and complexity of the Images as hearing, directly afterward, the Prélude à l'Après-midi d'un Faune, as one does on this Previn disc. Masterly as that work is. revolutionary as it was, it seems almost primitive in comparison, its focus almost continually on a solo instrument, rarely advancing for our inspection more than two or three simultaneous musical events. There are many fine performances of the work, but Previn's primary competition is again Boulez, and here, I think, Boulez takes first place. Previn's digital recording quality is better, of course, but its superiority is nowhere so musically significant as it is in the Images. Still, the distant-sounding horns at the end have never sounded quite so wonderful to my ears as on the Angel disc. In all, Previn's is a splendid record, brilliantly performed and magnificently recorded, and, in its combination of musical and technical qualities, unquestionably a landmark in the history of recorded music.

—James Goodfriend

DEBUSSY: Images pour Orchestre: Gigues; Ibéria; Rondes de Printemps. Prélude à l'Après-midi d'un Faune. London Symphony Orchestra, André Previn cond. ANGEL O DS-37674 \$10.98. twenty years, is more than equal to what DG has provided for the Amadeus. All of these sets serve Haydn well; the Amadeus' unique elegance may make the difference for many listeners, but the important thing is to have one set or another in order to get to know these wonderful works. R.F.

LANGLAIS: Organ Works (see GRUNEN-WALD)

MARTINO: Triple Concerto for Clarinet, Bass Clarinet, and Contrabass Clarinet with a Chamber Orchestra of Sixteen Players. Anand Devendra (soprano clarinet); Dennis Smylie (bass clarinet); Leslie Thimmig (contrabass clarinet); Group for Contemporary Music, Harvey Sollberger cond. BAB-BITT: Arie da Capo. Group for Contemporary Music, Harvey Sollberger cond. NONE-SUCH H-71372 \$4.96.

Performance: Spectacular Recording: Excellent

Milton Babbitt started out in music as a clarinetist, so it is appropriate that one of his principal pupils, Donald Martino, should have dedicated this Triple Clarinet Concerto to him for his sixtieth birthday. Martino, himself a clarinetist, has taught at Princeton, Yale, Harvard, the New England Conservatory, and the Berkshire Music Center. His music is very highly worked out in the Babbitt serial manner but with many links to tradition, especially that expressionist rag from old Vienna. The concerto is an energetic work, written with neatness, economy, and invention, but for most people the outstanding feature is celtainly going to be the extraordinary sound of the three clarinets.

The Babbitt Arie was written in 1974 for the Da Capo Chamber Players. The name of the group was the obvious inspiration not only for the title of the composition, but also for its form, a series of "arias" or solos for five players-flute, clarinet (doubling bass clarinet), violin, cello, and piano-all interwoven in Babbitt's characteristically complex manner. Don't be focled by the references to arias and da capos. This is much more abstract, far-cut music than the Martino (the master is much less craditional than the pupil). Babbitt is the great American master of perialism, and, anlike the more volatile Europeans, he has stuck to his guns over the years.

The performances make all the difference in this music; without really good players you can't tell the mistakes from the music. In this case—in both cases—the Group for Contemporary Music, long our leading performance organization for cerial and serial-related music, not only gives us the assurance of accuracy but achieves the closest identification with the music. The recordings are superb. *E.S.*

RECORDING OF SPECIAL MERIT

MOZART: Idomeneo: Nicolai Gedda (tenor), Idomeneo; Adolf Dallapozza (tenor), Idamante; Edda Moser (soprano), Elektra; Anneliese Rothenberger (soprano), Ilia; Peter Schreier (tenor), Arbaces; Eberhard Büchner (tenor), High Priest; Theo Adam (bass), Veice of the Oracle; others. Leipzig Radio Chorus; Dresden State Orchestra, Hans Schmidt-Isserstedt cond. ARABESQUE 8054-4 feur discs \$28.92, © 9054-4L \$28.92.

Performance: Very good Recording: Fairly good

To the various miracles that occur during the considerable performance span of *Idomeneo*, I would add two non-mythologieal ones. The first is that an opera regarded as hopelessly passé for more than a century now has four entries in the Schwann catalog—as many as Gounod's *Faust* (possibly the most popular opera of that same century). And the second is that all four recorded versions may be recommended as worthy of Mozart's marvelous score.

The new Arabesque release, a recording originally issued by Electrola in Germany around 1972, is the most complete version. (Scraphim SIC-6070, on two discs, is the oldest and most heavily cut: its commendable aspects are limited to the singing.) All the musical numbers of the original Munich production are here, including even the arias for Idamante and Idomeneo (Nos. 27 and 31 in the score) that Mozart himself chose to omit when he prepared Idomeneo for the Vienna stage. There are some cuts in the recitatives-as there are in all other recordings-but this is the version most likely to please scholars. Happily, however, the set's virtues transcend scholarliness. Hans

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CIRCLE NO. 39 ON READER SERVICE CARD

NAGAOKA by COSAWA & CO. (USA) Inc., 521 Fifth Avenue, New York, New York 10017 Schmidt-Isserstedt, who died shortly after it was recorded, believed in Idomeneo as drama. His conducting may not have the vitality of Colin Davis' (Philips), but it is sensible, free of eccentricities, and quite effective. And the singers allow little room for criticism.

Idomeneo's demanding part has been ably served on records before, particularly by Wieslaw Ochman (Deutsche Grammophon), but no other interpreter matches Nicolai Gedda overall in his eloquent handling of the recitatives, which reveal much of the character's inner struggles, or his stylish execution of the arias. Anneliese Rothenberger portrays Ilia's warm femininity just as persuasively as Edda Moser projects Elektra's near hysteria. Vocally, both sopranos are captured in near-peak form.

Adolf Dallapozza (an Austrian whose command of Italian is good enough but not nearly as fluent as his name would suggest) is a good, if not outstanding. Idamante. That role is very well sung (though Teutonically inflected) by Peter Schreier in the DG set. On this one, on the other hand, Schreier sings the less important role of Arbaces, again very well, and gets to sing both of that character's arias. (The entire role is almost dispensable dramatically, yet Mozart wrote first-rate music for it.)

The technical quality of the Arabesque set is disappointing. Not only is its overall sound inferior to that of the DG and Philips sets, but something must have happened in the transfers to cause distortion on sibilants and loud passages. G J

MOZART: Piano Concerto No. 9, in E-flat Major (K. 271); Concerto for Two Pianos, in E-flat Major (K. 365). Alfred Brendel (piano); Imogen Cooper (piano in K. 365); Academy of St. Martin-in-the-Fields, Neville Marriner cond. PHILIPS 9500 408 \$9.98. © 7300 616 \$9.98.

Performance: Crisp Recording: Excellent

The Brendel/Marriner survey of the Mozart piano concertos is within sight of the halfway mark with this Philips release. Crispness and utterly clear articulation are the dominating characteristics of Brendel's performance of the twenty-year-old Mozart's K. 271, and Marriner's orchestral collaboration is in essentially the same vein. Personally, I like a little more "give" and a somewhat lighter touch in this music, as in, for example, the recording Vladimir Ashkenazy and the late István Kertész made for London a decade ago. The brilliant finale comes off best here (if you notice a different final cadenza after the minuet episode, remember that Mozart wrote two separate sets of cadenzas for this concerto).

The Two-piano Concerto, a charmer of a piece, is the real success of this disc. The young English artist Imogen Cooper plays the secundo. The music can take the vigor applied throughout the opening movement, and the slow movement emerges here as the last word in elegance and fluidity---"like ' to use Mozart's phrase. The finale goes with tremendous zest and brilliance, topping off what for me is an unusually successful realization of this piece. Marriner and his players are in fine form, and the recording is flawless throughout. A half "Special Merit" anyhow. D.H.

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MOZART: Piano Concertos Nos. 14 and 26 (see Best of the Month, page 76)

MUSSORGSKY: The Nurserv (see Collections-Elisabeth Söderström and Vladimir Ashkenazy)

PROKOFIEV: The Ugly Duckling, Op. 18 (see Collections-Elisabeth Söderström and Vladimir Ashkenazy)

PUCCINI: La Bohème. Katia Ricciarelli (soprano), Mimi: José Carreras (tenor), Rodolfo; Ingvar Wixell (baritone), Marcello; Håkan Hagegård (baritone), Schaunard; Robert Lloyd (bass), Colline; Ashley Putnam (soprano), Musetta; Francis Egerton (tenor), Parpignol; Giovanni de Angelis (bass), Benoît; William Elwin (bass), Alcindoro; others. Chorus and Orchestra of the Royal Opera House, Covent Garden, Colin Davis cond. PHILIPS 6769 031 two discs \$19.96, © 7699 116 \$19.96.

Performance: Good but unexceptional Recording: Very good

Was a new La Bohème really necessary? A glance at the Schwann catalog might prompt the observer to argue otherwise. But opera fans aren't glancing, they are buying: this new Philips set is doing very well in the stores as my review is going to press.

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CIRCLE NO. 40 ON READER SERVICE CARD

Katia Ricciarelli and José Carreras, the | principals, are the set's main attractions. Miss Ricciarelli, in good voice throughout, portrays a touching and tender Mimi, unexaggerated in her emotions but always believable in the character's changing moods. Mr. Carreras has always displayed the signs of a potentially ideal Rodolfo: handsome, poetic, impulsive, youthful-sounding. The potential is still there, but it is only partially realized, for vocally he is inconsistent here.

Ashley Putnam projects a lively Musetta without overindulgence. She is among the role's best recorded interpreters. The Marcello of Ingvar Wixell displays the Swedish baritone in his familiar emphatic form; vital and energetic, lacking only a mellifluous Italian sound. After a surprisingly colorless beginning, Håkan Hagegård comes into his own in Act IV, but Robert Llovd, despite his appealing tones, makes virtually no impact with his Coat Song.

This is simply not a La Bohème to elicit superlatives: it is an efficient, businesslike Colin Davis investment in Italian opera, which may result in musical dividends in the form of crisp attacks, firm rhythms, and transparent orchestral textures, but which leaves one, if not unmoved, certainly dryeyed. There are no disturbing eccentricities here, no severe misjudgments of tempos, no Karajan-like mannerisms, but neither is this a Bohème of heartfelt natural spontaneity à la Serafin (London 1208). And in terms of vocal luxuriance, it does not equal Seraphim S-6099 (De los Angeles/Bjoerling), London 1299 (Freni/Pavarotti), or London 1208 (Tebaldi/Bergonzi). G.J.

RACHMANINOFF: Songs (see Best of the Month, page 79)

RECORDING OF SPECIAL MERIT

RAMEAU: Les Indes Galantes, Airs and Dances Transcribed for the Harpsichord by the Composer. Kenneth Gilbert (harpsichord). HARMONIA MUNDI HM 1028 \$8.98 (from Brilly Imports, 155 North San Vicente, Beverly Hills, Calif. 90211).

Performance: Suave Recording: Excellent

Anyone who has tried to sort out the printed score of Rameau's "ballet héroïque" Les Indes Galantes eventually comes to understand the curious arrangement of the music into arbitrary "concerts" that have little to do with the story they are supposed to express. What comes as a surprise, however, is that the original publication also included some thirty keyboard arrangements by Rameau himself of various instrumental symphonies and dances. Harpsichordist Kenneth Gilbert edited these transcriptions for Heugel, Paris, and has now recorded a selection of them for Harmonia Mundi

Gilbert is a rare example of the scholarperformer. Having gone through the study of the intricacies of French performance practice, he has emerged with a thoroughly musical style of playing that incorporates the incredibly detailed ornamentation and rhythmic alterations in an easy, flowing manner; it is a delight to hear. The music itself is vintage Rameau: suave, sophisticated, and rhythmically contagious. S.L

(Continued overleaf)



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CIRCLE NO. 61 ON READER SERVICE CARD



THE operas of Jules Massenet enjoyed something of a revival during the Seventics, and his Werther, in particular, is still riding high. Deutsche Grammophon's rccent recording (reviewed in April) has barely entered the catalog, and already we have a newer version from Angel. With its altogether felicitous casting, the Angel set scores most impressively where the DG one failed most conspicuously: capturing the Gallic essence of Massenet's music. This might at first seem like a puzzling observation, for neither sct offers French principals-DG's Russian Charlotte, for example, is no less French than Angel's American one, and in the title role one can only choose between one Spanish tenor (Plácido Domingo) and another (Alfredo Kraus).

But music, not mere nationality, is the point here. DG's Elena Obraztsova is an interesting, at times compelling singer, but she was not happily cast as Goethe's repressed young matron. Tatiana Troyanos' somewhat aloof interpretive style, on the other hand, suits the character's passivity to perfection, and, moreover, she is entirely convincing in the closing scene when, confronted with the tragedy that her passivity has caused, she allows her emotions to pour forth unchecked. Throughout, she conveys warm femininity and sings with consistent tonal beauty, though the characteristic flutter in her tones somewhat beclouds her pronunciation. No such reservation applies to Alfredo Kraus, whose diction is a model of clarity. In other ways, too, his Werther is nearly ideal: sensitive, fastidiously musical,

and elegantly phrased—if at times too lachrymose for my taste (I grant that melancholy is not uncongenial to the character of Goethe's hero). There is no question about Kraus' stylistic mastery, but I could not help remembering Domingo's fuller, more imposing tones in the climaxes, with their firmer ring in the top register, or wishing that somehow the best qualities of these two remarkable Spaniards could be combined in one unsurpassable supertenor.

Tore the rest, I have only praise. The role of Albert, so often colorless as portrayed by a less gifted artist, emerges as a major contribution when Matteo Manuguerra interprets it, and, though Christine Barbaux may not quite steal her scene, she offers a charming Sophie. Jules Bastin is a good, characterful Bailiff, and, for once, even the hearty duettists Schmidt and Johann are strongly cast. Michel Plasson and the London Philharmonic provide an attractive orchestral frame for all the fine singing, and the recorded sound is absolutely first-rate.

> . —George Jellinek

MASSENET: Werther. Tatiana Troyanos (mezzo-soprano), Charlotte; Alfredo Kraus (tenor), Werther; Matteo Manuguerra (baritone), Albert; Jules Bastin (bass), Bailiff; Christine Barbaux (soprano), Sophie; Philip Langridge (tenor), Schmidt; Jean-Philippe Lafont (baritone), Johann; others. London Philharmonic Orchestra, Michel Plasson cond. ANGEL SZCX-3894 three discs \$27.94, © 4Z3X-3894 \$27.94.

RAVEL: Quartet in F Major. BARTÓK: Quartet No. 3, in C-sharp. Sequoia String Quartet. DELOS @ DMS 3004 \$17.98.

Performance: Good to superb Recording: Rich

To the best of my knowledge, this disc by the California-resident Sequoia ensemble is the first digitally mastered string-quartet recording to be generally marketed in this country. The string quartet presents recording problems different in character from those which Delos dealt with so successfully in Susann McDonald's harp recital disc and Carol Rosenberger's altogether remarkable impressionist piano program.

I recommend listening to the Bartók side of this record first, for what digital mastering can do in laying bare the fantastic sonorities of the Hungarian master's string quartet is nothing short of thrilling. The nocturnal opening, followed by a fierce dance episode, will afford more than adequate demonstration. The performance as a whole is vital and well articulated, though toward the end the music lacks the fierce tension the Juilliard Quartet gave it.

Problems arise in the Ravel-not out of the performance itself, which is notable for its warmth, vitality, and command of nuance, especially in the slow movement, but because the music, in my opinion, demands a tighter and less highly colored acoustic ambiance than it receives here. The broad tonal washes of the Bartók gain from the somewhat reverberant and rather highly colored acoustics of the Immaculate Heart College Auditorium in Los Angeles, but the pizzicato pages of the Ravel second movement lose their all-important sec quality amid the reverberant character of the hall (it does help to cut the playback level somewhat). The Ravel side is further troubled by a curious "ringing" or hum condition at about 500 cycles, which was evident in both copies of this record that I had on hand but nowhere else on the eleven other digitally mastered Delos sides in my possession. By all other standards, however, this is an excellent disc, and, like all the other Delos records I have heard, it is blessed with flawless pressing. DH

RECORDING OF SPECIAL MERIT

ROREM: Miss Julie (Highlights). Judith James (soprano), Miss Julie; Ronald Madden (baritone), John; Veronica August (mezzo-soprano), Christine; others. Orchestra, Peter Leonard cond. PAINTED SMILES PS 1388 \$9.98 (plus 60¢ postage from Painted Smiles Records, 116 Nassau Street, New York, N.Y. 10038).

Performance: Artful Recording: Excellent

With the possible exception of Samuel Barber, it's hard to think of an American composer who can set words more felicitously for the human voice than Ned Rorem. His songs yield increasing pleasure on each rehearing, and this recording of his opera based on Strindberg's Miss Julie reveals the full range of his many musical skills. Miss Julie was not fortunate in its first production at the New York City Opera in 1965, but last year the New York Lyric Opera Company performed a pruned, reworked version to considerable critical praise. The revised version, presented at the NYU Theatre in New York on April 5, 1979, was recorded, and this listener's only complaint is that an abridged version on one disc is all that we get from Painted Smiles when a two-record set could have given us the pleasure of the entire work.

One of the joys of *Miss Julie* is Kenward Elmslie's intelligent verse libretto, which captures all the irony and bitterness of the Strindberg play but at the same time makes it altogether suitable for singing. The story of the seduction by Miss Julie of her father's valet John on a country estate in Sweden and her subsequent inability to lure him into marriage unfolds in brief, tense episodes. Rorem transformed the lyrics into splendid arias while supplying the turbulent orchestral atmosphere that precisely reflects the emotions boiling beneath the passages of dialogue. Even in this abridgement the flow of the piece is preserved, and the libretto that comes with the record supplies connective passages that clearly describe the events omitted. This is subtle music but entirely accessible, and the record, with Veronica August a versatile and suitably arrogant Miss Julie, Ronald Madden believably coarse but seductive as the valet she can never really own, and a strong supporting cast under Peter Leonard's ardent direction, should stimulate a new interest in one of the most singable American operas ever penned. P.K.

RECORDING OF SPECIAL MERIT

SAINT-SAËNS: Violin Sonata No. 1, in D Minor, Op. 75. FRANCK: Violin Sonata in A Major. Elmar Oliveira (violin); Jonathan Feldman (piano). COLUMBIA MX 35829 \$6.98.

Performance Electrifying Recording: Vivid

SAINT-SAËNS: Violin Sonata No. 1, in D Minor, Op. 75. GRIEG: Violin Sonata No. 2, in G Major, Op. 13. Christiaan Bor (violin); Jerome Lowenthal (piano). PELI-CAN LP 2014 \$7.98.

Performance: Dryish Recording: Dryish

Two months after Elmar Oliveira won the gold medal in the 1978 Tchaikovsky Competition in Moscow, I heard him and Jonathan Feldman play the Franck sonata in Washington; I have remembered the performance as an electrifying one, and the new recording indicates that my memory did not exaggerate. This is music making of a very high order, exuding genuine respect and affection for the material and transmitting those qualities by means of abundant but tastefully reined vigor, rich tone, and solid technical security. The partnership is a full one, with Feldman very much in the picture and providing more than mere "accompaniment." I get the feeling that he and Oliveira developed both their enthusiasm for the work and their interpretation of it together, and that they still allow for a good deal of give-and-take in performing it. Their performance breathes ' freshness, spontaneity, and uncommon communicativeness, and so it is also in the overside Saint-Saëns sonata, a less familiar but eminently lovable work filled with delightful discoveries. There are one or two rough spots (the very last note of the Saint-Saëns seems not quite dead on), but the exuberant sweep and overall stylishness that so vivify both sides of this disc are what leave the most lasting impression even after a dozen hearings. Columbia has provided vivid, well-balanced sound to match and fine notes by Peter Eliot Stone.

The Columbia jacket is emblazoned "Debut Recording," although the record is not Oliveira's first (perhaps the reference is to the duo?). The Pelican release does appear to represent the disc debut of Christiaan Bor; he has impressive credentials, good technical equipment, a good sense of style, and a well-known and admired pianist as his partner. Other things being equal, many might find the seldom-heard Grieg G Major Sonata more enticing than the much-recorded Franck; but other things so often





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have a way of not being equal, and in this case there is the matter of flair, which Oliveira displays so winningly and which Bor seems to lack. His playing is sound, tasteful-and rather dry. He is not helped by the dryish acoustics of the recording locale or by the sonic focus, which puts the piano rather in the background, particularly in the Saint-Saëns. For the Grieg, I continue to favor the second Heifetz recording (the one with Brooks Smith, now in RCA CRM6-2264), while the Oliveira/Feldman disc is something I would be happy to have regardless of duplications of either or both titles. R.F.

SCHOENBERG: *Herzgewächse* (see WE-BERN)

SCHUBERT: Four Impromptus, Op. 142 (D. 935). Rudolf Serkin (piano). COLUMBIA M 35178 \$8.98.

Performance: Affectionate Recording: Good

Rudolf Serkin playing Schubert has always been a special treat, and an all too rare one among his recordings. In these unhurried, rather undemonstrative performances of the Op. 142 Impromptus there is a feeling of intimate reflection, as if Serkin were remembering the music for his own pleasure rather than playing it for the public. His playing is filled with authority and affection, but it is also a little too loosely organized to bring the music fully to life. The touching simplicity in the playing of No. 2, in A-flat, suggests that playing the notes so unaffectedly may have served as an aidemémoire in the process of full reconstruction that took place in his inner ear. What we hear, however, is more in the nature of a wistful outline of all four pieces, and this is heard in some discomfort, despite the essentially good recording of the piano, because of the extremely gritty surfaces (on both copies of the disc that reached my turntable). Both Daniel Barenboim (Deutsche Grammophon 2530.986) and Alfred Brendel (Philips 6500.928) offer fuller realizations of these intriguing and dramatic works, and, in addition to quiet surfaces, their recordings offer better value as well, Barenboim's disc including the four impromptus of Op. 90 (D. 899), and Brendel giving us the third set of impromptus, known as the Drei Klavierstücke (D. 946). R.F.

RECORDING OF SPECIAL MERIT SCHUBERT: Rondeau Brillant in B Minor, Op. 70 (D. 895); Sonatina in D Major, Op. 137, No. 1 (D. 384); Fantasy in C Major, Op. 159 (D. 934). Sergiu Luca (violin); Joseph Kalichstein (piano). NONESUCH H-71370 \$4.96.

Performance: Outstanding Recording: Fine

Of Schubert's six compositions for violin and piano, the D Major Sonatina is surely the most endearing, the Fantasy in C the most ambitious, and the *Rondeau Brillant* the most nobly accomplished. To have these three works superbly realized on a single disc, as they are here, is a self-compounding delight for which "irresistible" seems a shabby understatement. The incredibly sympathetic response of both Sergiu Luca and Joseph Kalichstein to this music, and to each other as they play it, is so thoroughly and joyously in the Schubertian spirit that comparisons, as they must on this level, become meaningless. I can say, though, that these are the first performances I've heard in the last twenty-five years or so that have not left me feeling I had to go back to the old Angel series by Johanna Martzy and Jean Antonietti (revived in part briefly on the Mace label) to hear how this music really ought to sound. Every phrase is unexaggeratedly alive, and both partners show a regard for tonal beauty that never gets in the way of the radiant spontaneity and momentum of their performances. The recording itself is a fine one in respect to richness, clarity, and balance, the pressing is clean, and there is an excellent set of notes on the music by Robert Winter. In short, it's a marvelous record, not only irresistible but, I would think, indispensable.

Ordinarily the foregoing would constitute a complete review, but in this case I can't help adding that this was one of the last releases Teresa Sterne saw through the production cycle before her separation from Nonesuch last fall. Had the corporate powers not made that extraordinary decision, which became a cause célèbre throughout the musical community (see James Goodfriend's "Going on Record" in March and William Anderson's "Speaking of Music" in April), we could have expected a second disc to complete this Schubert cycle, as well as completion of various other noteworthy series begun some time ago-Gilbert Kalish's Haydn keyboard sonatas, Paul Jacobs' Debussy, etc. R.F.

RECORDING OF SPECIAL MERIT

SCHUBERT: Symphony No. 3, in D Major (D. 200); Symphony No. 8, in B Minor (D. 759, "Unfinished"). Vienna Philharmonic Orchestra, Carlos Kleiber cond. DEUTSCHE GRAMMOPHON 2531 124 \$9.98, © 3301 124 \$9.98.

Performance **Toscaninian** Recording: **Good**

Did I say some months ago in these pages something to the effect that Carlo Maria Giulini and the Chicago Symphony Orchestra had given us a Schubert Unfinished about as good as it could be? Well, there is more than one way to skin a cat. Carlos Kleiber has gone about things in his own way and given us an Unfinished done as well as it can be as musical drama, as opposed to Giulini's all-out lyrical emphasis.

I was interested to note that Kleiber's performance time (including the time required for the first-movement exposition repeat) is within seconds of Arturo Toscanini's 1950 NBC Symphony reading. Like Toscanini's, Kleiber's way with the opening movement is one of stern control, scrupulous attention to details of phrasing and accent, and maximum emphasis on character differentiation between themes as well as on dynamic contrast. Dynamic contrast is, if anything, even more emphatic in the minormode outbursts in the second movement, especially in the very first one. There is a sharp difference between Kleiber and Giulini in the opening pages of this movement in the details of accent Kleiber dwells on-

STEREO REVIEW

and to telling effect. The ethereal quality he brings to the final pages of the symphony gives his reading a very special poignance unmatched by any other performance I have heard.

The performance of the D Major Symphony from Schubert's eighteenth year is likely to raise a few eyebrows, for Kleiber gives us no easygoing Hausmusik treatment, but rather a razor-sharp one of extraordinary brilliance and tautness. The allegretto movement will be the main eyebrow raiser, since most performers I have heard treat it as almost an andantino. Kleiber opts for a pacing comparable to that of the allegretto of the Beethoven Eighth Symphony, whose première in Vienna was about a year before Schubert composed his essay in D Major. The menuetto also goes at a brisk pace, with the Vienna players doing a delectable job with the Ländler-style trio, and the tarantella-like finale is simply astonishing. The recorded sound is good on the whole, if somewhat weighty in the lower middle register. Like just about all of Carlos Kleiber's orchestral discs so far, this one can be called brilliantly provocative-thrillingly innovative for some, outrageously heretical for others. D.H.

SCHUMANN: Fantasie, Op. 17; Kinderszenen, Op. 15; Arabeske, Op. 18. Daniel Barenboim (piano). DEUTSCHE GRAMMO-PHON 2531 089 \$9.98, © 3301 089 \$9.98.

SCHUMANN: Fantasie, Op. 17; Noveletten, Op. 21, Nos. 1 and 2. Artur Rubinstein (piano). RCA ARL1-3427 \$7.98, © ARK1-3427 \$7.98.

Performances: Barenboim delightful Recordings: Okay

Two more contrasting performances cannot be imagined. Barenboim's Fantasie is youthful, fiery, not particularly romantic in the small things, but impressive and heroic in the large. Rubinstein's is small-scale, tentative, burnt out, with only an occasional flicker. This never-before-released recording was made in 1965, and its companion pieces, the Novelletten, have strength and character. So it does not appear as though great age was the culprit. My guess would be that Rubinstein had never played the Schumann Fantasie and was, in effect, sight-reading at the session. Certainly there were good reasons why RCA did not choose to release the recording then, and it would have been kinder to leave it in the vaults even now.

The Barenboim disc is a delight, with the neat and simple *Kinderszenen* as a perfect foil to the *Fantasie*. The *Kinderszenen* are far from mere kiddie fare, but, as we realize from this performance, contain some of Schumann's most ingenious and expressive thoughts in simple guise. I don't care for the resonant piano sound, but in other respects this is a highly recommended recording.

E.S.

R. STRAUSS: *Die Aegyptische Helena*. Gwyneth Jones (soprano), Helena; Matti Kastu (tenor), Menelaus; Barbara Hendricks (soprano), Aithra; Willard White (bass), Altair; Curtis Rayam (tenor), Daud; Birgit Finnilä (contralto), the Omniscient Mussel; others. Kenneth Jewell Chorale; Detroit Symphony Orchestra, Antal

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Stereo Review, 1 Park Avenue, New York, N.Y. 10016



Satie

SATIEYRS will want Arabesque's new release of music by Erik Satie without knowing anything more about it than its contents, for there are pieces in it that they have probably never heard before. The material was recorded (presumably by Pathé-Marconi) in 1974, but to my knowledge it has not previously appeared on records in the U.S.

You get considerable variety for your money. Geneviève de Brabant, the longest work here, was composed in 1899 but orchestrated only after the composer's death by the conductor Roger Desormière. It consists of an instrumental introduction or Entrée des Soldats (which keeps coming back), a long unaccompanied recitation (in the original French) of the story of Sainte Geneviève, a chorus straight out of Offenbach, two affecting arias for Geneviève, a call of hunting horns, an aria for Golo, a brief cortège, and an even briefer closing number for Golo and chorus (again right out of Offenbach). This whole panoply of music and speech makes no sense whatsoever unless one is aware (the fact is buried in the notes) that it was all designed for a puppet show, and then everything comes together (well, sort of), while the "is he serious or is he not?" question sublimates itself into the marionette milieu. The music, at any rate, is odd and interesting and sometimes beautiful; the performances by all concerned are most elegant.

The second-longest piece on the disc is the *Messe des Pauvres*, of which an ancient recording, by organist Marilyn Mason, was listed in the catalog for twenty-odd years. This new one by Gaston Litaize takes a totally different approach, being considerably louder and more extroverted than Mason's restrained and delicate performance, but, curiously, the music works both ways. This is unquestionably "serious" Satie, though the musical *language* differs hardly at all from that of his witty style.

The record is filled out with songs, six of which are so obscure (in familiarity, not musical content) that they are not even included in the Grove's Dictionary catalog of Satie's works. These are, apparently, all early pieces (the Trois Mélodies of 1886 date from Satie's twentieth year), and their stark simplicity (Satie only rarely allows himself the luxury of arpeggiating the straight chordal accompaniment) shows him already far removed from the musical concerns of his contemporaries. In their innocence, the songs walk the line (or perhaps the line is here even being created) between the serious and the not so, and their texts, most by J. P. Contamine de Latour (of whom I have never heard in any other context), begin to raise the question of whether he was or wasn't (he also wrote the text for Geneviève de Brabant). The remaining three songs, Daphénéo (a strangely moving song built on a nonsensical pun and perhaps a prime example of musical surrealism), Le Chapelier (similar in effect and based on Alice in Wonderland), and La Diva de l'Empire (a café song and a whole different kettle of poissons), are, in comparison, almost familiar masterworks.

Mady Mesplé and Aldo Ciccolini handle these songs with typical French grace and deadpan expression, as if they know perfectly well what is serious and what is not but are not telling. I can't think of a more affecting way to perform them—all but one, that is. The *Diva de l'Empire* is really a Belle Époque *pop* number and needs the services of a chanteuse rather than of a serious artist. A couple of *them* have recorded it (particularly a lady named Colinette), but the records are lost in the dustbins of time. So, better this clean, straight performance than nothing (or even whatever else is currently available).

HE recording problems seem perfectly well managed on this disc, and the surfaces are certainly better than average. A text booklet is supplied which gives texts and translations for everything except, oddly, the sung portions of *Geneviève*. The notes contain much fascinating information, but there is so much more one would like to know about this occidentally inscrutable man that they seem, in the last analysis, insufficient. But the record is a little classic of its kind. "There are more things in heaven and earth" Indeed there are, and some of them are on this record.

—James Goodfriend

SATIE: Geneviève de Brabant. Mady Mesplé (soprano), Geneviève; Jean-Christoph Benoit (baritone), Golo; Pierre Bertin, reciter; Chorus of the National Theater Opera; Orchestre de Paris, Pierre Dervaux cond. Mass for the Poor, Op. Posth. Chorus of René Duclos, Jean Laforge dir.; Gaston Litaize (organ). Three Songs of 1886; Three Other Songs; Daphénéo; Le Chapelier; La Diva de l'Empire. Mady Mesplé (soprano); Aldo Ciccolini (piano). ARABESQUE 8053-L \$6.98. Dorati cond. LONDON OSA 13135 three discs \$26.94.

Performance. Good, but . . . Recording Good

"Tragedy in the theatre after this war seems to be pretty inane and childish," wrote Richard Strauss to Hofmannsthal in 1916, "...long live the political-satiricalparodistic operetta." He returned to the subject in a letter three years later, when he wrote: "I should so much love to have a political satire in late-Grecian garb, with Jeritza as a hetaera from Lucian."

Well, perhaps Die Aegyptische Helena could have become an operetta, but hardly in the hands of these authors. Hofmannsthal and Strauss were immensely gifted men, but lightness of touch and easygoing grace were not their strong suits, Der Rosenkavalier notwithstanding. What they did create was a romantic opera in a mythological setting, devoid of political and satirical overtones but filled with philosophical and psychological ones in its examination of the relationship between Menelaus and Helen after the fall of Troy. The plot complexities are related in the detailed annotations accompanying London's recording of Die Aegyptische Helena. The notes also deal with the opera's Dresden première in 1928 with Elisabeth Rethberg and Curt Taucher in the lead roles, Fritz Busch conducting, though they fail to mention that Antal Dorati was Busch's young assistant in those days. Presiding over the opera's first recording now, more than forty years later, must give the Detroit maestro an enviable feeling of satisfaction.

Helena is less grandiose and less bewilderingly complex than the earlier Die Frau ohne Schatten (1919), but its libretto is nonetheless entirely too verbose for the good of the drama. A further handicap—in my view, at least—is the strong Wagnerian cast of some of Hofmannsthal's verses. Fortunately, the music gives wings and radiance to the overblown lines; it soars in glowing colors reminiscent of Die Frau ohne Schatten, with a magical orchestration that at times recalls the transparency of Ariadne auf Naxos as well. Whatever one may think of the text, the music justifies this opera's presence in the record catalog.

This performance serves the opera well enough, though it may not convert any nonbelievers. Strongest among the singers is the young American soprano Barbara Hendricks as the sorceress Aithra, who creates the illusion of the two Helens (see synopsis for details) to make Menclaus forgive, if not forget, the past. Miss Hendricks copes laudably with the role's demanding tessitura, with its unreasonable downward extension, and imparts an impish touch to her lively characterization. Hers is an altogether admirable portrayal, beautifully vocalized.

As displayed on the album cover, Gwyneth Jones appears to be the very incarnation of the alluring mythological Helen. Vocally, though, she falls considerably short of the ideal; her achievement is not inadequate, but it is not always pleasing tonally. The music of Menclaus is largely declamatory except for a rather effective *arioso* in Act II, and it is surprising to learn that Strauss wrote this music with Richard Tauber in mind (the tenor chose Lehár's *Friederike* instead). Matti Kastu's portrayal of the angry and confused warrior king is convincing, but his singing is hard-toned and nonsensuous. Altair and Da-ud are not fully formed characters, nor are they interpreted memorably, and Birgit Finnilä's sumptuous tones have to battle her role's uncomfortably low range.

Antal Dorati's authoritative conducting, which stints neither lushness nor power in the music, is the set's strongest asset. We are in his debt for an imperfect yet worthy realization of this eminently listenable opera. I found the recorded sound over-reverberant and somewhat artificial-sounding initially, but I adjusted to it as the performance progressed. G.J.

STRAVINSKY: Elegy for J.F.K.; Three Shakespeare Songs (see WEBERN)

WEBERN: Six Songs, Op. 14; Five Spiritual Songs, Op. 15; Five Canons, Op. 16; Three Folk Lyrics, Op. 17; Three Songs, Op. 18. SCHOENBERG: Herzgewächse, Op. 20. DALLAPICCOLA: Seven Goethe Songs. STRAVINSKY: Elegy for J.F.K.; Three Songs from William Shakespeare. Dorothy Dorow (soprano); Ensemble Amsterdam, Reinbert de Leeuw cond. TELE-FUNKEN 6.42350 AW \$9.98.

Performance: Pure Recording: Very good

It is sometimes forgotten that song played an essential role in the evolution of expressionism and twelve-tone music. Right at the center of Anton Webern's work is a whole string of opus numbers representing works for voice and small instrumental ensembles-a rather fragile music that remains much less well known than both the earlier and the later instrumental music. Dallapiccola's more lyrical Goethe songs and the charming late Stravinsky songs show the influence of Webern's very clearly.

Dorothy Dorow, long a sterling interpreter of twentieth-century music, has the ears and vocal precision to clarify and beautify this difficult music. She always knows where the center of the pitch lies. Nevertheless, she also does some sliding to pitch in the Webern-a questionable mannerism at best-and 1 am not entirely comfortable with a certain haughty "lieder recital" tone that sometimes threatens to take over here. But these are still remarkable performances. We have almost arrived at the point of taking for granted such easy, precise, and pure performances of music that, not so many years ago, was considered to be impossible or performable only in a mad, approximate scramble. Texts are provided, E.Sbut no translations.

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Performance Muscular Recording: Bright and clear

Twenty-five years ago I described organist Catherine Crozier's work as "notable for its rhythmic vigor, strong sense of line, and effective calculation of weighted sonority in terms of registration." On the basis of this richly varied recital played on the Theodore Kuhn Co. tracker-action organ in New York's Alice Tully Hall, I find no reason to alter that characterization.

Miss Crozier's handling of the familiar Bach Fantasia and Fugue is that of a strict constructionist, as is her playing in the "Sei Gegrusset" partita, and I would have welcomed a little deft flavoring of the "meat and potatoes" here. But the twentieth-century repertoire is quite another matter. The Hindemith sonata gets a very strong reading, and Miss Crozier's taste for stark registration and powerful rhythmic pulse lends the music the special quality that has often led me to equate the best of Hindemith's work with the expressionist sculpture of Ernst Barlach. The Distler partita is neo-Bach in spirit with a singularly lovely pentatonic-flavored Bicinium interlude prefacing the brilliant fugue-finale. The passacaglia by Czech composer Miloš Sokola is a brilliant neo-Lisztian essay.

However, the only contemporary work here that comes within striking distance of the Hindemith in terms of effectiveness and craft is Ned Rorem's somewhat Messiaenic A Ouaker Reader-in essence eleven meditations or ruminations on Quaker lore and texts from which Miss Crozier has chosen a half-dozen of the most striking. Since Composers Recordings recorded the entire work on the Alice Tully Hall organ as performed by its dedicatee, Leonard Raver, a direct comparison of the CRI disc with this one is of more than passing interest. In general, Miss Crozier tends toward a more sinewy approach, while Raver responds more to the music's poetic aspects.

Comparison of the sound of the analogrecorded CRI disc with that of Gothic's essay in digital mastering brings up a problem I have mentioned before: if the hall itself and the microphone placement are not just so, the new technology will do nothing to enhance the final result. Indeed, the employment of such procedures places a premium on optimum acoustics, proper microphone placement, and careful disc processing. Taking as a test the Rorem piece with the greatest dynamic and coloristic contrast, The World of Silence, I found that CRI not only achieved a better sonic focus but was also better able to convey the placement of the ranks of pipes.

In fact, what bothered me about the Gothic album from the start was a seeming excess of midrange pipework, which to judge from photographs could be the result of both the disposition of the pipes themselves and the acoustic characteristics of Tully Hall (I have found it rather bass-shy). Gothic's production team of Fred Miller and Harry Munz can produce magnificent organ discs, as attested to by Frederick Swann's Franck album (analog-recorded, performed on the Riverside Church organ in New York). I hope that for future digital

recordings Gothic will find a more congenial instrument in another hall. D.H.

JAN DE GAETANI AND GILBERT KAL-ISH: Songs of Rachmaninoff and Chausson (see Best of the Month, page 79)

MUSIC WITH THREE RECORDERS. Mattheson: Sonata IV, in G Minor, Op. 1, No. 3. A. Scarlatti: Sonata in F Major for Three Recorders and Continuo. Dornel: Sonata in B-flat Major for Three Recorders. Riccio: Sonata à 4 in A Minor; Canzon La Rosignola. Scheidt: Paduan à 4 in D Minor. Anon.: Sonata in G Major for Three Recorders and Continuo. Purcell: Chaconne, Three Parts upon a Ground, in F Major. Quadro Hotteterre; Frans Brüggen (recorder). TELEFUNKEN 6.43265 AW \$9.98, © 4.43265 6X \$9.98.

Performance: Fine Recording: Fine

Although three recorders can yap and twitter and at times sound out of tune even if they are not, they can produce moments of pure, silken sound that are quite ravishing. On this disc such moments are to be found in the works of Riccio and Scheidt, where the organ binds the flutes together and the cello supplies a firm base. The pieces are compositionally the most interesting ones as well, and they make the record well worth the investment

The strongest suit of the Quadro Hotteterre is its ensemble. They play as one, and the abrupt and frequent tempo changes required in the seventeenth-century sonatas and canzonas are beautifully handled. S.L.

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Performance: Exquisite Recording: Excellent

The Pro Cantione Antiqua is an all-male group-altos, tenors, and basses-and thus, on the record jacket, the here very neces-(Continued on page 129)

STEREO REVIEW * 🖌

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 Residents of CA, CO, DC, FL, IL, MI, MO, NY STATE and VT add applicable sales tax. sary sopranos (female) are relegated to a sub-listing under that of the members of the group. Despite this perhaps male-chauvinist attitude, the sexes work well together and produce a clear, bell-like tone that is a delight to hear. Particularly effective is the group's ability to control tremolo. Depending on musical needs and textural coloration, the sound ranges from pure white to a tasteful warm, vibrating sonority. The singers' diction is excellent, and their use of sharp consonants lends a rhythmic vitality and articulation which gives a dance-like quality to many passages in the "balletto' style. In short, this is one of the finest sets of madrigal performances available on discs.

The choice of madrigals is also very fine and thoughtful. Philip Ledger edited a selection of some fifty-eight madrigals for the Oxford Book of English Madrigals. From this printed collection he has chosen thirtyfive for this recording, including many perennial favorites, such as Now Is the Month of Maying, and many "sleepers," such as the ravishing Sleep, Fleshly Birth by Robert Ramsey. The collection will delight the connoisseur and the casual listener. S.L.

RECORDING OF SPECIAL MERIT

ELISABETH SÖDERSTRÖM AND VLA-DIMIR ASHKENAZY. Mussorgsky: The Nursery. Prokofiev: The Ugly Duckling, Op. 18. Grechaninov: The Lane, Op. 89. Elisabeth Söderström (soprano); Vladimir Ashkenazy (piano). LONDON OS 26579 \$8.98.

Performance: Excellent Recording. Excellent

After their highly successful documentation of the songs of Rachmaninoff (on four London discs), this gifted duo undertakes here a more specialized and even more challenging task: a recital of Russian songs for or about children. Mussorgsky's cycle *The Nursery* was undoubtedly the inspiration for the other works. This astonishingly "modern" late-Romantic composer created in *The Nursery* a new form of musical expression in which toys, animals, and events in a miniature world are illuminated, magnified, and wondered at from a child's vantage point.

Prokofiev's *The Ugly Duckling* (1914), based on the Andersen tale, is certainly indebted to Mussorgsky's experimental writing, but the familiar story is told in a sort of continuous tone poem, with the brilliant piano part providing the connective tissue. Alexander Grechaninov (1864-1956), on the other hand, retained Mussorgsky's miniaturistic format for his cycle of five children's songs, but his was a more songful idiom in which Tchaikovsky's influence is no less discernible than Mussorgsky's.

This recital is a tour de force for singer and pianist alike. Vladimir Ashkenazy's brilliant pianism combines grace and power, and it is beautifully captured by the recording engineers, while Elisabeth Söderström's performances transcend mere singing in their almost visible re-creation of these vignettes. And yet the program will not be for every taste. Writing music for or about children is always a difficult pursuit, because sophistication and naïveté mix uncasily, and the performances here, fine as they are, are not without a certain air of artificiality. *G.J.*

STEREO REVIEW

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JUNE 1980

Simel/Live

By Steve Simels



Uncle Floyd (Vivino), right, as Don HoHum, and Skip Rooney, left, as Hula Hannah

BIG NOISE FROM WEST ORANGE

FLOYD VIVINO is a short, driven young man who has for the last seven years almost singlehandedly kept the great tradition of the TV kid-show-for-adults alive. As Uncle Floyd, he holds court every weekday evening in a low-budget surrealist free-forall broadcast over a UHF station in the wilds of West Orange, New Jersey, whose other programming consists largely of public-service shows in Polish (I am not making this up). His set is closet size, the props pure thrift-shop, and the supporting cast, whose duties include cackling insanely off-camera at every moth-eaten joke in captivity, seem to have studied comedy, as James Wolcott observed, under the Creature from the Black Lagoon.

Uncle Floyd's sponsors include a local construction firm, a magic shop, and a tattoo parlor in Carlstadt. His fans include the Ramones and David Johansen (both of whom frequently appear on the show), Bruce Springsteen, about one hundred thousand viewers in the New York metropolitan area, and the author of this column, who can't recall having so much fun in front of the tube since the halcyon days of Soupy Sales.

Floyd is, in short, a genuine local hero in the process of moving from cult figure (a phrase he doesn't like because it "frightens parents") to aboveground star, the star of one of the most unlikely show-biz sagas in recent memory. To his credit, he has vowed never to leave Channel 68, at least until they straighten out the toll situation at the Lincoln Tunnel: he clearly understands that the Floyd Show wouldn't be funny out of context. But he's such a tireless self-promoter that some day he may be forced to go big time. Already he's got a single (Deep in the Heart of Jersey, Dioya 600), it's rumored that the show itself may be syndicated, and lately Floyd's been almost unavoidable in all the media, popping up everywhere from the Tomorrow Show to the opera reviews (!) of the New York Times.

The latest Bastion of Good Taste to fall before Floyd's barbarian legions was no less than Manhattan's prestigious Bottom Line, the première rock-showcase night club in the country. In late April, Floyd packed the joint for six consecutive shows (the place seats five hundred), and those of us who fought our way in got more than our money's worth.

Though not quite a family affair, there was a little something for everybody, beginning with a wonderfully seedy wedding band headed by one of Floyd's brothers. There was Looney Skip Rooney, who told off-color stories about Passaic with a prurient glee that put me in mind of a depraved infant. There was David Burd (whom you may have heard delivering the truly awful one-liners on the recent radio spot for Elvis Costello's "Get Happy") demonstrating the fine art of rock-and-roll violin playing with a stirring one-finger rendition of Louie, Louie. There was the inimitable Muggsy with impersonations of rock stars Bruce Stringbean, Pot Roast, and Neil Yuck.

B_{EST} of all, though, was Floyd himself. Decked out initially in his trademark bow tie and Madras porkpie hat, he went on to do several of his best characters, including Julia Stepchild and Eddie Slobbo. But the high point of the evening, for me, came during his exchanges with his "partner" Oogie. Oogie is an orange-haired dummy (Floyd's ventriloquism is on a par with Farrah's acting, but no matter) whose personality is part Leo Gorcey, part Woody Allen. He almost never seems to be an extension of Floyd himself; snotty, a horrendous punster, and an awful wise-ass, he's real. I believe in him far more than I'll ever believe in a cutesie-poo little simp like Kermit the Frog

Which, of course, is a big part of what Floyd is up to. He knows that a didactic, parentally approved kid show (the dreaded Sesame Street, for example) in reality talks down to kids; worse, it bores them to catatonia. He knows because there's still enough of the kid in him to remember. His entire career up until now can thus be seen as a last-ditch attempt to bring adolescent silliness and high spirits back to the people, where they belong. It's therefore no mystery why the punks like him so much, for that's what they're trying to do too. I'm too old to be a punk myself, but I'd like to think that, like Floyd, there's still enough of the kid left in me to appreciate the effort.

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