MARCH 1977 • ONE DOLLAR

rereo keview

Julian Hirsch takes a look at two decades of tape equipment Tips on buying a tape recorder • Coming tape developments Recording—do it right the first time • The noise dilemma

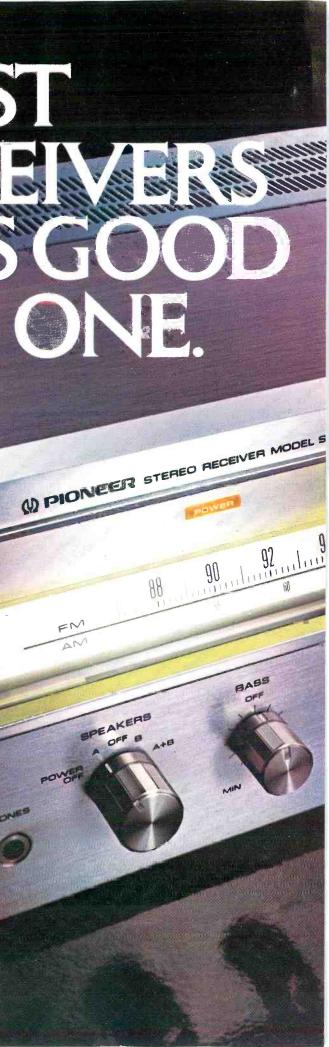
HIRSCH-HOUCK LABS TEST REPORTS: JBL L166 Speaker System • Kenwood KR-9600 AM/FM Stereo Receiver • Sansui TU-9900 AM/FM Stereo Tuner • Yeaple Stereopillow "Nearphones"

\$600 RECEIVERS SOUND AS GOOD AS THIS ONE.

14276

GHENIX CILA PE 39892 BOX 599-C BL 2 03 Sects 211 B059860 2417 NDA22

ECH TROE ISUE



The average \$600 receiver sounds as good as the new Pioneer SX-650 until you start listening to prices.

If \$600 is your kind of price, an SX-650 should qualify as your kind of receiver. Not only will it give you the kind of features and sound quality you'd expect for that kind of money; it'll also leave you with roughly half your receiver budget unexpectedly unspent.

But suppose your idea of a receiver price is somewhere under \$300. The SX-650 is going to sound better to you than anything you thought you could afford. Because it has more power, a wider frequency range, less distortion, and far greater versatility than most other receivers in that category.

All this might sound a little extravagant; but an authentic breakthrough, an achievement like the SX-650, doesn't happen often. We've learned that when our promises seem to sound especially rich, the best thing to do is simply review the facts.

It's a fact that the SX-650 provides a continuous power output of 35 watts per channel, min. RMS into 8 ohms, from 20 to 20,000 Hz, with no more than 0.3% total harmonic distortion. It also delivers each instrument and voice at its intended level, balanced within \pm 0.3% of the RIAA curve.

The facts of its stereo separation, selectivity and sensitivity, however, must be experienced: numbers are impressive, but sometimes only hearing is believing.

You'll also be impressed by what you don't hear from the SX-650. You won't hear an assortment of background noises, or the thousand miscellaneous acoustic devils that live in the limbo between FM stations on lesser receivers.

On your next visit to a high fidelity dealer, listen to a Pioneer SX-650 with any reasonably accurate speakers.

You'll find either its price or its performance amazing. Depending on which you hear first.

OPIONEER

U.S. Pioneer Electronics Corp., 75 Oxford Drive, Moonachie, New Jersey 07074. *For informational purposes only, the SX-650 is priced under \$300. The actual resale price will be set by the individual Pioneer dealer at his option.

UNFORTUNATELY FOR THEM THIS ONE SELLS FOR UNDER \$300*





CIRCLE	NO	21	ON	READER	SERVICI	CARD
CINCLE	10.	-		READER	SERVICE	L GAND

	Already your system sounds be								
MODEL & STYLUS COLOR			4000 D/1	<u>2407</u>				2000 E	2000
FREQUENCY #	10Hz-50KHz	15Hz-50KHz	15Hz-45KHz	20Hz-20KHz	20Hz-20KHz	20Hz-20KHz	20Hz-20KHz	20Hz-20KHz	20Hz-20KHz
RESPONSE	± 3 db	± 3 db	± 3 db	± 1 db	<u>± 2</u> db	± 2 db	± 3 db	±3 db	士 3 db
TRACKING FORCE RANGE	34-1¼ gm	¾-1½ gm	1-1¾ gm	¾-1¼ gm	¾-1½ gm	¾-1½ gm	1+2 gm	1¼-2½ gm	1½-3 gm
SEPARATION: 15Hz to 1KHz 1KHz to 20KHz 20KHz to 50KHz 20 Hz to 500Hz 5001 z to 15KHz 15KHz to 20KHz	28 db 23 db 15 db	26 db 21 db 15 db	24 db 20 db 15 db	20 db 30 db 25 db	20 db 28 db 20 db	20 db 25 db 18 db	18 db 23 db 15 db	18 db 23 db 15 db	16:db 21 db 13:db
L. M. DISTORTION	.2%	.2%	.2%	.08%	.1 %	.15%	.2%	.2%	.2%
@ 3.54 cm/sec	2KHz-20KHz	2KHz-20KHz	2KHz-20KHz	2KHz-20KHz	2KHz-20KHz	2KHz-20KHz	2KHz-20KHz	2KHz-20KHz	2KHz-20KHz
STYLUS	.2 mil	.2 mil	.2 mil	.2 x .7 mil	.2 x .7 mil	2 x .7 mil	2 x .7 mil .	.3 x .7 mil	7 mil radius
	bi-radial	bi-radial	bi-radial	elliptical	elliptical	elliptical	elliptical	elliptical	spherical
EFFECTIVE TIP MASS	.4 milligram	.4 milligram	.4 milligram	.2 milligram	.6 milligram	.6 milligram	.6 milligram	9 milligram	1 mil igram
COMPLIANCE	30x10 ⁻⁶	30x10 ⁻⁶	30x10 ⁻⁴	30x10 ⁻⁶	20x10 ⁻⁶	18x10 ⁻⁴	17x10 ⁻⁴	16x10 ⁻⁴	14>10 ⁻⁶
	cm/dyne	cm/dyne	cm/dyne	cm/dyne	cm/dyne	cm/dyne	cm/dyne	cm/dyne	cm/idyne
TRACKING ABILITY	32 cm/sec @ 1KHz @ 1 gm	32 cm/sec @ 1KHz @ 1¼ gm	30 cm/sec @ 1KHz @ 1½ gm	38 cm/sec @ 1KHz @ .9 gm	32 cm/sec @ 1KHz @ 1 gm	28 cm/sec @ 1KHz @ 1 1/4 gm	28 cm/sec @ 1 KHz @ 1½ gm	28 cm/sec @ 1KHz @ 1¾ gm	32 cm/sec @ *KHz @ 2 gm
CHANNEL	within 1 db	within 1 db	within 1½ db	within ¾ db	within 1 db	within 1¼ db	within 1½ db	within 1½ db	withir 1½ db
BALANCE	@ 1KHz	@ 1KHz	@ 1KHz	@ 1KHz	@ 1KHz	@ 1KHz	@ 1KHz	@ 1KHz	@ IKHz
INPUT LOAD	100K ohms/	100K ohms/	100K ohms/.	47K ohms/	47K ohms/	47K ohms/	47K ohms/	47K ohms/	47K ohms/
	channel	channel	channel	channel	channel	channel	channel	channel	channel
TOTAL	under 100	under 100	under 100	300	400-500	400-500	400-500	400-500	400-500
CAPACITANCE	pf/channel	pf/channel.	pf/channel	pf/channel	pf/channel	pf/channel	pf/channel	pf/channel	pf/channel
OUTPUT	3	3	3	3	4.5	4.5	7	7	7
@ 3.54 cm/sec	mv/channel	mv/channel	mv/channel	mv/channel	mv/channel	mv/channel	mv/channel	mv/channel	mv/cnannel

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No matter what system you own, a new Empire phono cartridge artain to improve its performance rtain to improve its performance. The advantages of Emptre are threefold. One, your records will ast longer. Unlike other magnetic tridges: Empire's moving iron design allows our dramond s One, your records will 'ast longer. Unlike other magnetic cartridges. Empire's moving iron design allows our dramond stylus to float free of its magnets and coils. This imposes much less weight on the record surface and insures longer record life. Two, you get better separation. The small, hollow iron armature is certain to improve its performance. on the record surface and insures longer record life. Two, you get better separation. The small, hollow iron armature we use allows for a tighter fit in its positioning among the poles. So, even the most minute movement is accurately reproduced to we use allows for a lighter fit in its positioning among the poles. So, even the most minute movement is accurately reproduced to since you the space and death of the original recording you the space and depth of the original recording. Three, Empire uses 4 poles, 4 coils, and 3 magnets (more than other cartridge) for better balance and burgeoiceties So, even the most minute movement is accurately repro give you the space and depth of the original recording. Three, Empire uses A poles, A coils, and 3 page of any other cartridge) for better balance and hum rejection. The end result is great listening. Audition one for your self or write for our free brochure. "How To Get The Most Out Of Your Records." After you compare our performance specifications we Records." After you compare our performance to better than Empire think you'll agree that, for the money, you can't do better Work 11530 Three. Empire uses 4 poles, 4 coils, and 3 magnets (mo any other cartridge) for better balance and hum rejection. The oud result is great listening. Audition one for you

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COVER: Design by Borys Patchowsky; Photo by Bruce Pendleton

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Editorially Speaking



DISC QUALITY REVISITED

Top topic in reader mail this past month (see "Letters to the Editor") has again been the deteriorating quality of the Great American Phonograph Record. Righteous indignation is the tenor of most of these letters, but a number of correspondents have moved beyond initial outrage to give a little thought to possible solutions.

One of those solutions-the "two lines" idea-has been proposed many times over the years but has never been seriously triedquite probably because the industry still remembers the (seemingly) endless difficulties it experienced during the years of mono-tostereo transition as well as the more recent experiments with stereo/quad double-stocking. And they are probably right in their contention that it would be economically infeasible to market their products in two (or more) 'grades'' because of the ''catch twenty-two' involved: if the premium were small enough to tempt a reasonable number of buyers, it would be too small to pay the costs; if it were large enough to pay the costs, it would be too large to attract enough buyers. There is therefore, I think, only *one* reasonable solution: *one* quality level, and that level a high one.

Against the arrival of that great day, our advice to quality-conscious record buyers is to complain loud, long, and vociferously—but civilly, reasonably, and persuasively as well. Remember that the people you address are dealing with pressures you probably don't know exist. A few you might think about:

(1) Competition Between Record Companies—It is extremely difficult to raise record prices unilaterally (unless you want to go out of business in a hurry). And, of course, record companies could not conceivably get together and agree to raise prices—even to secure better quality—without opening themselves to the charge of price-fixing.

(2) The Great American Stockholder—He will insist that his company make a profit for the simple reason that those profits are probably what he lives on.

(3) Labor and Materials—Like many other industries in these inflationary times, the rec-

ord industry is caught in a price squeeze between consumer resistance to higher prices (resistance is easier when the item concerned is a luxury—bought any coffee lately?) and rising production costs.

Another common proposal is that we get the government involved in "policing" the industry. Frankly, the thought of getting another bunch of "experts" down in Washington spending their time and our money trying to solve problems Solomon couldn't get a grip on gives me a case of the pip. Chances are that such an assembly of sages would be made up of ex-record-company pensioners (the only ones who know anything about it) still in the grip of the fallacy that is at the root of the problem: the notion that cost-cutting (and the low quality that goes with it) is the only way to make a buck in the record business.

What we face in overcoming this myopic view is a simply enormous project of re-education. The public must understand that higher quality will mean higher prices for records. Manufacturers must be willing to face up to the seriousness of the quality issue on an industry-wide basis; this should probably be done through their own trade association, the RIAA (Recording Industry Association of America). And individual companies must reeducate their employees and their stockholders to see that the quality issue, if not tended to now, will inevitably affect company image and long-term profits whatever the short-term gains may be.

Signs of the times: RCA has just announced an increase in the price of its Red Seal line (to \$7.98); it is reasonable to expect that others will follow shortly. It would be nice to think that at least part of this increase will go into higher quality, but more realistic to trace it to rising production costs (phono-disc vinyl is made out of oil, after all) and retailer pressure to provide more headroom for discounting. It is salutary to remember, however, in this March Tape Issue, that cassette quality continues to improve (almost everybody, including RCA, now Dolbyizes) and that those little tapes use very little vinyl. Provocative thought: do we not already have-almost-a kind of quality-based double-stocking?

Stereo Review

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Credentials Like These Are Worth Reading



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Consider the new Jensen Spectrums. These good sounds didn't just happen. They're the result of extensive engineering efforts and exhaustive testing. Testing that ranged from exacting measurements in laboratory "live" rooms and anechoic chambers to in-depth consumer surveys.

Examine our Spectrum Model 540. It's an excellent example of the superb specs you'll find throughout the Jensen Spectrum Series.

The Spectrum 540 is a 3-way, 4 element system that is so efficient it can be driven with as little as 10 watts continuous power. Its maximum power rating is 75 watts continuous.

The woofer is a 12," long-throw, high compliance design. Special acoustic suspension and infinite baffle enclosure give you extremely low distortion. And a high temperature voice coil affords high power handling. Magnet structure weight is a hefty 4½ lbs. with a Gap Flux Density of 10,000 Gauss. Two 3½" cone midranges give ex-

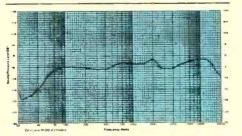
Two 3¹/₂" cone midranges give excellent power handling and eliminate break-up in the critical midrange region. Tuned isolation chambers control response at the low end of the midrange spectrum. They also provide acoustical isolation in the cabinet between the midranges and the woofer. An edge damped rim suspension with specially treated molded cone offers sharp, clear, midrange reproduction.

midrange reproduction. A 1½" Mylar[®] rear damped hemispherical dome tweeter offers a dispersion of 170°. Its large, lightweight voice coil gives high power handling, yet maintains a low mass for good high frequency reproduction.



Tweeter and midrange controls allow you to adjust your Spectrum System to room conditions and listening preferences; controls are front mounted for convenience, continuously variable, calibrated in db attenuation from a maximum, or flat, response.

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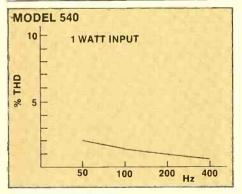
About as flat as you can get...and that's good. The Frequency Response Range is an admirable 25 to 25,000 Hz.

TONE BURSTS



"Blurring" and "Overshoot" are reduced to a minimum in this acid test of transient response. The Spectrum 540 reproduces each waveform accurately with low distortion.

TOTAL HARMONIC DISTORTION



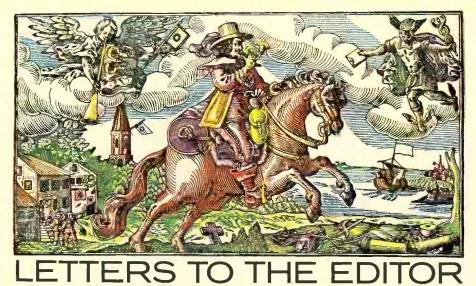
Distortion is kept to a minimum in Jensen Spectrum Speaker systems.

The cabinet is built with solid walnut front moldings and walnut veneer on wood composition panels. All walnut surfaces are hand rubbed for a rich luster and beauty. The baffle is finished in an attractive, durable black pebble grain.

In short, Jensen Spectrum speakers aren't designed to put out the most amount of bass or the most amount of treble. They're designed to put out the <u>right</u> amount. We consider them to be the best speakers we've produced in 50 years. Simply because when it comes to sound reproduction, they're extraordinarily accurate. And that's what specs are all about.

For further information and name of your nearest authorized Spectrum Dealer, write to: Jensen Sound Laboratories, Dept. **SR-37** 4136 United Parkway, Schiller Park, Illinois 60176.





Disc Quality

W. R. Kane's letter in the December issue presents a valid complaint regarding the miserable state of phonograph disc quality. It is painfully obvious that the quality of disc pressings has been declining while that of the hardware used in recording and reproducing the information found on discs now approaches perfection. This fact is especially irritating as there are a number of techniques which the record industry could practice in order to increase the quality of its product. These include the use of top-quality vinyl and the prompt replacement of worn pressing masters. I understand that such techniques are inexpensive in relation to the final consumer cost of a disc. Perhaps the industry could produce two lines of each recording and charge accordingly for the quality differences. At least some consumer choice is warranted in the matter.

Do you have any suggestions as to what effective action concerned disc-purchasers might take to help remedy this problem? I suggest that the FTC establish standards for disc quality as it has done for so many other consumer products.

> CARL G. BORDEN Piedmont, Calif.

For a discussion of the points raised by reader Borden, see this month's "Editorially Speaking," page 4.

• I have been told by clerks at major New York record stores that they are *charged* for returning defective records. If this is true, I think it is disgraceful! Retailers who are charged for returning defective merchandise which customers have returned to them should boycott those record companies maintaining such a policy, particularly when it seems to be the policy of many of them to produce faulty merchandise to begin with.

THOMAS P. LEWIS White Plains, N.Y.

The Editor replies: It is not true, though it is easy to understand why some hard-pressed clerk might have recourse to such a fiction remember that he has to deal with much more defective merchandise than any individual customer. Return rules at most record shops are standard: an unopened (shrink-wrapped) disc may be returned for anything of equal value (a lot of gift records go this route); an opened defective disc may be exchanged, but only for another copy of the same (the reason for this is that far too many naughty youngsters buy a record, take it home and tape it, return it as "defective," exchange it for another disc which they take home and tape, and so on); in some cases the store will permit replacement with a different disc if you pay a premium of 50¢ or so (that has now gone up in most cases to a dollar, and naughty youngsters may have had something to do with that too).

• It's been said so many times lately that everyone is no doubt tired of hearing it, but record quality in general stinks. I recently purchased a Linda Ronstadt album on Asylum. I couldn't hear the pops and crackles because the stylus wouldn't stay in any one groove long enough. At the record store we opened three more copies, but all were badly warped. To get rid of me they talked me into taking an album of Queen instead. I quickly tired of its snap, crackle, pop, so I turned on my AM receiver. I spent the evening listening to my neighbor's CB.

ROD SWEETLAND Sacramento, Calif.

CB Interference

As an audiophile and CB enthusiast and an owner of a communications shop, I have a few comments to make on Ralph Hodges' "Audio Basics" column on CB interference (January). There are certainly a lot more people who own and operate stereo equipment than there are those who own and operate CB equipment. As a rule of thumb, most CBer's operating base stations (where CB RFI comes from) are surrounded in their area by those owning stereo equipment. Yet, in a given area of, say, one square block, the CBer will throw RFI on only one or two receivers. (I am speaking of the CB operator who complies with the FCC standards of four-watt output.) This would suggest that the RFI received by the stereo enthusiast is a result of some dysfunction in his audio receiver and not because of the CB station.

In the instance of the CBer who is running illegal power output, I agree that he is to be held responsible for RFI as well as TVI, CB "bleed-over," and numerous other types of interference. The FCC already has the necessary laws to handle such cases but not the manpower to enforce the regulations.

> R. E. ROCKWELL Monrovia, Calif.

Ralph Hodges replies: It wasn't—and isn't my purpose to wage a vendetta against CB, but merely to describe the controversy and its implications. However, I think reader Rockwell misses an important point. If a sound buff disturbs your sleep at nights, you can (in most communities) call the police and have him shut down. If he continues to annoy you, you can gather evidence, hale him into court, and very often win your case. In the future it is very likely that your powers to pull his plug will increase, since it has been the recent tendency of law to restrict the activities of noise makers (especially nonessential ones) more and more.

However, if CB gets into my audio system I cannot look to the police or the courts for assistance, since the law is mute on the subject except to guarantee the CBer his right to broadcast. Nor can I successfully take the manufacturer of my equipment to court, because the law at present finds no fault in his equipment's being r.f.-sensitive. If the new law goes into effect, the audio manufacturer will have to design his equipment to pass the FCC's interference tests, and I will have to help pay the manufacturer's costs by paying more for my equipment. And if I then still have an r.f. problem (an entirely likely possibility, according to the FCC, since they don't anticipate that their test will or could be all-inclusive), I am right back where I started from. The manufacturer cannot be held responsible; after all, his equipment passes the tests.

Far from having an equal right to ply his hobby, the amateur radioist has, under the law, a much greater right than the audiophile at present. The law doesn't define any rights of the music listener in this context, and therefore it can be said that those rights, technically, do not exist. Also, I'm not sure I'd go along with the idea of equating rights in this way. Society might be inclined to condone the activities of the compulsive pyromaniac (who presumably derives pleasure from his arson) as readily as it does those of the birdwatcher, except that society has decided that the pyromaniac causes intolerable inconvenience to various other people. And that's the court in which the ball lies now. Other people-lots of them-are being seriously inconvenienced. You cannot expect them to keep quiet about it forever.

Guitar Rip-off

James Goodfriend's January 1977 column on musical rip-offs was well-written and to the point. Unfortunately, the impact of his message was, for me at least, substantially dissipated later on in the issue when Stephanie von Buchau fell prey to a bit of deception by John Williams and Columbia Records.

John Williams may indeed be a "technical wizard in every aspect of guitar playing." However, he did not transcribe the Chaconne from Bach's Violin Partita No. 2; his rendition, like others of this piece on the guitar, is nothing other than Johannes Brahms' arrangement for piano left-hand only (Studien (Continued on page 8)

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quality, precision and reliability shines brighter than ever. Because Tandberg offers you the widest selection of receivers in its history. So you can enjoy brilliant Tandberg performance. And still choose exactly the features you want, at the price you want to pay. See them, hear them at your

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Eleasure of its performance. **NEW TR-2025.** Now you can enjoy Tandberg performance with push-button ease. (This FM stereo receiver includes pre-tuning for 5 stations among its many desirable features.) **NEW TR-1040.** Another push-button

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für Pianoforte Nr. 5). A careful listening to Williams' performance while following the Brahms arrangement will reveal only very slight differences, and those confined to one or two passages.

One might note in closing that Brahms entitled his work "Chaconne von J.S. Bach, für die linke Hand allein bearbeitet," thus explicitly disclaiming any authorship of the work. One can wish that modern performers would be equally modest.

CHAYIM HERZIG-MARX Evanston, Ill.

Christopher Parkening

• Why did Stephanie von Buchau, in her article on classical guitar music, neglect Segovia's renowned student, première virtuoso guitarist Christopher Parkening? This is akin to writing about classical piano music and leaving out Horowitz or Rubinstein!

JOEL S. RICHMON Piedmont, Calif.

The article was a roundup of fairly recent guitar recordings. At the time it was written Parkening had not made a new recording since 1971. His current release, "Parkening and the Guitar" (Angel S36053), was not received in time for inclusion.

Stylus Magnification

• Julian Hirsch's phono cartridge article in January contains pictures of phonograph styli taken with the scanning electron microscope. We have noticed that the captions supplied for Figure 2 and Figure 6 require small corrections. Magnification in Figure 2 is more like 1000× because the groove shown is about 1.5 mils wide. This probably occurred during the process of reducing the size of a photograph from 8 x 10 inches to the published version. The caption for Figure 6 should have read does not appear smooth.'' Magnification in this shot is actually close to 5000×.

GEORGE ALEXANDROVICH Stanton Magnetics, Inc. Plainview, N.Y.

Rubinstein's Petrouchka

In his January review of the new Weissenberg Petrouchka, Eric Salzman states that the set of piano pieces from this work was made for Artur Rubinstein who, he believes, never performed it. I was at Symphony Hall in Boston on February 17, 1952, when Petrouchka was performed to perfection by Mr. Rubinstein. The work was also part of the 1971 monumental series of recitals given by Mr. Rubinstein in Carnegie Hall. I believe these recitals were recorded by RCA but that only one disc of Debussy, Prokofiev, Villa-Lobos, and Szymanowski was released. Perhaps a set similar to RCA's Heifetz collection will be done for Artur Rubinstein.

Joseph Beaudoin Stoughton, Mass.

Small Labels

Ira Mayer's article on small record labels in January was enjoyable even though obvi-8 ously limited in scope and length. However, Mr. Mayer implied that issuing a record on a small scale was a relatively inexpensive operation. That still might apply to the single-artist folk disc, but not if you're trying to record a six-piece jazz band. Since our start just four years ago most costs have increased alarmingly. These rising costs force the small label to seek either higher prices for each disc, greater distribution, or a combination of the two. Like it or not, our prices are compared to general pop labels, and we can't stray too far above those. There seems to be a psychological block among even the most devoted fans in this area.

> PLATO SMITH Land O' Jazz New Orleans, La.

Manuguerra

● I wholeheartedly concur with George Jellinek's high marks for Matteo Manuguerra's Baron Scarpia in his January review of Deutsche Grammophon's newly released Tosca. I hope Mr. Manuguerra will soon record a disc of tenor-baritone duets with Carlo Bergonzi. Contrariwise, I deplore the sketch of Luciano Pavarotti (on page 132) dressed as Santa Claus and encircled by the words "Merry Christmas from the World's Greatest Tenor." Bah! Humbug! Mr. Pavarotti has yet to attain sainthood among tenors, and the gifts he brings us could all be placed in one small stocking!

THOMAS R. WILSON Downers Grove, Ill.

Nothing New

In the December Equipment Test Reports you pointed out that electronic direct-drive turntables first appeared only a few years ago. Not so. On page 524 of the April 1917 issue of *Popular Mechanics* there appeared a news item about a "slow-running electric motor that has been designed for operating phonographs, the armature [being] part of the turntable," so there is at least one prior claim to the distinction of "first."

> RICHARD S. BENNETT Falls Church, Va.

AM/FM

I would like to thank and congratulate Noel Coppage for expressing his views on FM radio in his November review of Steve Milfer's "Fly Like an Eagle." I'm glad someone else agrees with me that there is a growing problem with FM adopting AM programming. This may be the reason for the growing FM penetration in North America. Let's hope it doesn't get to the point of absurdity.

> ROB EDISON Lakefield, Ont., Can.

Correction

• The review of "Oba Koso" on page 120 of the December issue carried a misprint in its mailing information. The correct address from which to order this recording is: Traditional Music Documentation Project, 3740 Kanawha Street, N.W., Washington, D.C. 20015.

Performance. Scott Stacks Up.

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HONE POWER

Every serious listener knows that separate tuners and amplifiers offer greater system versatility and flexibility than the all-in-one receiver. But Scott separates stack up where it really counts – performance.

Every one of Scott's complete line of tuners and amplifiers is engineered and designed to give you all the performance features you expect, at a price no higher than many receivers currently on the market.

Scott's T 526 AM/FM Stereo Tuner and A 436 Integrated Power Amplifier provide such important performance features as front panel Dolby de-emphasis switching, a phase locked loop multiplex section and linear motion calibrated controls.

And that's only part of the story. Compare these important performance features with any other medium-priced tuner and amplifier on the market today.

The Scott T 526 Tuner

IHF sensitivity rated at 1.9 μ V, S/N ratio 68 dB and a capture ratio of 1.5 dB. Signal strength and center channel tuning meters. Four gang tuning capacitor for better image rejection. AM section designed around a tuned RF amplifier using J-FET for improved signal-to-noise ratio. AM noise suppression circuitry. The Scott A 436 Amplifier 42 watts RMS per channel, driven into 8 ohms from 20 Hz to 20 kHz with

no more than 0.3% THD. True logarithmic meter amplifier obviates the need for range switching. Individual channel power level meters calibrated in % of full power output capability eliminates confusing dB and VU readings. Two completely independent tape monitors allow two tape recorders to be used simultaneously for direct tape-to-tape copying. Instantaneous electronic protection circuit in the output stage IM distortion lower than 0.15% for a cleaner sound without listening fatigue.

High and Low filters, two auxiliary outlets and mic inputs.

And the Scott T 526 and A 436 come complete with professional rack-mount handles, and are backed by a three-year, parts and labor limited warranty.

For specifications on Scott's complete line of audio components, write or call H.H. Scott, Inc., 20 Commerce Way, Woburn, Mass. 01801. (617) 933-8800. In Canada: Paco Electronics, Ltd., Quebec, Canada. In Europe: Syma International S.A., 419 Avenue Louise, Brussels, Belgium.



Receivers/Tuners/Amplifiers/Turntables/Speakers CIRCLE NO. 100 ON READER SERVICE CARD

New Products latest audio equipment and accessories



□ The new Advent 201A stereo cassette deck, an evolutionary successor to the Model 201, has a "Sendust" alloy record-playback head that is reported to combine the desirable performance characteristics of permalloy with the wear resistance of ferrite materials. Another added feature of the 201A is a stereoheadphone amplifier, the output of which is connected to a standard phone jack on the side of the unit. The transport of the original 201 is retained, as are all the control and performance features, including the single recording-level meter that can be switched to read either channel or the higher of the two.

Frequency response of the 201A is 28 to 15,000 Hz ± 2 dB, with an A-weighted signalto-noise ratio exceeding 60 dB with chromium-dioxide tape and 57 dB with "standard" tape. Wow and flutter are less than 0.08 per cent (JIS weighting). Distortion, which is tape dependent, will not be affected by more than 0.1 per cent by the electronics up to and beyond tape saturation. The Advent 201A measures approximately 14 x 4½ x 9¼ inches; it is supplied with a plastic dust cover. Price: \$399.95.



□ Acoustic Research's new full-color catalog (thirty-six pages) describes in detail the company's current loudspeaker line and its approach to sound reproduction in general. The first part of the catalog deals with the standard of accurate reproduction as defined by AR, as well as the testing and manufacturing of AR speaker systems. The concluding sections deal with speaker evaluation, installation, and use, plus the physics of sound production and reproduction. The catalog is approximately paperback size ($8!4 \times 5!2$ inches); it is available free from selected AR dealers or for \$1 from Acoustic Research, 10 American Drive, Norwood, Mass. 02062.



De Luxe Tape Deck From Technics

□ An "Isolated Loop" tape-drive system is a feature of the RS-1500US stereo open-reel deck from Technics by Panasonic. The Isolated Loop employs a single large capstan with two pinch rollers that engage the tape at the beginning and end of the loop. Forming the loop itself is a cluster of four heads (half-track erase, record, and playback, plus quartertrack playback) and a guide roller at the bottom. The roller carries stroboscopic markings that are illuminated by a strobe lamp. The capstan motor is speed-governed by a quartzcrystal oscillator and a phase-locked loop, providing speeds of 15, 71/2, and 33/4 ips. Separate direct-drive motors power the reels, which can be up to 101/2 inches in diameter.

The RS-1500US transport has all-electronic rather than electromechanical (solenoid) switching. Among other features are frontpanel bias and equalization switching for different tape types, a pitch control with a range of 12 per cent, a real-time index counter, and various facilities for tape editing and splicing. The recording-level meters are true averagereading devices switchable in sensitivity. A timer can be connected for unattended recording. Heads are readily replaceable and are said to be alignable by the user.

Frequency response is 30 to 30,000 Hz at 15 ips and 30 to 25,000 Hz at 7½ ips, both ± 3 dB. The weighted signal-to-noise ratio is 60 dB, and wow and flutter are 0.018 per cent (wrms) at 15 ips. The dimensions of the machine are 18 x 17½ x 10½ inches; it weighs 51 pounds. Price: approximately \$1,500.

Circle 115 on reader service card



□ A new Robins splicing jig has side-by-side grooves for the ¼-inch tape of eight-track cartridges and open-reel as well as the narrower tape used in cassettes. Spring-loaded fingers that can be flipped to one groove or the other hold the tape that is to be cut by a singleedged razor blade and then joined by standard splicing tape. A length of double-face tape is supplied to secure the jig to a tape machine or other convenient surface. The splicing jig is Robins catalog No. R26060. Price: \$2.89.

Circle 116 on reader service card



□ The S8910 closely resembles the other top Sherwood receivers in performance and appearance, except that it lacks an AM tuner section. Its continuous-power output of 60 watts per channel is available at any frequency from 20 to 20,000 Hz with no more than 0.1 per cent harmonic or intermodulation distortion. The FM section employs Sherwood's "digital-detector circuit" together with a phase-locked-loop multiplex stage. Usable sensitivity is 1.7 microvolts, with 2.7 microvolts needed for 50-dB quieting with a mono signal. Capture ratio is 1 dB, AM suppression is 65 dB, and spurious-response rejection is 95 dB. Alternate-channel selectivity is 75 dB.

Special features of the S8910 include provisions for monitoring from and dubbing between two tape decks, switching between two pairs of speakers, connections for a fourchannel matrix adapter, and FM de-emphasis that is switchable between 75 and 25 microseconds (to facilitate the use of a Dolby (Continued on page 12)

Fact: If you're concerned about smoking, you should know something about gas.

You might not know it, but cigarette smoke is mostly gas—many different kinds. Not just 'tar' and nicotine.

And despite what we tobacco people think, some critics of smoking say it's just as important to

cut down on some of the gases as it is to lower 'tar' and nicotine.

No ordinary cigarette does both. But Fact does.

Fact is the first cigarette with the revolutionary Purite filter. And Fact reduces gas concentrations while it reduces 'tar' and nicotine.

Read the pack. It tells how you get the first low gas, low 'tar' smoke with good, rich taste.

Taste as good as the leading king-size brand.

And that's not fiction. That's a Fact.



Fact is the first cigarette with Purite granules. The selective filtering agent. Selective. That means it reduces specific gases in smoke that taste bad. Without removing the elements that taste good. So, for the first time, you get low gas, low "tar," and satisfying taste in one cigarette. Fact: The low gas, low "tar,"

Available in regular and merthol.

Fact: The low gas, low 'tar.'

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

Regular, 14 mg. "tar," 1.0 mg. nicotine; Menthol, 13 mg. "tar," 1.0 mg. nicotine ≘v. per c.garette, b≠ FTC method.

3 B. WT CO.

New Product/ latest audio equipment and accessories

decoder on Dolbyized FM broadcasts). In one position of the speaker-selector switch, rear speakers are connected to the receiver's outputs differentially, providing a simple speaker matrix for simulated four-channel effects. The S8910's dimensions are approximately $21\frac{14}{x} \times 6 \times 15\frac{34}{x}$ inches. A wood cabinet finished in walnut veneers is supplied. Price: under \$500.

Circle 117 on reader service card



□ The HP series of stereo power amplifiers offers evolutionary refinements over the original Audionics products. The new PZ3-II in particular, rated at 100 watts per channel continuous within the full audio band with no more than 0.03 per cent harmonic distortion, is now optionally available with peak-reading output-level meters and a black-anodized front panel suitable for rack mounting.

The full complementary-symmetry design of the PZ3-II includes what Audionics calls a "dynamically biased" output stage, said to be responsible for reduced notch and high-frequency distortion. Wide-bandwidth driver and output transistors are used, while the audio passband has been deliberately limited to 70,000 Hz. Input for rated output is 1 volt into the amplifier's 22,000-ohm input impedance. The signal-to-noise ratio exceeds 95 dB. Dimensions: 19 x 6 x 15 inches. The PZ3-II is \$529 equipped with meters and gain controls.

Circle 118 on reader service card



□ Hervic Electronics is the importer of the Goldring G900 SE stereo phono cartridge, a design whose weight of only 5 grams is made possible by the use of new materials and con-

struction techniques. The G900 SE is a moving-magnet cartridge designed to track over a stylus-force range of 0.75 to 1.5 grams. Frequency response is 20 to 20,000 Hz \pm 2 dB, and stereo separation is nominally 25 dB. The output of the cartridge is 1 millivolt per centimeter per second of recorded velocity, with a recommended load of 47,000 ohms shunted by a capacitance of 150 to 200 picofarads.

The G900 SE's stylus is elliptical in shape, with dimensions of 0.7×0.2 mil. The pickup provides a vertical tracking angle of 24 degrees. Price: \$120.

Circle 119 on reader service card



Semi-Pro Recorder

□ After a long absence, Ampex has returned to the audio-hobbyist market with a new open-reel tape deck suitable for professional or audiophile use. The ATR-700 is available in half- or quarter-track stereo versions and even in mono (full-track). The three-motor, solenoid-switched transport is equipped with various editing features such as a pause control, a switch that disables the tape lifters, and a "tape-spill" function that permits operation without the take-up reel being used. Either gap on the record head can be switched to playback duty for track synchronization. Controls include four-in, two-out mixing capability, a master recording-level control, and a variable-speed adjustment operable on all three speeds (15, 71/2, and 33/4 ips). The two built-in microphone preamplifiers have balanced inputs.

The ATR-700 is set up for various types of Ampex tape as well as for Scotch (3M) 250. Front-panel switches provide three different positions for both recording bias and equalization. With the recommended tapes, frequency response is 40 to 18,000 Hz at 15 ips, 40 to 15,000 Hz at 7½ ips, and 40 to 7,500 Hz at 3¾ ips, all ± 2 dB. Signal-to-noise ratio (Aweighted) is 55 dB for quarter-track and 60 dB for half-track. Wow and flutter (NAB) are 0.08 per cent for the two higher speeds. The machine takes reels up to 10½ inches. Approximate dimensions are 21¾ x 17½ x 9¾ inches. Price: \$1,695. An optional remote control with 16-foot cable costs \$115. A portable carrying case will also be available. *Circle 120 on reader service card*

Tandberg's Hexagonal Loudspeaker

□ The Fasett speaker system, new from Tandberg, is a compact design $(11 \times 9\frac{1}{2} \times 8\frac{3}{4})$ inches) that presents a hexagonal profile when viewed from the front. Within the bass-reflex enclosure are a 5-inch woofer and a $2\frac{1}{4}$ -inch cone tweeter. The multiple sides of the enclosure provide for a number of mounting schemes, including installation with drivers facing directly at or somewhat away from the listener, or drivers angled somewhat upward. The Fasett can also be hung, or attached to the wall by means of keyhole slots in its rear.

The Fasett system's impedance ranges between 4 and 8 ohms, and its power-handling capability is 25 watts continuous or 40 watts program material. An input of 6 watts produces a 96-dB output level at a distance of 1 meter. Frequency range is 50 to 20,000 Hz. The Fasett is available in black, antique white, and orange. Price: \$160 per pair.

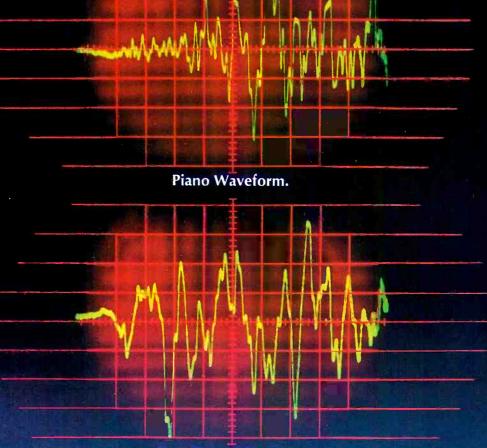
Circle 121 on reader service card



□ "Automatic Program Locate Device" is Sharp Electronics' nomenclature for the sequential programming system in the Optonica (Continued on page 17)

A new concept in speaker comparison. Instead of speaker vs speaker...

Live versus...



Bass Drum Waveform.

If you were satisfied with conventional speaker sound, Technics would have made a conventional speaker. Then you could have compared our speaker to their speaker.

Instead, we developed Technics Linear Phase Speaker Systems and compared them to music. Live music. Look at the waveforms. On the left are oscilloscope readings (the fingerprints) of representative musical instruments. On the right, these instruments as reproduced by Technics Linear Phase SB-7000A. Waveform fidelity that could only be achieved by a drastic departure from conventional speaker design. How did we do it? Our engineers realized there were three conditions to be satisfied. First, the crossover network should be designed to provide an overall linear phase characteristic for the whole speaker system, while simultaneously compensating for the different acoustic pressures of the individual drivers. Second, each driver unit must be precisely located in the optimum acoustic position. Third, the driver units must be designed and manufactured with flat amplitude and a wide frequency response.

By using our unique new phase-controlled crossover network, which incorporates 6 dB and 18 dB/octave cut-off slopes

Technics Linear Phase

Piano Waveform reproduced by SB-7000A.



Bass Drum Waveform reproduced by SB-7000A.

and special phase-correcting circuits for each driver, Technics engineers have been able to achieve an overall phase response, linear between 0° and ±45° between 100 Hz and 15 kHz. An incredible figure in a multi-range speaker system! The special phase-correcting circuits have also eliminated "audible dip" at crossover frequencies. These circuits assure excellent directional localization of the original sound source within the acoustic field.

To align the acoustic centers of the speaker units in precisely the same vertical plane, Technics engineers had to develop a new time-delay system using BBD (Bucket Brigade Device). After alignment, each unit was fine-tuned to assure precise linearity. Additionally, each unit was positioned vertically for the best horizontal dispersion and then spaced as closely as possible for the best vertical dispersion of all sound frequencies.

Each of the wide frequency response/ low distortion driver units was designed and manufactured by Technics after exhaustive amplitude and phase studies in anechoic chambers. It is this ability to both design and manufacture that has helped us become the world's largest speaker company. Supplying many of Europe's and America's finest speaker system designers with high-quality speaker units.

The result: Waveform Fidelity

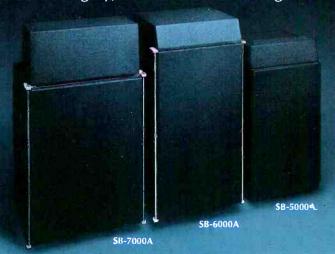
The diagrams show the phase and amplitude characteristics of Technics Linear Phase and three other leading speaker systems.

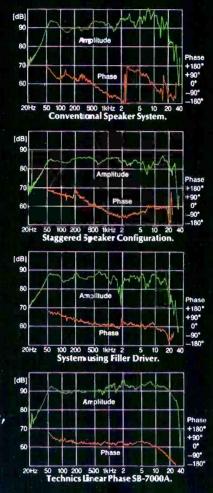
The other speaker systems, including those promoted with "phase linearity," show severe phase shifts at different frequencies.* But, as you can see, Technics Linear Phase Speaker Systems show an unprecedented flat and linear phase response. This results in more precise positioning of instruments in the stereo sound field.

What does all this mean to you?

Waveform fidelity you can hear...and see. For the first time in audio history there is a speaker system with not only wide frequency response, but complete linearity: Flat amplitude/frequency response and linear phase/ frequency response.

Technics SB-7000A, SB-6000A and SB-5000A. The world's most linear phase speaker systems. No more wandering stereo imagery, no more bass loss at high





volumes; just music, pure and simple, as it was originally played. Live.

And if specifications are music to your ears. Listen to these:

SB-7000A: 3-way speaker system with 13³/4" woofer, 4³/4" mid-range and 1¹/4" dome tweeter. Output level (1M) of 90.5 dB/watt.

SB-6000A: 2-way speaker system with 12" woofer and 1¼" dome tweeter. Output level (1M) of 91.0 dB/watt.

SB-5000A : 2-way speaker system with 10" woofer and 2³/₈" tweeter. Output level (1M) of 92:0 dB/watt.

The SB-7000A cone-type units are made from a new triple layer TC/aramid fiber. This combines lightness with high Young's modulus (strength) for smooth piston motion and low distortion.

The high-efficiency dometype tweeters in the SB-7000A

and SB-6000A use a diaphragm of heat molded expanded polyurethane on a silk cloth base.

Sounds great, doesn't it. But there's really only one way to be truly convinced. Listen to Technics Linear Phase Speaker Systems. Now available for demonstration at selected audio dealers for very selective ears.

*Test data and methodology available upon written request. Write Mr. James Parks, Technics Dept., One Panasonic Way, Secaucus, New Jersey 07094.



New Product/ latest audio equipment and accessories

RT-3535 stereo cassette deck. The system is controlled by nine push keys labeled 1 through 9. The numbers are meant to correspond to recorded selections on the cassette; these selections are played in the order in which they are entered on the keyboard. A circuit within the deck locates and "counts" the intervening unrecorded sections to identify each selection. A tenth CLEAR key wipes out the sequence and prepares the system for new commands. An LED indicator identifies the selection being played by number.

The RT-3535 is a front-loading two-motor machine with Dolby noise reduction and switchable bias and equalization for all current tape types. There is also a switchable limiter circuit to automatically prevent overrecording and a novel SPACE function that inserts an appropriate unrecorded interval between selections when a recording is being made. Frequency response is 30 to 15,000 Hz with "normal" tape, 30 to 16,000 Hz with chromium-dioxide tape, and 30 to 17,000 Hz with ferrichrome, all ± 3 dB. Signal-to-noise ratio is 58 dB without Dolby circuits; wow and flutter are 0.04 per cent (wrms). Approximate dimensions of the RT-3535 are 181/2 x 53/4 x 14 inches. The machine has simulated walnut side panels. Price: about \$430.

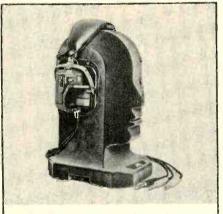
Circle 122 on reader service card



□ The Model 5000 from Scientific Audio Electronics is described as an "Impulse Noise Reduction System" intended specifically to suppress or eliminate the clicks, pops, and scratches that intrude on disc-record reproduction. The operation of the device is based on the differences that distinguish such noises from program material, including attack and decay times and phase characteristics. An electronic "program" circuit, together with a logic circuit, detects the presence of impulse noise and interrupts the audio signal for its (usually very brief) duration. In addition, the recorded material just before the noise is used by the Model 5000 to "fill in" the interruption with a suitable extrapolated signal that thoroughly masks the operation of the device.

The SAE 5000, which is intended to be installed in the tape-monitor loop of an audio system, is a stereo processor with a continuously variable sensitivity control. Pushbuttons defeat the action of the 5000 and also *invert* it, so that the only sounds you hear are the clicks and pops that are being removed, rather than the recorded material; this is intended as an aid in setting the sensitivity control as well as a demonstration of the device's efficacy. There are tape-monitor facilities to replace those taken up by installation. Harmonic and intermodulation distortion are less than 0.1 per cent, and frequency response is 20 to 20,000 H $z \pm 1$ dB. The 5000 has an input impedance of 75,000 ohms and a maximum output of more than 9 volts into 10,000 ohms. Insertion loss is less than 1 dB and the signalto-noise ratio exceeds 90 dB. Dimensions: 3 x 9¼ x 10¾ inches. Price: \$200.

Circle 123 on reader service card



JVC Headset for Reproduction and Binaural Recording

□ The JVC HM-200E is a headset containing both dynamic transducers for listening and a pair of electret-condenser microphone capsules for making binaural recordings. The microphone elements are mounted on the outside of each earpiece within cavities that simulate the shape of the external ear and as close as possible to the actual ear of the wearer. The electret capsules are powered by AA cells contained within the earpieces. A threeposition microphone switch provides flat frequency response, low-frequency attenuation, or "off." Overall microphone response is 50 to 10,000 Hz ±10 dB. Output impedance is 600 ohms, and the microphones' electronics provide a signal-to-noise ratio exceeding 45 dB.

The headphones in the HM-200E are of the acoustically isolating type with thickly padded ear cushions and headband. The phones have a frequency response of 50 to 10,000 Hz, an impedance of 8 ohms, and a level switch. Air seals and partitioning prevent any acoustical interference with the microphones. The entire headset weighs just over 11/4 pounds. The cables are about 6 feet long, terminating in a three-conductor stereo phone plug for the headphones and a pair of two-conductor phone plugs for the mikes. Also supplied is a polystyrol-foam dummy head (with screw sockets for microphone stands and adapters) to be used for recording without the operator's having to wear the headset. Price: approximately \$80.

Circle 124 on reader service card



□ As a companion to the Uher portable stereo cassette machines, the manufacturer now offers a two-piece amplifier/preamplifier combination for automobiles, boats, or any other vehicle with a 12-volt storage battery. The separate power amplifier installs in any convenient space; since it switches on automatically when it senses an audio signal at its input, it is unnecessary to route its battery connections through the preamplifier for on/ off switching. The preamplifier, which provides bass, treble, mid-range, and balance controls, occupies the upper part of a special under-dash mounting-bracket assembly. Beneath it, a compartment receives the tape machine, which mates with a signal/power-cable connector when slid into place.

The power amplifier is rated at 25 watts per channel continuous into 8 ohms from 50 to 20,000 Hz with no more than 3 per cent harmonic distortion. The preamplifier's tone controls have a range of ± 17 dB at 35 Hz, ± 8 dB at 1,000 Hz, and ± 15 dB at 30,000 Hz. The preamp/mounting-bracket assembly is just slightly wider than the 7-inch width of the Uher portables and about 4 inches high. The combination of preamp/bracket and power amp is designated the CR200 "Stereomatic." Price: \$195.

Circle 125 on reader service card

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

Recent fluctuations in the value of the dollar will have an effect on the price of merchandise imported into this country. Please be aware that the prices quoted in this issue may be subject to change.

You may have noticed that few turntable manufacturers call your attention to the critical role of the tonearm in record playback. Dual is an exception. For years, we have seen pointing out that the fidelity of reproduction and record life are significantly influenced by every aspect of tanearm design. Whatever the shape, materials, or mechanics of a tonearm, the goa is always the same: to maintain the cartridge in the correct geometric rela-

Why we want you to know more abou tonearms. And why groove undulations, it will gouge ts own way. And as we have frequently reothers may not aged record.

tionship to the groove and to permit the sty us to follow the contaurs of the groove freely and accurately. Whenever the stylus cannot follow.

Every tonearm designer should consider geometry, mass, balance, resonance and bear ng friction However despite the simple fact that the shortest distance between two points is a straight line, some designers are more concerned with appearance. Hence, the curved tonearm, whose deviations from optimum design simply add mass, reduce rigidity and incréase the likelihood of resonance. Which is why all Dual tonearms are straight.

Dual engineers have clavays designed for optimum performance, which depends on more than external shape. Stylus force is applied through a long coiled spring centered around the vertical pivot, and its accuracy is mainfaired independently of record warp or turntable level. So is the dynamic separately for all stylus types, but is self-compensating for grocve diameter. You might keep all this in mind when you are considering your next

turntable. Chances are you'll want it to be a Dual.

United Audio Products, 1205c. Columbus Ave., Mt. Vernor, N.Y. 10553 Exclusive U.S. Distribution Agency for Dual

The Dual CS721. Fully automatic, single, play with automatic tonearry, lead-in groove sensor Less than \$310, including base and cove

10.039

Simbal-mounted Dual tanearms pivot horizontally and entically an identical sets of pivot points and highprecision low-friction bearings. The metal of the pivot point is first hardened and then hored, a pracess which produces microscopically smooth surfaces. The ball bearing races are only C137 inch in diameter. Bearing friction vertical, <0.007 gram; horizontal, <0.015 gram

Stylus force, applied by long coiled spring ground vertical pivot, remains perpendicular to record even if turntable is not level.

The curved tanearm ma appear longer than the Duat tonearm, but both actually have the identical effective length and horizontal tracking angle.

10



Actual size of Dual tupe (A) and typical curved tonearm (B). For the same effective length, straight Dual tonearm has lower mass and resonance yet greater rigidit.

mmm

The Dual 1249: Fully automatic: single-play/multi-play plus²continuous repeat. Bel-drive. 12[°] dynamicallybalanced platter, 6% pitch-cont-al, illuminated strobe. Less than S280.

Other full-size belt-drive mode s include : Dual 502, semi-automatic. Less than \$160, Dual 510, semiautomatic, with lead-in groove sensor. Less than \$200.

Cuci 1249

Tape Q. and A.



Which Tape Format?

Q. I'm considering adding a tape machine to my system, but I can't make up my mind whether to go cartridge, cassette, elcaset, or open-reel. What are the relative advantages of each format both for recording and for playing back prerecorded tapes?

ARTHUR KRAMER Philadelphia, Pa.

A. Choose open-reel if you are interested in making live tapes, editing, and monitoring while recording. The open-reel format also provides (by at least a small margin) the lowest distortion, widest frequency response, lowest wow and flutter, and lowest noise levels, and it is less likely to distort high-frequency signal peaks. Cassettes, on the other hand, have the virtues of compactness, convenience, and a performance level (in the topquality machines) that will satisfy all but the most critical listeners. Off-the-tape monitoring is available with cassettes, but only in the expensive three-head decks.

Eight-track cartridges have many of the same deficiencies as the cassette when compared with open-reel machines, plus specific problems of their own. In addition, they are far less convenient to record on than cassettes because of their use of four sets of parallel stereo tracks on a continuous-loop tape. Prerecorded eight-track cartridges played at home-rather than in a car-have a hiss level that makes them unacceptable for critical listeners (road noise masks the hiss in cars). Although the usual run of prerecorded cassettes are only marginally better in this regard, the Advent prerecorded cassettes all sound fine. (For a free copy of the Advent catalog, write to: S. R. Shapiro, Advent Corp., 195 Albany Street, Cambridge, Mass. 02139.)

The year-old elcaset format is off to a slow start, and it's hard to judge at the moment where it will be going. Although I have few if any reservations about its *potential* technical quality or convenience, the relatively high consumer cost of the elcaset machines and tape cartridges may inhibit sales to the point that the format will have difficulty achieving wide acceptance. I know of no plans at the moment for a prerecorded elcaset catalog. The elcaset format and the thinking behind it were discussed in the October 1976 issue of STEREO REVIEW. Open-reel prerecorded tapes have slowly improved over the years, but, when they are compared to the best discs, I find that their superiority is neither sufficient nor consistent enough to justify their extra cost. And prerecorded tapes in any format do not provide the easy location of selections that discs do, although some sophisticated new elcaset and cassette machines have selection-finder circuits built in. (Note that my comments on sonic quality are directed only at the commer-



Photo illustrates relative sizes, if not the virtues, of the cassette and elcaset tape formats.

cial prerecorded products. The home tape recordist can easily turn out tapes in any format that are hard to tell from the original program, assuming that the machine and the tape used are of good quality.)

Since I'm aware that my views on the question of duplicated tape quality can be argued with, in the interest of fair play and equal time I refer you to Barclay-Crocker: B-C, if not the largest, is at least one of the foremost retail specialists in open-reel prerecorded tapes, carrying an extremely wide selection of titles including some they are duplicating themselves. Although the prerecorded tape market is somewhat confused at the moment, with various labels either being discontinued or looking for a home, B-C is the first place to look for whatever is available. They offer a fast, efficient, personalized service both over the counter and through mail order, and visitors are welcome to stop in and browse. A catalog costs \$1. The address is Barclay-Crocker, Dept. SR, 11 Broadway, New York, N.Y. 10004.

Missing Highs

O. The prerecorded cassettes I have been buying lately, which are marked in very small print as being Dolby B processed, have highs in playback only when the Dolby circuit is switched off; when I switch in my deck's Dolby circuit the highs disappear. I think I would rather have the highs and the hiss than neither.

> PAT BREWSTER Seattle, Wash.

A. Many of the cassette duplicators in the United States, for one reason or another (mostly because of inadequate care and equipment), don't record the audio frequencies above 8,000 Hz or so at full strength on their prerecorded cassettes. Since the Dolby encoding process boosts the low-level high frequencies, Dolbyized tapes played without decoding sound somewhat brighter than non-Dolbyized tapes. However, when you switch in the Dolby decoding, the extra boost is removed—as it should be—along with 5 or 6 dB of hiss, and you are left with a tape that is reasonably hiss-free but sounds dull because of the highs that were lost in the duplication process. It is obvious that the problem lies not with Dolby processing, but rather with those duplicators who are doing such a rotten job. This is not true of all prerecorded cassettes; the Advent releases, for example, demonstrate just how good Dolbyized prerecorded cassettes can be.

Incidentally, if you seem to be losing highs with your own home-made Dolby cassettes, first check the performance of your machine by dubbing and playing back a disc without the Dolby circuits switched in. If everything sounds okay without Dolby, but high-frequency loss is heard when you record and play through the Dolby circuits, then either your tape machine's equalization and bias do not match the requirements of the tape you are using (a small loss in highs because of overbias, for example, will be doubled by the Dolby circuits), or the Dolby circuits in your machine are not properly adjusted.

Old Tape, New Deck

Q. I've been considering upgrading my cassette deck to a front-loading type. However, I've been told that tapes recorded on one good deck will not always sound first-rate on a different good deck. Will a new, higher-quality deck play my previously recorded tapes without any loss in sound quality?

> BILL BROCK Keswick, Va.

A. First of all, I detect an implication in your question that front-loading decks are *necessarily* of higher quality than toploading types. Some are—but some aren't. Front loading is a convenience factor; in and (Continued on page 22)

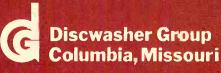
The Simple Answer is A Complex Solution.

New D3 Fluid

unmatched function
unequaled vinyl safety

The Discwasher® System:

the best record care system in the world.



If your cartridge is more than three years old, don't replace your stylus!

Dor't get us wrong. There is nothing worse than playing your records with a worn stylus. And no better way to restore your old unit to its original glory than a new diamond.

But frankly there have been significant strides made recently in the phono cartridge field. And the new cartridges of today stand head and shoulders above even the finest of a few short years ago.

Here's the phoice: Get fresh – but outdated – performance with a replacement stylus, or anjoy all the benefits of modern cartridge research and development for just a few dollars more. You'll find that you can update your system for far less than you might imagine. It's propably the most dramatic single improvement you can make.

For instance, Audio-Technica offers Universal¹⁴ cartridges equipped with a genuine Shibata stylus and our un quely effective Dual Magnet¹⁴ system beginning at just \$75.00 list. Or you can replace your present cartridge with a ²resh new Audio-Technica cartridge with highly-poliched elliptical tip for as little as \$45.00 list.



Are these new models worth the difference? Absolutely. You'll be an azed at what you near from today's generation of phono carridges Improved frequency response. Lower distortion Better separation. Less record wear. Truly better sound.

A new Audio-Technica cartridge. Your best value in hi-fi.

AUDIO-TECHNICA U.S., INC., Dept. 37F, 33 Shiawassee Avenue, Fairlawn, Ohio 44313

tech

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of itself it has nothing to do with machine quality, and it seems likely to me that a \$400 top loader is going to deliver better performance overall than a \$200 front loader.

As I understand your question, you are asking whether a tape that plays back with good quality on the deck on which it was made can sound less good on a different deck with better specs. Assuming that the original cassette deck was correctly adjusted for the standard playback curves, and its head(s) were accurately aligned, then in general it is safe to assume that tapes made on it are going to play back as well or better on other correctly adjusted quality decks.

There are, however, a couple of areas where frequency-response discrepancies may occur. Over the years there has been a shift in the standard low-frequency equalization characteristic of cassettes, with the result that tapes played on machines made at different times may sound slightly bass-heavy or bassshy. Also, some manufacturers' machines are not accurately aligned to the Dolby recordplayback characteristic. This may cause a slight but audible boost or cut in the low-level high frequencies when playing back tapes on machines other than the one they were recorded on. In general, however, the improved overall characteristics of the newer or more expensive machines will usually provide somewhat improved sound-even from older recorded tapes.

Dubbing Dolby

O. My question is rather simple: when recording a Dolbyized tape from one deck to another, is it better to decode the tape playing from deck No. 1 and re-encode when recording on deck No. 2, or to record the tape from deck No. 1 to deck No. 2 without decoding and re-encoding?

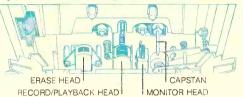
> A. RINGEL Brooklyn, N.Y.

Best results are achieved in duplicating. A. Dolbyized tapes (when they lack a reference test tone) if you decode the signal and then re-encode it when making the copy. Although this may seem like redundant processing, it is necessary because proper decoding of a Dolbyized signal can be achieved only if the decoder circuits "track" the encoding both in signal level and frequency. When you copy Dolbyized audio material (without decoding it, that is), the odds are that it will be recorded on the new tape at a higher or lower level than on the original tape. This can confuse the Dolby decoding circuits because the Dolby reference level has been shifted. However, if there is a Dolby-level test tone on the tape with the encoded program, then this can serve as a zero-reference guide during future duplications-and without decoding. Note that any frequency aberration that occurs in the signal after it has been encoded (because of the use of a "hotter" tape for the copy, for example) will be emphasized by the decoding process. In short, if an encoded signal is not fed to the decoder circuits at exactly the same reference level at all frequencies that it had when encoded, then the Dolby circuits simply cannot react properly. The result is a diminution of the noise-reduction potential of the Dolby circuits and some high-frequency boost (or loss) in playback of low-level (soft) audio signals.

HOW TO TELL A FISHER CASSETTE DECK FROM ANY OTHER.

Fisher manufactures only 3-head cassette decks. For the important reason that all professional recordings are made on 3-head decks.

The only way to make consistently perfect, high fidelity tape recordings is to listen to the sound as it is recorded. The way professional recording studios do.



The 3-head design of the Fisher CR5115 and CR5110 permits monitoring directly off the tape while recording. You hear exactly what is recorded on the tape. No second guessing. No hoping for the best. No more poor recordings or missed opportunities because of operational errors or tape problems.

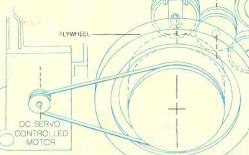
The CR5115 and CR5110 incorporate four preamplifiers — two for recording and two for monitoring. Two head decks use two preamplifiers.



A Tape/Source switch enables instantaneous comparisons to be made between the incoming signal (source) and the

recorded signal (tape). Indicator lights for each mode let you see at a glance which signal is being monitored.

Tape Heads. The CR5115 and CR5110 have separate heads for erase, record/playback, and monitor. The CR5115 uses ferrite heads for extremely long life and superior frequency response.



Tape Transport. In the CR5110 a large, dynamically-balanced heavy weight flywheel is driven by a regulated speed DC motor. The CR5115 uses servo control to provide even more precise tape speed. A precision-ground capstan provides good tape-to-head contact and accurate tape movement. Wow and flutter on the CR5110 is less than 0.09% WRMS; on the CR5115, less than 0.07% WRMS.



Limiter. The CR5115 has switchable limiter circuitry to prevent excessive peak levels from causing distortion. Sudden loud passages are automatically recorded at the maximum

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distortion-free level — without affecting the overall input level and while maintaining high signal-to-noise performance — better than 58dB with Dolby.

Tape Selector. Fisher includes a three-position tape select switch which sets the recording electronics for all of the latest tape formulations. You get full compatibility between recording circuitry and the type of tape used...for CrO₂, and standard tapes, as well as FeCr tape. **Dolby**. Both the CR5115 and CR5110 have built-in Dolby noise reduction circuitry. It virtually eliminates tape hiss and improves the signal-to-noise ratio by as much as 10dB.



The CR5115 has switchable Dolby FM circuitry, complete with the 25 micro-second de-emphasis necessary for the proper demodulation of Dolby-encoded broadcasts. Even if your receiver has no FM Dolby circuitry built-in, you can enjoy the full dynamics and noise-free reception of Dolby-encoded FM with the CR5115.



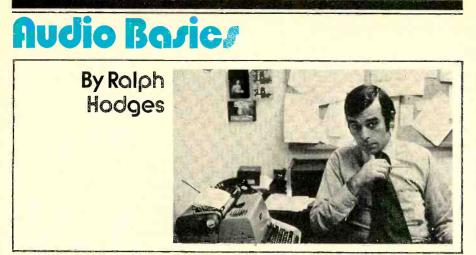
CR5110

It's really easy to tell Fisher tape decks from all the others. Compare the features and specs of the CR5110 (priced at \$199.95*) and the CR5115 (priced at \$249.95*), and you'll see why they're the best value around. Now at fine audio stores.

Fisher Corporation, 21314 Lassen Street, Chatsworth, Calif. 91311







ON BUYING A TAPE RECORDER

HERE are three steps to buying a good tape recorder: (1) deciding what type of machine you want, (2) selecting one that performs to your standards, and (3) explaining the apparent extravagance to your nearest and dearest. Item 1 presents no special difficulties if you take your time and think things through (for starters, see Larry Klein's Q & A column this month). Item 3 is plainly impossible, so I will not even try to deal with it here. But item 2 is, as we know, within the realm of the possible for most consumers. True, the task is far from easy and a good deal less than straightforward, and winning your way through to truth, light, and the best machine for you requires an attack on more than one front, but then, as we all know, nothing good comes easy.

First, what about specifications? A good tape machine has good specs, to be sure. Unfortunately, a poor machine may just as easily have good-even somewhat unbelievably good-specs. The subject of tape-recorder specifications (and particularly the various non-comparable ways in which they are derived and presented) is, in other words, a large one, too large for the scope of this short column. Specs definitely have their uses, but for the moment we'll have to consider other legitimate means to our goal. One of these is the brute economic strength ploy: it is possible to pay top dollar for a brand name with a reputation as solid as the pyramid of Cheops and never have reason to regret it. I think this is a fine tactic, though it may not appeal to the bargain hunters among us. But once you've taken these first two approaches-specs and brand names-as far as they can go, you have no choice left except the personal research project. Reports in magazines and advice from friends are the starting point; the next step takes you into the store itself and the hurly-burly of commerce.

This is not the best environment for cool deliberation on complex matters, so prepare yourself—have in hand well ahead of time any information that might be difficult to get in the store or to trust a salesperson about, such as the recommended type(s) of tape for the machines you have under consideration. Resolve to be as systematic and thorough as circumstances permit. Remain sympathetic but firm when salespeople become increasingly restless with your indecision. Don't hurry; go about your business and make the following tests:

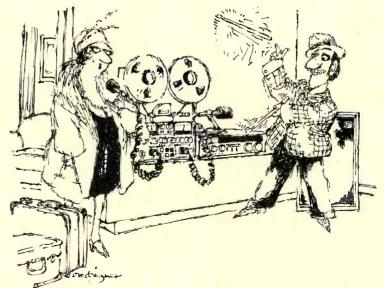
• The Facsimile Test: This is the most obvious measure of a good tape recorder—can the machine make a recording with no audible difference from the original? A change in tonal balance is an audible difference, and it will most certainly be encountered if the machine is not properly matched to the tape. Distortion, noise (hiss), and flutter are other differences; they should not be added in more than barely perceptible amounts.

For valid *comparisons* between recorders you have to proceed very carefully. First, assuming you can monitor off the tape with both machines while recording, advance the recording levels on each in turn until distortion becomes obvious, and then back off until it just disappears. This makes their distortion levels equal. Then, using only their playbacklevel controls (which we'll also assume they have), make their loudness levels equal. Finally, listen to see if their hiss levels are equal. If they are not, the quieter machine wins. There are any number of variants on this test, but they must take all the above factors into account. Thus, for two recorders to be equal, their distortion, loudness, and noise (and also their frequency responses, of course) must be *simultaneously* equal.

Those unfortunates who are considering machines that lack playback-level controls and/or off-the-tape monitoring can also perform this test, though at great additional inconvenience. To match distortion, trial-anderror procedures are called for, with constant rewinding of the tape to listen and then rerecording with readjusted recording levels. To match loudness levels, you can always plug the left playback channel of one machine into the left tape input of the amplifier or receiver and the left playback channel of the other machine into the right tape input. Then the system's balance control can perform the level matching. But thereafter, be sure to listen to only one channel (machine) at a time.

• The Noise Test: This is the ultimate frequency-response test, useful only to those who want assurance that the machine will handle the highest audible frequencies without loss. It consists simply of recording and listening to FM interstation noise. (Full details on this test were provided in the article "Using FM Interstation Hiss to Test Recorders and Speakers" in the November 1976 issue of STEREO RE-VIEW.) To make sure the tuner provides the very highest frequencies (its multiplex filter might ordinarily prevent this), you can feed the recorder from the "FM detector" or "four-channel" jack which is a feature of most modern tuners and receivers. A moderate recording level should be used, particularly with cassette decks. Any loss of extreme high frequencies will be immediately apparent unless the loudspeaker has reduced highs to begin with.

• The Reductio ad Absurdum: This works only on those machines that permit recording on one channel at a time (most cassette decks, for example, don't). Using appropriate recording levels at all times ("appropriate" means levels that are as high as possible without running into audible distortion), record a mono program on one channel. Listen to it; it (Continued on page 26)



"... Lester, when you hear this I'll be in California with Murray. You remember Murray—he plays drums down at the Jug Tavern on weekends...."

The battery that powers your watch can also ruin it.

If the battery in your electric or electronic watch ever leaked, it

could damage the watch internally. To help prevent leakage, every watch battery made by Union Carbide is sealed in a unique and patented way: by radially compressing a resilient gasket (1) between the cell top (2) and outer metal container (3). "Eveready" was the first battery maker to use this effective method for preventing leakage. Ask the U.S. Government. They granted us Patent No. 3,069,489.

Why nobody compares their batteries to our alkaline power system.

You've seen television commercials where somebody compares the longer-lasting power of their battery to ordinary batteries. But you've never seen a commercial where anybody says that their battery lasts longer than "Eveready" Alkaline Power Cells. Because for electronic flash, cassette recorders, calculators, smoke detectors, movie cameras—anything that really eats up energy—you can't buy a longer-lasting power system than "Eveready" Alkaline Power Cells.





Will you have a flashlight handy when you need one?

Sure, you know where to look. Junior was using it last night to work on his car. Or did he borrow the flashlight Amy uses to read with under the covers after "lights out"? If your family is typical, the flashlight you may have to depend on in an emergency may not be where

you think it is. Keep a spare in a safe place, like your glove compartment. The "Eveready" Economy Flashlight makes it easy, because it's priced right. Get one. You never know when you'll need it.

Eveready wants you to know



What you don't know about effective tip mass won't hurt you,

just your records.



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Bang & Olufsen of America, Inc., Dept. 12F 515 Busse Road, Elk Grove Village 60007

On Buying A Tape Recorder . . .

(Continued from page 24)

should sound fine. Now transfer the program to another channel, using either the machine's sound-on-sound switching (if any) or a simple patch cord from the output of channel one to the input of channel two. Listen again; it should sound worse—hissier and perhaps subtly distorted. Now transfer the program back to the original channel for more listening, and so on. Before many back-and-forth transfers have taken place the program should sound so bad that it would be absurd to continue. The better the machine, the greater the number of transfers possible before total deterioration of the signal occurs.

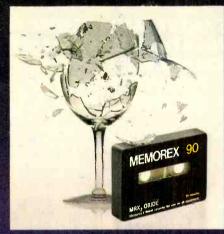
This test assumes that the recorder's inherent noise, distortion, wow, and flutter are additive to some extent with each transfer. The greater they are to begin with (although they may not be heard at first), the faster they'll add up to where they are grossly audible. This is a particularly tough test, so don't be surprised at anything that happens.

• Transports of Delight: The tape transport, by definition, consists of the total mechanism that propels the tape from one reel to the other. It must be gentle and precise. For evidence of both qualities, you can try fast-for-ward and rewind in rapid succession, watching closely for any jerks, jammings, or other signs of distress. Any open-reel machine with high high speeds will have difficulty winding an absolutely smooth tape "pack" on the reel. Through the openings in the sides of the reel you'll be able to see—and even feel— raised and depressed layers of tape in almost every case. But take care that the exposed tape edges have not been rippled or otherwise roughed up, as will happen if they're brought into violent contact with a reel flange or tape guide. (Note: if you can't find an unwarped reel in the store to make this test fair, buy one. Good aluminum reels are available in Scotch and TDK brands, among others.)

You can't really observe the transport of a cassette deck in operation, but you can *hear* it. Often you'll note a brisk rattling sound when a cassette is fast-forwarded or rewound. This is actually an encouraging sound; it means the tape packs are loose and free-spinning. A poor transport may quite quietly be winding sluggish tape packs that will jam.

• Maintenance: It's an unwelcome thought, but sooner or later-and ideally at regular intervals-any tape machine will require maintenance. Tape recorders, besides being high-speed mechanical devices of great complexity, have a built-in wear problem and a necessity for precise physical alignment. Find out where the manufacturer maintains service facilities. It would not be a mistake to give this considerable weight in your buying decision, because driving your machine a short way to a convenient repair depot will prove a lot easier than crating it carefully for a truck ride across the country. It will also encourage you to have it attended to that much more often; that way it will be able to repay some of the love you must expect to lavish on it.

Is it live, or is it Memorex? Well, Melissa?



We put Melissa Manchester to the Memorex test: was she listening to Ella Fitzgerald sing ng live, or a recording on Memorex cassette tape with MRX₂ Oxide?

It was Memorex, but Melissa cou dn't rell.

It means a lot that Memorex can stump a singer, songwriter and musician like Melissa.

In fact, when you record your own music, Memorex can mean all the difference in the world.



EIGHT ALL-NEW MARANTZ UNITS.

Probably the largest — and certainly the finest — line of stereo receivers ever unveiled. And it all starts with the **world's greatest receiver**, the Marantz 2385, with output rated at an astonishing **185 Watts per channel** (minimum RMS at 8 Ohms, 20-20,000 Hz, with no more than 0.05% Total Harmonic Distortion). And at the other end of the line-up is the most incredible receiver **value** Marantz has ever offered: the 2216, with 16 Watts per channel, minimum RMS at 8 Ohms, 20-20,000 Hz, with no more than 0.5% Total Harmonic Distortion.

And there are 6 other new and outstanding Marantz receivers — with prices to match any budget, with all-new higher power output, and with range of features to match any degree of involvement with audio.

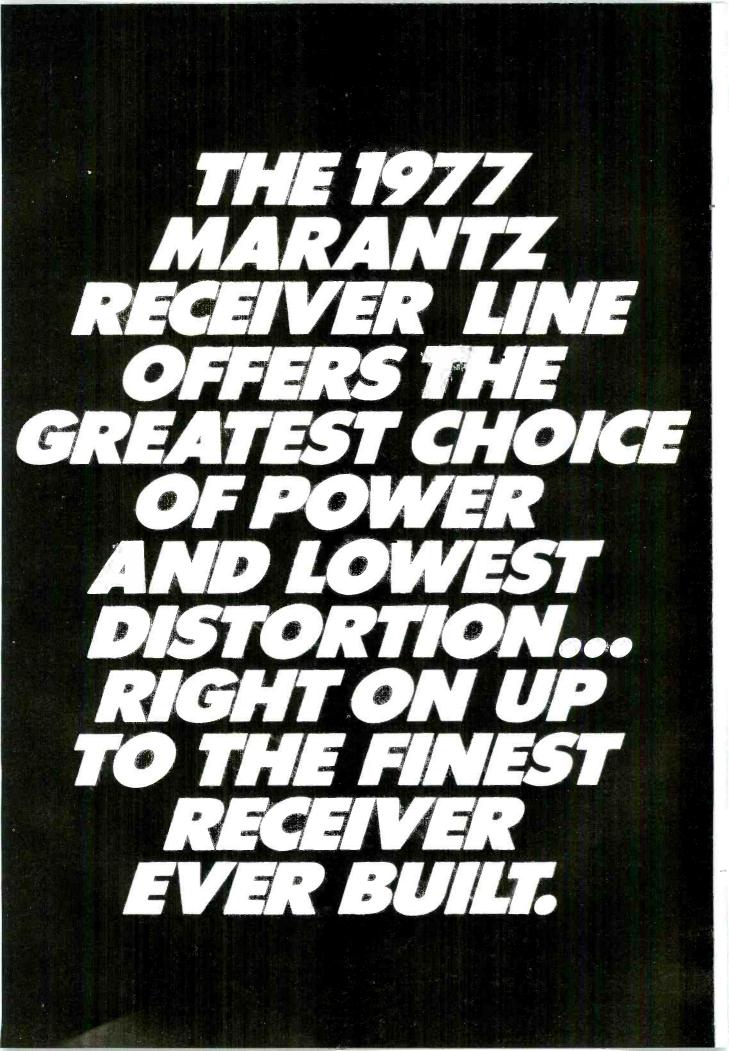
Never before has the incomparably thrilling sound of Marantz been available over such a broad spectrum of power and performance. Never before has a receiver line packed so much muscle, either, and with such low distortion. Never before have you had more compelling reasons to buy your first receiver or to upgrade your present one. At last "component quality" acquires true meaning in describing receivers. The Marantz 2385 Receiver, for instance, **exceeds**—in power, features and specifications—most separates on the market today, while still being packaged into a remarkably manageable size for such walloping power and vast array of features.

THE MOST IMPRESSIVE COMBINATION OF QUALITY PERFORMANCE FEATURES EVER ENGINEERED INTO A RECEIVER LINE.

Every possible technological advance that can improve performance has been designed into this new generation of Marantz receivers. For example, the 2385 includes: Plug-in optional **Dolby* FM Noise Reduction Adapter** for the lowest noise possible with FM reception. **18 dB per octave Bessel-derived high filter**—an advanced linear phase design that reduces unwanted high frequency noise—and does the job with a more natural, less colored sound be-



2385



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MODEL NUMBER	2216	2226	2238	2252	2265	2285	2330	2385
RATED CONTINUOUS POWER, MINIMUM RMS AT 8 OHMS, 20-20,000 HZ	16 Watts per channel	26 Watts per channel	38 Watts per channel	52 Watts per channel	65 Watts per channel	85 Watts per channel	130 Watts per channel	185 Watts per channel
TOTAL HARMONIC DISTORTION	0.5%	0.3%	0.1%	0.1%	0.08%	0.08%	0.07%	0.05%
FM SENSITIVITY (IHF USABLE)	13.2 dBf (2.5 μV)	10.8 dBf (1.9 μV)	10.8 dEf (1.9 µV)	10.8 dBf (1.9 μV)	10.3 dBt (1.8 μV)	10.3 dBf (1.8 μV)	10.3 dBf (1.8 μV)	9.3 dBf (1.6 μV)
50 dB QUIETING SENSITIVITY (STEREO)	39.2 dBf (50 μV)	37.2 dBf (40 μV)	37.2 dBf (40 μV)	37.2 dBf (40 μV)	36 dBf (35 μV)	36 dBf (35 μV)	36 dBf (35 μV)	33.2 dBf (25 μV)
FM DISTORTION (1 KHZ) MONO STEREO	0.4% 0.7%	0.15% 0.3%	0.15% 0.3%	0.15% 0.3%	0.15% 0.3%	0.15% 0.3%	0.15% 0.3%	0.15% 0.2%
CAPTURE RATIO	3.0 dB	1.0 dB	1.0 dE	1.0 dB	1.0 dB	1.0 dB	1.0 dB	1.0 dB
FILTERS	High filter	High filter	High filter	High filter	High and low filters	18 dB per octave Bessel-derived high filter and Butterworth low filter		
FM DOLBY CAPABILITY		25 μ S FM de-emphasis	25 µS F M de-emphasis	25 μS FM ce-emphasis	25 μS FM de-emphasis	25 μS FM de-emphasis	Built-in FM Dolby system	Optional plug in Dolby FM adapter – 25 µS FM de-emphasis
SUGGESTED LIST PRICES**	Under \$240	Under \$300	Under \$360	Under \$460	Under \$570	Under \$670	Under \$790	Under \$1100

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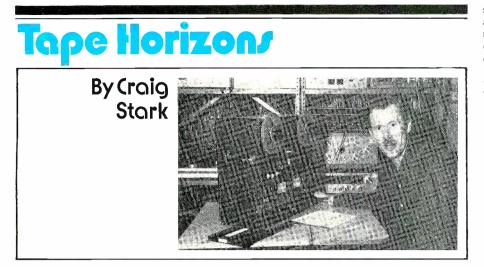
cause it eliminates the overshoot and "ringing" common to other filters. 18 dB per octave 15 Hz sub-sonic Butterworth low filter outs sub-sonic transients and rumble that effectively rob you of vital amplifier power. Never before has such advanced filter technology been applied to audio components or receivers.

The Marantz 2385 also offers: 2 LED peak power indicators to continuously monitor amplifier output to instantly let you know when transients are driving the amplifier to full output. An amplifier section utilizing full complementary symmetry direct-coupled output in a massive triple-paralleled transistor array-an advanced design never before used in a receiver. The result is the highest day-in, day-out operating reliability and lowest Total Harmonic Distortion. 5-gang FM tuning capacitor, in conjunction with dual-gate MOS FET FM front end ensures virtually complete rejection of spurious signals, with an IHF usable sensitivity of 1.6 microvolts, and a 50 dB quieting sensitivity figure in stereo of 25 microvolts virtually the finest such specification ever obtained in a receiver -- even a separate tuner.

And the 2385 includes: Three tone controls for each channel—bass, treble and midrange—for maximum tonal flexibility. Selectabl frequency turnover points to adjust range of influence of each tone control. Independent tape copy facility, which permits dubbing from one tape deck to another while listening to yet a third signal source, such as records or FM. Linear phase IF filters for lowest distortion. LED function indicators.

But look at the exciting array of features included in virtually every receiver: phaselocked loop, a sophisticated circuit that maximizes stereo separation while minimizing distortion. Dual-gate MOS FET FM front end. Full complementary symmetry amplifier section plus direct-coupling. 25 microsecond de-emphasis switch for properly receiving Dolby FM, the new generation in stereo broadcasting. Gyro-touch tuning for smoothest, most accurate station selection. See the new 1977 Marantz receiver line at your Marantz dealer ncw. Fantastic!





WHAT'S COMING UP?

N a little more than the three decades since U.S. Army Signal Corpsman John Mullin "captured" three German Magnetophon recorders, the tape industry has gone from birth to a vigorous maturity, and it's worth pausing this month to try to see just what is (or may be) coming up on the tape horizon.

Six years ago this month the editors of STEREO REVIEW asked me to design—on paper—my "Dream Machine," and it has been a source of great satisfaction to me ever since to watch one after another of its features (often much improved upon) progress from the studio or drawing board into the world's listening rooms.

Cassettes have now, of course, come to dominate all but the high end of the tape market (in terms of both dollars and frequency response), but their position is about to be attacked on two fronts. "Microcassettes," smaller than matchboxes and running at only 15/16 ips, have been developed, and before long you may be able to put all of Mozart's symphonies into the glove compartment of your car—along with the machine to play them on. (The *microcasette* should not be confused with another miniature cassette dictation system, the *minicassette*, which has a variable-speed drive system that makes it unsuitable for music recording or reproduction.)

From the opposite direction, a number of manufacturers have concluded that the cassette format, with its rigid licensing restrictions, has been developed about as far as it is economical to do so, and they have decided, further, that its performance simply is not going to satisfy the *critical* home listener/recordist. Historically, 7½-ips open-reel tape has been the choice for serious music recording, and attempts to sell 3¾ ips as "just as good for half the tape price" simply failed. But perhaps in bypassing the 3¾-ips speed entirely, the downward speed shift of the cassette format did go just a bit too far.

Such, at least, is the thinking behind the new elcaset format, announced some time ago and shortly to be introduced (if promises are kept) in actuality. Twice the speed and a wider track width will give the elcaset—it is still only about the size of a paperback book significant advantages in frequency response and signal-to-noise ratio over its smaller cousin. No less important, though the convenience of no-threading operation is retained, is the fact that in the elcaset system the tape leaves the shell entirely, so the advantages of an open-reel deck (stable and precise tape drive and guidance) will be retained. And, of course, three-head operation will be the norm, not the exception.

Poor open reel! The elcaset, if successful, will knock out the little that is left of its attractiveness in the "under \$1,000" market. But, for absolutely state-of-the-art professional and semiprofessional applications, open reel has been, is, and will continue to be supreme, and the continuing attention paid to its development will, as in the past, be the primary (though by no means exclusive) source of the fundamental improvements that find their way into home tape systems.

OOKING at the state of the reel-to-reel art today, one of the immediately obvious areas of development is in the design of tape-drive mechanisms that will more nearly do what a transport (in its "play" mode) is supposed to: move the tape across the heads at an accurate, unvarying rate. The central point in the system, of course, is the rotating capstan, and in older designs it was driven through a series of rotating rubber wheels pressed against the shaft of an induction motor whose speed varied somewhat with the voltage of the a.c. line. That rather crude system gave way to the belt-driven capstan run by a motor synchronized to the 60-Hz frequency of the power line. And now that, in turn, is about to give way to the capstan directly driven by a d.c. motor whose relatively slow rotation is synchronized, through a phase-locked servo-control, to an ultra-stable quartz-crystal oscillator. The improvement this system affords in long-term speed accuracy is of little consequence to the home user, though it is vital to, for example, the broadcaster. But the very considerable improvement in short-term speed accuracy (elimination of wow and flutter) is an enormous benefit to recordists

Tape-motion aberrations do not all arise from the capstan's rotation, however. What happens at the supply reel (and, to some extent, the take-up reel as well) also affects the motion of the tape against the heads. In recent years, many recorders, both open-reel and cassette, have adopted a "dual-capstan" system that isolates the portion of the tape passing across the heads from the action of the supply reel as well as the take-up reel. That's a step in the right direction, but it sets up *two* rotating capstan and pressure-roller systems, each of which can introduce wow and flutter of its own.

The next step, used in 3M's Mincom professional recorders (and appropriated into my "Dream Machine"), has now been taken, with a variation or so, by one major manufacturer of nonprofessional recorders. This involves feeding the tape between the pinch-roller and a very large-diameter capstan, down past two heads, then around another large-diameter idler, back up past two more heads, and finally squeezing it with a second pinch-roller against the opposite side of the *same* largediameter capstan. This single-capstan, isolated-tape-loop system is an example I expect other manufacturers will follow in time.

With either type of closed-loop system, single or dual capstan, the isolation from the supply and take-up reels that is provided by the pinch-roller action is never complete, however. And with conventional reel motors, the supply and take-up tensions vary directly with the amount of tape on each reel—a ratio of about 3:1, and in opposite directions from each other as well. Servo-control can, however, be extended to the reel motors themselves so that they, too, provide a constant tension regardless of the size of the tape pack. This is standard professional procedure, and it is now coming into increasing use in topquality consumer equipment.

Once servo-control is applied to the reel motors, however, another possibility-actualized in the new professional Ampex ATR-100 series-is opened up. That is to eliminate the capstan puck rollers (themselves a source of wow) entirely, so that the large-diameter capstan doesn't *drive* the tape at all, but merely governs (via servo-control) its pace. This requires that the reel-motor servo system be perfectly balanced-but with enough electronic sophistication it can be. I've used it, and it works magnificently-another example for top-end open reel (or elcaset) decks eventually to follow. The new Omega open-reel machine from Uher is the obvious forerunner of this trend in consumer equipment.

KEVOLUTIONARY new developments in tape oxides *could* appear quite soon-but they won't. Research is well on into pure metallic (non-oxide) particles that could be used to bring about a 12-dB improvement in the signal-to-noise ratio, but no one yet wants to push it. Why? For one thing, the material, when exposed to air, "self-combusts" like something out of Mission Impossible. That isn't the real problem, however, for within the binder it would be completely stable. The real problem is what confronts all tape "improvements": compatibility with existing recorders. The metal-particle tapes would require far more bias than today's machines can supply-enough, indeed, that today's heads would become obsolete as well. Any time you "improve" a tape-adding to its high-frequency performance or increasing its overall output-machines that worked perfectly well with the "old" tape have, at the least, to be readjusted or even (as with the metallic particles) redesigned. It'll come, but not yet. In the meantime, chrome may become a casualty to improved ferric oxides, which will themselves continue to evolve slowly.

And, on the far, far horizon, the day of *digital* recording is coming; I'll talk about that more fully in another column. "I am the dancer. watch me move Wind to a feather, any heart that I choose."



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TAPE RECORDER PROGRESS — 1958 TO 1977: Modern tape recorders, both open-reel and cassette, perform so well that it is easy to forget how far they have come from their humble beginnings. In order to better appreciate the qualities of today's audiophile machines, I recently reviewed typical performance specifications of tape decks as they have evolved over the years. My source was the Ziff-Davis Stereo Directory & Buying Guide (and its predecessors) going back to the 1958 edition, which was the first issue in my files. This brought together in one place an on-going listing of products, specifications, and prices, year by year, with sufficient completeness and accuracy to give me the long and detailed perspective I was looking for.

It was clear first of all that the tape hobbyist of 1958 did not enjoy today's almost unlimited choice. Most machines with any pretensions to quality were actually professional or semiprofessional recorders such as the Ampex 601, Magnecord PT-6, and Premier Tapesonic. And almost all were mono machines, although stereo was beginning to appear on the scene. After paying from \$400 to \$600 (in 1958 dollars!), one could expect a frequency response of 50 to 10,000 Hz ± 3 dB at 7¹/₂ ips and an unweighted flutter level between 0.3 and 0.1 per cent (more likely the former). The signal-tonoise ratio (S/N) was typically 45 to 50 dB in those days before Dolby and lownoise tapes.

Judging from their specifications, these open-reel machines could be put to shame by most current *cassette* decks (this is a somewhat misleading conclusion, since open reel always has enjoyed much greater "headroom" compared to cassettes). Nevertheless, there was a hint of things to come in the form of the Sony 555, a stereo recorder with in-line (rather than staggered-gap) heads selling for \$525 with built-in power amplifiers, and the Tandberg Model 3 (mono) with a 30- to 16,000-Hz ± 2 dB frequency response at 7½ ips, a 60-dB S/N, and only 0.1 per cent flutter.

Tape recorders designed for the ordinary consumer appeared in greater numbers the following year, with the \$300 Norelco (Philips) Continental capable of 40 to 16,000 Hz (± 2 dB) response at 7½ ips with only 0.2 per cent flutter and a 54dB S/N. It could even play stereo tapes, although it recorded only in mono.

Stereo FM broadcasting had arrived by the time the 1960 Buying Guide appeared, and most manufacturers included stereo recorders in their lines. Prices changed little in those days before galloping inflation, and performance quality likewise remained nearly constant from one year to the next. The Berlant Concertone decks had a 40 to 12,000 Hz frequency response at 71/2 ips, with a 45-dB S/N and 0.25 per cent flutter, for \$495 in mono or \$695 in stereo. Heath's first kittype recorder, with roughly similar specifications, was only \$170, however. It recorded in mono but had a stereo playback head.

The year 1961 brought a definite advance in performance, with the Norelco Continental 400 three-speed, quartertrack stereo recorder featuring a frequency response of 50 to 18,000 Hz with only 0.15 per cent flutter and a 48-dB S/N at 7½ ips (price: \$400). By 1962, stereo machines had become commonplace, and the upper frequency limit had crept to the 20,000-Hz mark in such di-

Tested This Month

Sansui TU-9900 AM/FM Tuner Yeaple Stereopillow "Nearphones" Kenwood KR-9600 AM/FM Receiver JBL L166 Speaker System verse machines as the Concertone 505 (\$550) and Tandberg 6 (\$500). In 1964, the first transistorized recorders made their appearance. Sony's Model 777 had a response of 50 to 15,000 Hz ± 2 dB, a 50-dB S/N, and 0.15 per cent flutter. Otherwise, there were few changes from the 1963 listing.

Probably the most revolutionary year in home tape recording was 1965, for it marked the unheralded (and apparently inauspicious) arrival of the cassette. The \$150 Norelco Carry-Corder 150 was an amusing, battery-operated novelty (I remember being quite unimpressed with it at that year's "Audio Fair") that played or recorded in mono on tape cassettes. Obviously, we all thought, nothing much was going to come of that, and no one (least of all Philips, who introduced the system) dreamed of the far-reaching effect the cassette was to have on tape recording.

In sharp contrast to their little cassette machine, Norelco also offered the Continental 401 open-reel recorder (all solidstate), which featured four speeds (15/16to 7¹/₂ ips) for \$300. At the highest speed, the 50- to 18,000-Hz response, 48-dB S/N, and 0.15 per cent flutter of the machine were typical of the better home recorders of the time.

The semiprofessional and professional recorders, such as Magnecorder and Crown, had also converted to transistors by this time, and the Crown SS700 series had specifications that would do credit to a 1977 recorder. For example, it had a frequency response of 50 to 25,000 Hz ± 2 dB at 71/2 ips, with a 54-dB S/N, for only \$750 in mono and \$900 in stereo.

By 1966, the price of the Norelco Carry-Corder had fallen to \$120, and its specifications were listed as 110 to 7,000 Hz ± 3 dB, with a 45-dB S/N and 0.35 per cent flutter. No other cassette machines had yet appeared. Sony's growing line of open-reel recorders was by then fully transistorized, and the tube-type Revox G-36 (\$500) was delivering a 40- to 15,000-Hz frequency response at 7½ ips, with a 50-dB S/N and 0.3 per cent flutter.

The 1967 directory did not disclose any significant advance in overall performance, although a spate of new models had appeared, from Ampex and Magnecord among others. That year the directory carried, for the first time, a separate section for "cartridge" machines (meaning anything other than open reel). Only a couple of undistinguished cassette recorders were included in this group, and they were apparently meant to compete with the Norelco Carry-Corder. The Teac brand name appeared for the first time in this directory, with several open-reel decks offered in the \$500 class. Their ratings of 30 to 20,000 Hz frequency response, 50 dB S/N, and 0.12 per cent flutter gave another hint of things to come.

1968 brought a number of small mono recorders in the \$100 to \$150 range and stereo models priced between \$150 and \$200. Few members of the industry had yet decided to take the cassette seriously, and the Norelco Carry-Corder had dropped in price to \$89.50. Low- to medium-price open-reel recorders continued to proliferate in 1969, spanning a price range from \$100 to \$500. Even some of the less expensive units had impressive specifications: 40 to 16,000 Hz ± 3 dB at 7¹/₂ ips with a 50-dB S/N and 0.15 per cent flutter. At \$300, one could have a frequency response extending to 20,000 Hz. In respect to price, Teac's line expanded in both directions, starting from their \$300 Model A-1200.

Although most cassette recorders were still battery portables, a couple of true component decks appeared. The Teac A-20 had a 60- to 12,000-Hz response with 0.2 per cent flutter, while Harman-Kardon's CAD-4 featured a 50to 12,000-Hz response for \$180. (The Carry-Corder was now only \$65.)

1970 saw the introduction of the Dolby "B" noise-reduction system to the American market in two open-reel machines from KLH. The KLH 40 (at \$650) was somewhat ahead of its time, and it was eventually recalled by the manufacturer, but its ratings of 45 to 15,000 Hz at 3¾ ips, with 0.1 per cent flutter and an astounding 68-dB S/N (with Dolby) were a strong hint of what the future would bring in home tape-recorder performance. The KLH 41, at about one-third the price, had almost the same performance less a number of operating features. But the cassette had still not broken out of its "low-fi" classification.

By 1971, all categories of tape-recorder performance had begun to advance noticeably. High-price open-reel machines such as the Panasonic RS796, Revox A77, and Teac A-6010 had nearly flat response to 15,000 Hz and beyond, with flutter levels of 0.08 per cent and a 55-dB S/N. Just about the same performance could be had in the \$300 Tandberg 3000.



----- THE FIRST WORD -

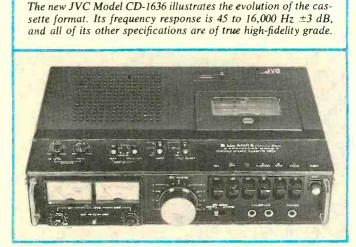
The most important development of 1971, however, was the emergence of the high-fidelity cassette deck with builtin Dolby noise reduction. The Advent 200, Fisher RC-80, and Harman-Kardon CAD-5, selling between \$200 and \$250, had a typical frequency response of 30 to 12,000 Hz, flutter as low as 0.15 per cent, and the greater-than-50-dB S/N made possible by the Dolby system. Simultaneously with the appearance of these machines, the venerable Norelco Carry-Corder that started it all disappeared from the listings.

The 1972 directory, for the first time, had a *separate* section for cassette machines in recognition of the fact that they had little in common with the eight-track *cartridge* machines. The Advent 201 and Wollensak 4760, both at \$280, had a rated frequency response from about 35 to 15,000 Hz ± 2 dB, a 54-dB S/N, and from 0.1 to 0.15 per cent flutter. Open-reel recorders, mostly in the \$200 to \$400 range, continued in strength.

In 1973, four-channel open-reel recorders from Akai, JVC, and Sony appeared at prices from \$300 to \$650. There were fewer open-reel stereo machines, but those that remained were generally of high quality and correspondingly high price. Their upper frequency limit had reached and surpassed 20,000 Hz, flutter was as low as 0.06 per cent, and a S/N of 58 dB was claimed for Teac's A-6010. And there were, at last, many cassette decks to choose from, with typical specifications of 40 to 12,000 Hz with ferric tape or to 15,000 Hz with CrO₂ tape, a S/N of 45 to 50 dB without Dolby (only a few had the Dolby system at that time), and flutter levels between 0.1 and 0.15 per cent.

As stereo open-reel decks disappeared

AND THE LATEST •



from the low- and medium-price categories, four-channel recorders began to take their places in 1974. They carried many brand names, and prices ranged from \$400 to \$700. A couple of very fine conventional cassette decks, the Tandberg TCD-300 and the Teac A450, appeared with prices of about \$400. The Teac machine's flutter rating of 0.07 per cent brought the cassette for the first time into direct competition with good open-reel recorders in this respect. The big news of the year, however, was the announcement of the Nakamichi 1000, the first three-head cassette recorder, with a staggering \$1,100 price tag. Rivaling the best open-reel decks in most areas of performance, the Nakamichi 1000 probably served more as an indicator of the true potential of the cassette medium than as a threat to open-reel decks in the marketplace.

Prices climbed more noticeably in 1975 after years of relative stability. The open-reel market was abandoned to the high-quality stereo machines and the numerous four-channel models (which, I suspect, surprised some of their manufacturers by carving out a secure niche among low-budget, multitrack recording enterprises, assuring their survival in spite of the declining interest in fourchannel recording or playback per se). The innate superiority of the open-reel format was emphasized that year by Tandberg's stereo 10XD (\$1,150) with its frequency response of 30- to 25,000-Hz ± 2 dB at 15 ips and 0.04 per cent flutter. There were a large number of cassette decks to choose from, all with generally similar specifications (though not necessarily the same actual performance, "specsmanship" being what it is), and prices in the \$200 to \$300 range. Nakamichi brought out a lower-price version of their Model 1000, the \$690 Model 700.

At about this time, a new phenomenon in cassette recording made its appearance (it actually began in 1974 with the introduction of the Sony TC152SD battery-portable Dolbyized stereo recorder for \$300). Having progressed beyond the "toy" stage, cassette recording was ready to become a useful means of making field recordings away from commercial power lines and with the full fidelity of which the medium was capable. By 1976, high-quality, battery-portable, fullfeatured machines were offered at prices from \$380 to \$500 by Nakamichi, Sony, Uher, and Yamaha.

By 1976, cassette was indisputably the king, with new decks appearing at an accelerated rate. Front-loading, solenoidoperated transports and more three-head recorders made their appearance. In the better units, an upper frequency limit of 17,000 Hz or so and flutter ratings under 0.1 per cent were no longer unusual. The open-reel market was static, being limited to the high-end products still popular with those willing to pay from \$700 to more than \$2,000 for a machine with features and performance not available in the cassette medium.

The situation has not changed much so far in this year 1977, except that de luxe cassette recorders are offered by a number of manufacturers to sell at prices from \$500 to nearly \$2,000 (!). On the other hand, in the less rarified region from \$200 to \$400, one can find the vast majority of cassette recorders, mostly of excellent quality. A few more batteryportable stereo machines appeared this year, mostly in the \$400 to \$500 range; they come from JVC, Sony, Teac, and Uher.

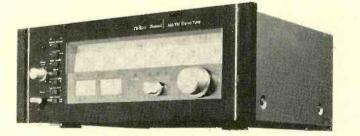
Cassette-recorder performance ratings, which now are doubtless approaching the limitations of the format, are fairly stable. Most can reach 15,000 Hz (at reduced recording levels), and a few can exceed 20,000 Hz. The major effort has gone into improving dynamic range (by increasing recording headroom and reducing noise), so that a S/N of 65 dB or better is no longer a "pipe dream" (tape manufacturers deserve a large share of the credit for this). Flutter is commonly below 0.1 per cent, although, since it is affected by the physical construction of the cassette itself, it is difficult to specify cassette-machine flutter with the same assurance as is possible with open-reel. Open-reel machines, both stereo and four-channel, hold the same place they have occupied for several years. They are expensive (though far less so than true professional machines) and continue to appeal to the serious recordist.

Coming up on the horizon is the elcaset, a new format combining many of the features of cassettes and open-reel tape. It is too early to predict the degree of success of the elcaset, but we can expect to see several brands of machines available in the near future.

In this brief trip along the tape path we have seen extraordinary improvements in performance, to the point that today's *cassette* recorders far surpass the best home *open-reel* recorders of a decade or two ago (though not necessarily the semipro machines of that time). Inflation has certainly had its effect on the performance/dollar ratio, but I think it is safe to say that today's consumer gets more for his money than ever before.

Equipment Test Reports By Hirsch-Houck Laboratories

Sansui TU-9900 AM/FM Stereo Tuner



THE Sansui TU-9900 AM/FM stereo tuner is part of that company's "professional" series of audio components, and it has the allblack finish that seems to be a styling trend

just now. It is large as tuners go: 181/8 inches wide, 121/4 inches deep, and about 63/8 inches high; it weighs about 21 pounds.

Most of the front panel is devoted to a rec-

tangular cut-out, the upper half of which contains the dial scales. Below them are two large meters; a switch that selects FM AUTO, FM MONO, or AM operation (also identified by colored lights above the switch); and a large tuning knob. A fourth light serves as a stereo FM indicator.

To the left of the dial is a vertical row of seven square pushbuttons. The ANTENNA AT-TENUATOR button reduces the signal reaching the tuner's input circuits by about 20 dB to prevent overload by very strong local transmissions. The BANDWIDTH switch provides WIDE and NARROW positions. Set to NARROW, the TU-9900 is highly selective (it is rated to have better than 90 dB alternate-channel se-(Continued on page 40)

Technics introduces a 321 element IC or, in plain English, more torque.

It's in the SL-1400, Technics' semi-automatic directdrive turntable. With our latest advance: The one-chip 321 element IC with three high-capacity power transistors. Those 321 elements translate to one reason why the SL-1400 will reach the exact playing speed within ¹/₂ of a revolution at 331/₃ RPM. That's torque.

But equally important, the SL-1400 has the Technics direct-drive system. The same system radio stations use. And discos abuse.

Professionals prefer our direct-drive system for the same reasons you will. Like inaudible wow and flutter (0.03% WRMS). Because with our system the platter is part of the motor. So there aren't any belts, gears or idlers to produce speed variations.

You won't hear any rumble, either. Because our DC motor introduces so little vibration into the system that rumble remains inaudible (--70dB DIN B).

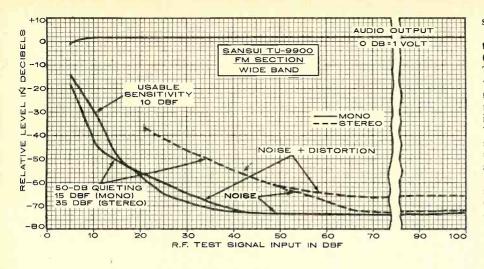
And load changes in AC line voltage or frequency

won't affect turntable speed. The reason: A frequency generator servo control. But direct drive isn't all the SL-1400 has going for it. For outstanding low tracking error, there's an ultra-sensitive gimbalsuspended tone arm. With an effective pivot-to-stylus length of 91/16". And all you do is place the stylus on the record and the SL-1400 does the rest. From auto cut. To auto return. To auto shutoff. You'll also get one anti-skating adjustment for all types of styli. Variable pitch controls. An easy-view stroboscope. Viscous-damped cueing. Feedbackinsulated legs. As well as a hinged detachable dust cover and integral base. So get the SL-1400. And get the precision of Technics direct drive. The convenience of semi-automatic operation. And the advantage of increased torque.

> Technics by Panasonic

Direct Drive System

CO PD



lectivity), with distortion ratings of 0.5 and 0.8 per cent, respectively, in mono and stereo. In the WIDE mode, the distortion ratings are dramatically improved to 0.06 and 0.08 per cent. Selectivity is reduced to 55 dB, which is adequate under most circumstances.

The NOISE CANCELER button engages a high-frequency blend circuit to reduce noise (and high-frequency channel separation) when receiving weak stereo signals. Below it is the interstation-noise MUTING switch. A CALIBRATION LEVEL button replaces the audio output of the tuner with a 400-Hz tone at a level of -10 dB relative to 100 per cent modulation. The primary function of this signal is to set up the recording level of a tape deck in advance of recording an FM broadcast. And although not mentioned in the instruction manual, it can be used to set up the levels of an external Dolby decoder as well. Since "Dolby level" corresponds to 50 per cent modulation or $-6 \, dB$, the calibration tone can be used to calibrate a Dolby unit's meters by setting the level to $-4 \, dB$.

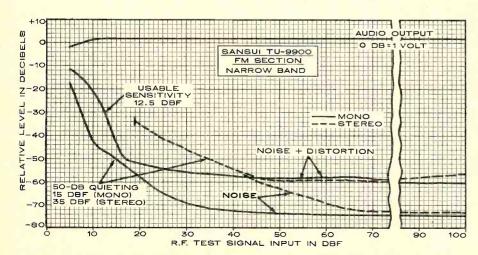
The LOW PASS FILTER button switches in a multiplex filter that cuts off 19-kHz and higher frequencies that might affect the Dolby system of a tape deck or possibly beat with the bias oscillator in some tape machines. When the filter is out of the circuit, the frequency response of the tuner extends well beyond the audio range. Finally, the METER SELECTOR connects the signal-strength meter (there is also a channel-center tuning meter) to read multipath distortion as an aid to orienting an antenna.

The remaining front-panel controls are the OUTPUT LEVEL knob and a power switch. In the rear of the tuner there are inputs for a 300ohm and a coaxial 75-ohm FM antenna plus a wire AM antenna. There is a hinged AM ferrite-rod antenna and two pairs of audio outputs. One carries the normal FM audio-output signal with the standard 75-microsecond deemphasis characteristic, and the other pair (marked DOLBY FM) carries the same program with the 25-microsecond de-emphasis needed to make it compatible with an external Dolby decoder. The level from the normal outputs is controlled by the front-panel control (variable over a nominal range of 0 to 1 volt), while the DOLBY FM output is at a fixed level of 0.4 volt (at 100 per cent modulation).

There are also outputs for connection to an external oscilloscope multipath indicator and a DETECTOR output ahead of the de-emphasis circuits for use with a possible future discrete four-channel FM decoder. The single a.c. outlet is unswitched. Price: \$450.

Laboratory Measurements. Because the setting of the bandwidth switch affects many of the performance parameters of the TU-9900, we made most measurements using both switch positions.

In the wide-band mode, the IHF sensitivity was 10 dBf or 1.7 microvolts (μ V) in mono. The 1.5- μ V rated sensitivity of the TU-9900 is considered to be at the theoretical limits for an FM tuner, and our measured sensitivity is indicative of very high performance. In stereo, the usable sensitivity was set by the



switching threshold at a 21-dBf ($6-\mu V$) level.

More important is the 50-dB quieting sensitivity, which was 15 dBf (3 µV) in mono with 0.35 per cent total harmonic distortion (THD). The stereo sensitivity was 35 dBf (30 μ V), with 0.3 per cent THD. Both of these figures represent very good tuner sensitivity. The signal-to-noise ratio (S/N) at a 65-dBf (1,000 uV) input was one of the best we have measured: 74 dB in mono and 71.5 dB in stereo (at higher signal inputs the stereo S/N almost equaled the mono figure). The distortion at 65 dBf was also lower than we have ever measured on an FM tuner and well below the ratings of our signal generator-0.021 per cent in mono and 0.052 per cent in stereo. With out-of-phase (L - R) modulation of the signal generator (one of the conditions specified in the current IHF tuner standard), the stereo distortion was 0.32 per cent at 100 Hz, 0.032 per cent at 1,000 Hz, and 0.075 per cent at 6,000 Hz.

The capture-ratio measurement (always difficult to make accurately or even repeatably) presented a challenge. Our reading was just under 1 dB, an outstanding figure. We could not measure the image rejection, which was better than the 100-dB range of our signal generator's output capability. The selectivity was close to the rated value, measuring 53.5 dB with alternate-channel (400 kHz) spacing and 5.7 dB with adjacent-channel (200 kHz) spacing. Both figures are fine for typical listening situations. The muting threshold was at 22 dBf (7 μ V). The tuner's hum level was 70 dB below 100 per cent modulation.

The frequency response with the LOW PASS FILTER disabled was almost perfectly flat, varying over a +0.2- to -0.6-dB range between 30 and 15,000 Hz. The filter had the expected effect on the frequency response, reducing the output by 0.4 dB at 12,000 Hz and by 2.5 dB at 15,000 Hz. In the process it dropped the 19-kHz pilot carrier leakage from -36 dB to an almost unmeasurable -85 dB.

Finally, the stereo channel separation was an extraordinary 60 dB or more from 60 to 600 Hz, falling to 45 dB at 5,000 Hz, 40 dB at 10,000 Hz, and 34 dB at 15,000 Hz. The midrange separation was not only the greatest we have ever measured, but far exceeded the guaranteed rating of our Sound Technology 1000A FM signal generator. The S/N, stereo sensitivity, muting and stereo-switching thresholds, pilot-carrier leakage, hum, and frequency response were unchanged when we switched to the narrow-band i.f. bandwidth. Mono sensitivity actually decreased slightly, to 12.5 dBf (2.3 µV). The 50-dB quieting sensitivity was unchanged, but the mono distortion at that input level increased slightly to 0.7 per cent.

As expected, the THD increased slightly at the 65-dBf test level, although it was considerably better than rated and would be considered excellent in a tuner of any price. It measured 0.11 per cent in stereo and 0.13 per cent in mono. The stereo THD with out-of-phase (L - R) modulation also increased slightly to 0.36 per cent at 100 Hz, 0.044 per cent at 1,000 Hz, and 0.63 per cent at 6,000 Hz.

With a reduced i.f. bandwidth comes a degraded capture ratio, and we measured it at 2.7 dB. On the other hand, alternate-channel selectivity became unmeasurably high, exceeding 100 dB, and the adjacent-channel selectivity of 17 dB set a new record for our tuner measurements. Stereo channel separation was reduced to perfectly good, though no longer extraordinary, levels of 27 dB between (Continued on page 42)

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-but it never fails to get you. You're busy, but you can't help looking up. Then the engines surge, the ship catches speed, and you get that feeling no landsman ever knows.

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30 and 3,000 Hz and about 26 dB at frequencies above 4,000 Hz.

The output level from the Dolby FM terminals was a constant 0.42 volt at 100 per cent modulation and a 25-microsecond de-emphasis characteristic. When we pressed the CALI-BRATION LEVEL button, the output level of the tone from the tuner audio terminals was exactly as specified. The ANTENNA ATTENUA-TOR reduced the input signal by 22.7 dB. The muting action was ideal, with no transient noises or thumps. The flywheel tuning mechanism was smooth and friction-free. The FM dial scale was calibrated at 0.25-MHz intervals, and there was no detectable error throughout its range. The AM tuner had the usual restricted frequency response (it was, in fact, even narrower than most), with its output being down 6 dB at 60 and 2,200 Hz.

Comment. In every respect except price,

the Sansui TU-9900 qualifies as a true "super tuner" (which to us signifies a tuner whose key performance characteristics are far better than the norm for high-quality tuners). Possibly a few (very few) of its measurements have been surpassed by some other tuners, but most of those units were far more expensive—several times its price, in fact. Overall, we would consider the TU-9900 to rank with the other "state-of-the-art" FM tuners we have seen, and that is quite impressive in view of its comparatively modest price.

It was not easy to find things about the TU-9900 that one might quarrel with. There was one, however—the multipath indicator. Like some others we have seen, this meter mode failed to respond to multipath levels revealed by an oscilloscope connected to the tuner's scope outputs and even by ear.

The -10-dB calibration signal proved to be a most useful feature for taping programs off the air. As Sansui suggests, it can be used to set the recording gain to 10 dB below the saturation level of the recorder, whatever that level might be. Then, one can record with assurance that the maximum dynamic range will be captured on tape without fear of distortion caused by unforeseen program peaks (FM stations in this country are well regulated in respect to their *peak* modulation levels, though the *average* levels may vary depending on the use of compressors and limiters).

Overall, we found the testing of the Sansui TU-9900 to be a challenging task, and we were left with a sense of surprise and pleasure at finding a product whose performance so far surpassed both its ratings and the expected norms for a unit of its price. And, as a fringe benefit, we now have a clearer idea of the inherent limitations of our very fine FM test equipment!

Circle 105 on reader service card

Yeaple Stereopillow "Nearphones"



THE Yeaple "Stereopillow" is a novel sound reproducer that combines many of the good features of both loudspeakers and headphones while eliminating some of the major disadvantages of both.

As its name suggests, the Stereopillow is in the form of a pillow, 27 inches by 20 inches by 6 inches deep. Inside it are two high-quality 4½-inch cone drivers (with 10-ounce magnets) mounted on small flat baffles and fully encased in polyurethane foam. The pillow can be placed upright behind a chair or sofa or in a nearly horizontal position against the arm of a sofa for listening in a reclining position. The listener's head is partially surrounded by the pillow, so that the drivers are located about 2 inches from the ears.

In this near-field listening location, even the small, flat baffles permit an effective frequency response down to well below 50 Hz. Since the frequency response of the drivers falls off naturally below 400 Hz and above 10,000 Hz, a passive equalization network in the pillow boosts the lows and highs to achieve a relatively uniform response at the listener's ears.

Like loudspeakers, the Stereopillow provides a relatively stable stereo image which does not shift with small movements of the listener's head (although both the sound-pressure level and the effective frequency response change rather rapidly if the ear is moved even a few inches from the drivers). Room acoustics are completely out of the listening equation. Even while listening at sound-pressure levels exceeding 90 dB, the sound level elsewhere in the room drops off rapidly with distance, to 65 dB or less at spacings of 5 feet or more, and the sound usually cannot be heard at all in an adjoining room.

The system impedance of 24 ohms makes it possible to parallel several Stereopillows for simultaneous use without presenting the amplifier with a dangerously low load impedance. Only 2 volts is needed across the speaker terminals to produce a 95-dB sound-pressure level at the listener's ear, which means that the Stereopillow can be driven by even the lowest-power amplifier or receiver (it must be connected to the speaker terminals, not the headphone output).

The Yeaple Stereopillow is available with a choice of several colored or patterned cloth covers that can be unzipped and removed for cleaning. The integral 30-foot cable enters the pillow at the upper right corner, and suggestions are given for dressing the cable and using it to hold the pillow in place behind chair or sofa. Price: \$79.95.

Laboratory Measurements. Evaluating the Yeaple Stereopillow required special test methods. The technique used by Yeaple to derive performance data (and by us to test the device) is to place a dummy head in a normal listening relationship to the pillow, with the latter supported in an upright position. A microphone is inserted between an "ear" of the dummy head and the surface of the pillow. With a 10,000-Hz signal applied to each driver, the microphone is carefully adjusted for maximum reading and all subsequent measurements are made in that position.

Our measured data closely matched those obtained by Yeaple. With 2 volts applied, the frequency response was within ± 2 dB from about 40 to 650 Hz, and it fell about 10 dB in a "shelved" characteristic to another flat region, where it was within ± 2 dB from 850 to 3,000 Hz. There was a smaller depression (about 5 dB) in the 3,000 to 7,500 Hz band, where the output varied ± 2 dB. Above this frequency the output rose about 8 dB and varied about ± 1 dB from 7,500 to 13,000 Hz before dropping off at higher frequencies. At very low frequencies the response followed the manufacturer's claims, falling at 12 dB per octave below 50 Hz.

In its overall frequency response, the Stereopillow resembled a number of good-quality headphones we have measured. Like them, its effective response (as heard by the listener) is extremely dependent on the precise geometric relationship between the two transducers and the listener's head. Specifically, a moderate shift of the ear relative to the surface of the pillow could make a considerable change in the response at very low and very high frequencies.

The sound-pressure level (SPL) measured in our test setup at a 2-volt drive level was about 110 dB in the bass and lower mid-range, (Continued on page 45)

THE MACHINE

Our

concept: the cassette is a component of your sound system, not an accessory. Because a cassette, unlike its open-reel counterpart, actually becomes an integral part of your system the instant you put it in your cassette deck.

This philosophy was one of the underlying principles behind the development of TDK SA cassettes. TDK SA was the first non-chrome tape compatible with chrome bias and equalization. It gives you better high-end performance than ferric-oxidebased tape, and unlike chrome tapes, it gives you greater dynamic range at low and midrange frequencies, with far less distortion.

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TDK SA cassettes offer both superior tape and precision mechanics. That's why quality tape deck manufacturers either use SA as their reference cassettes, or recommend it for their machines.* And why you'll get the best from your system by using our machine in your machine.

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A tapered Reactive Air Column radiates the lowest bass from the lour drivers on each rear panel,

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Clad in one of its optional imitation-fur coverings, the Stereopillow appears right at home propped up against the armrest of a sofa.

100 dB in the mid-range, and 95 to 105 dB in the upper mid-range and treble. In terms of conventional loudspeaker listening, this is very loud, although the sound was below normal background-music levels a few feet away.

The distortion at 2.8 volts (equivalent to an amplifier output of 1 watt into an 8-ohm load) was in the 0.3 to 0.5 per cent range from 1,000 Hz down to 100 Hz, and it rose gradually to 2.4 per cent at 50 Hz and only 8.4 per cent at 20 Hz. At a "10-watt" drive level (8.9 volts) the distortion remained under 2.5 per cent down to 80 Hz, but it rose rapidly to 16 per cent at 50 Hz.

The speaker impedance was about 24 ohms over most of the range from 150 to 2,000 Hz, falling to 15 ohms at 20,000 Hz and with a smooth rise to 50 ohms at the bass resonance of 57 Hz. Tone bursts were reproduced faithfully throughout the entire operating frequency range of the Stereopillow.

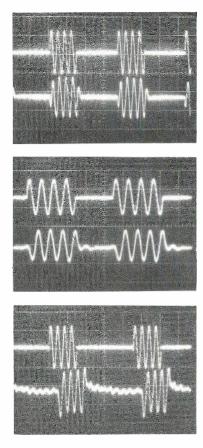
• Comment. As is the case with headphones and speakers, frequency-response measurements do not adequately describe the sound of the Yeaple Stereopillow. Most of our evaluation, therefore, was done by listening to a variety of program material.

First of all, the Stereopillow does not sound exactly like either a speaker or a headphone. With one's head firmly cradled in the pillow, the subjective frequency response resembles that of a good-quality speaker with somewhat subdued highs. The bass and middles are very powerful and smooth, although we never got the same sensation of low bass that is experienced with a speaker having a useful output down to 40 Hz or so. We suspect that this is due to the lack of stimulation of the entire body surface by very low frequencies, a problem the Stereopillow shares with headphones, which often have an excellent measured lowbass response but do not sound as powerful in the bass as speakers with much less measured output.

Also as with headphones, the front-back localization of sound is a bit uncertain with the Stereopillow. This is helped considerably by listening in a reclining position, preferably with the eyes closed. Although the user is not confined to a rigidly fixed position, there is a rapid drop of listening volume if the head is moved more than an inch or two away from the pillow surface.

No matter how loudly one plays the Stereopillow, it is easy to hear someone speaking in the same room or a telephone ringing. This is a major advantage over most headphones and speakers (some, of course, might consider it a disadvantage). Naturally, other people in the same room will hear the program, albeit at a rather low level. It will not normally interfere with conversation, but we doubt that anyone would be able to listen at high volume to the Stereopillow in the same room with another person who is listening to a different program via speakers or watching a TV program.

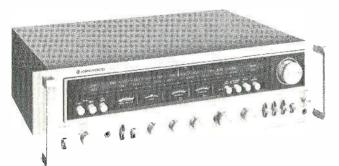
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The Stereopillow's tone-burst response was quite faithful, as shown in these oscilloscope photos made at (top to bottom) 50, 500, and 5,000 Hz.

interesting and rather different approach to personal music listening at a price competitive with that of many medium-price headphones. Circle 106 on reader service card

Kenwood KR-9600 AM/FM Stereo Receiver



KENWOOD'S new KR-9600, one of the select but steadily growing number of "superpower" receivers, is a mighty unit by any

standards. Its amplifiers are rated to deliver at least 160 watts per channel into 8-ohm loads, from 20 to 20,000 Hz, with 0.08 per cent or

less total harmonic distortion. Like some of Kenwood's integrated amplifiers, the KR-9600 uses an entirely separate power supply (including the power transformers) for each channel. This effectively eliminates what Kenwood calls "transient crosstalk distortion," which is described as a form of the intermodulation effect in one channel resulting from modulation of the common power-supply voltage by a powerful low-frequency signal in the other channel.

The output stages, featuring fully complementary-symmetry transistors, are directly coupled to the speakers. A fast-acting relay protects both the output devices and the speakers from damage, as well as providing a (Continued on page 52)

Sansui unveils its

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MODEL 9390 DB and MCDEL 8080 DB. Polby" Noise Reduct on circuitry. PM 25 ± sec. de-emphasis Two power output/Dolby" calibration meres. Two tuning meters. – 20 cB muting switch. 2 pre-amplifier outputs. Mic-mixing with miclevel control. Triple rone controls.

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8080 DB



9090 DB

The new Sa

The new 9090 DB is not only Sansui's new top receiver. We believe it is the finest on the market. Read its description and we believe you will believe as we do.

Imagine yourself at the controls of the Dolbyized* 9090 DB just as you see them, lifesize, on these pages. As you touch them in real-life you will be thrilled at the beautiful way the 9090 DB responds to your every wish. You will love how the controls give you a sense of power, and how this magnificent receiver permits that instant surge, that instantaneous response you want to hear through your speakers.

The built-in Dolby* Noise Reduction System does more than correctly equalize and decode Daiby FM. With it you can make and play your own Dolby processed tapes from any source, even if your recorder lacks its own Dolby circuitry. The 9090 DB's triple tane controls give you a choice of 2 different frequencies where the treble and bass action begins, as well as a studic-type equalizer for the vital "presence" midrange. And our easy-to-read twin power meters show you at a glance just how much power your speakers are getting.

Look at what the Model 9090 DB stereo receiver offers. Even better, listen to it for yourself at your nearest franchised Sansui dealer.

AUDIO SECTION

Power Output:

125 warts/channel. min. RMS with both channels driven into 8 onms from 20Hz to 20kHz, with no more than 0.1% total harmonic distortion.

- IM Distortion: less than 0.1% of rated min. RMS power output 70Hz : 7kHz = 4 11 SMPTE method)
- Frequency Response (f watt): 10Hz to 30kHz ± 1 dB from Aux to speaker terminals FIAA Phone Equalization:
- ± 0.3 dB, 30Hz to 15kHz
- Phono 1, 2 Sensitivity /Impedance: 2 5mV / 50k ohms
- Phono 1, 2 Maximum Input Capability: 180mV at 1kHz. less than 0.2% total harmonic distortion. Hum. and Noise:
- better than 80 dB (Aux, Tape Monitor) better than 70 dB (Phone)

FM SECTION

IHF Sensitivity: 9.8 dBf (1.7μ V) 50 dB IHF Quieting Sensitivity: Mcno: 14 dB* (3µV) Sterec: 36 3 dBf (36µ /) Signal-to-noise ratio: better than 70 dB Total Harmonic Distortion: Mono: less than 0.2% Stereo: less than 0.3% Alternate Channel Selectivity: Better than 85 ab Spurious Response Ratio (IHF): better than 85 d3 Stereo Separation: petter than 40 dB Frequency Response: 30Hz to EkHz + C.5, - 20 dB

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Clad in one of its optional imitation-fur coverings, the Stereopillow appears right at home propped up against the armrest of a sofa.

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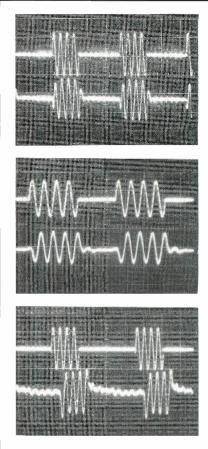
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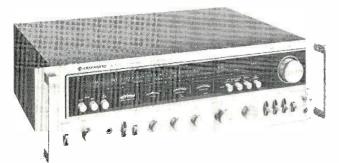
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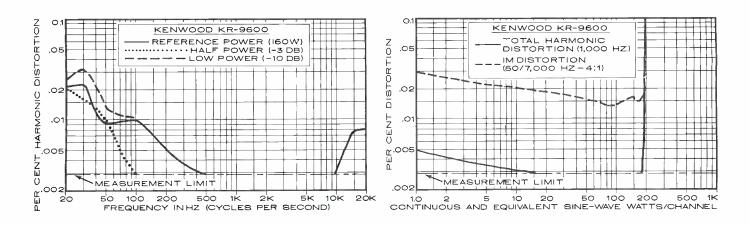
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The output stages, featuring fully complementary-symmetry transistors, are directly coupled to the speakers. A fast-acting relay protects both the output devices and the speakers from damage, as well as providing a (Continued on page 52)



time delay that eliminates thumps when turning the receiver on or off. At its input, the KR-9600 is unique in having separate preamplifiers for each of the two phono inputs The PHONO I input, which has a 2.5-millivolt sensitivity and a 250-millivolt overload rating, uses an FET input; the PHONO 2 preamplifier, rated at 5 millivolts sensitivity with a 500-millivolt overload rating, uses a bipolar-transistor input.

The KR-9600's tone controls consist of knobs for bass, mid-range, and treble frequencies. They can be bypassed by a DEFEAT switch. The tone controls, like the volume control, are lightly but positively detented in steps. The receiver can control two tape decks, with front-panel switching for recording on either machine or dubbing from either one to the other, while monitoring the playback from either one or listening to the source signal.

A novel feature is the receiver's "sound injection" circuit, a variant of the microphone injection system found on some other receivers. Kenwood's system provides a fading and mixing action as the MIC LEVEL knob on the panel is rotated. It smoothly fades out the signal from the selected program source and inserts the signal from a microphone plugged into the front-panel jack. This injection action takes place only at the tape-recording outputs and does not appear in the receiver's audio outputs.

The FM tuner section of the receiver is of comparable quality, featuring two r.f. stages, a five-gang tuning capacitor, an eight-element linear-phase filter, and a phase-locked-loop multiplex demodulator. A switch on the front panel converts the de-emphasis time constant from 75 to 25 microseconds for use with an external Dolby adapter.

The two tuning meters read channel center and signal strength for FM (the latter is also the AM tuning indicator). A button on the front panel converts the signal-strength meter to read FM modulation strength, from 0 to 100 per cent. In this mode, the meter has a fast response with little overshoot, and it can be used to set up recording levels on a tape deck for most effective use of the machine's dynamic range. Two other meters monitor the audio-output levels. Their logarithmic scales read from 0.1 to 200 watts, and a nearby button increases the meter sensitivity to cover a 0.01- to 3-watt range.

The Kenwood $\bar{K}R$ -9600, as might be expected, is large and heavy. Its satin-finish front panel is 22% inches wide and 6% inches high; the receiver extends about 16½ inches behind the panel. All rear connectors are recessed and do not protrude beyond the case

limits. A pair of rugged and attractive handles are supplied for mounting on the panel if desired (the 53-pound weight of the receiver makes this *very* desirable), and the overall depth of the receiver including handles is 18¹/₈ inches.

The front panel has pushbutton switches for low- and high-cut filters, 20-dB audio muting, power-meter range selection, FM meter mode, 25-microsecond de-emphasis, and FM muting. The large tuning knob, which operates a very smooth flywheel mechanism, is to the right of the dial. Across the bottom of the panel are knobs for the tone controls, volume (with a concentric ring for balance), the input selector (AM, FM, PHONO 1, PHONO 2, AUX), and speaker switching for three pairs of speakers or one combination of two pairs. Lever switches control on/off, loudness (with two degrees of compensation), tone-control defeat, mode (MONO, STEREO, REVERSE), tape monitoring from either deck or the source, dubbing from either deck to the other, and the SOUND INJECTION circuit. There is also a headphone jack on the panel.

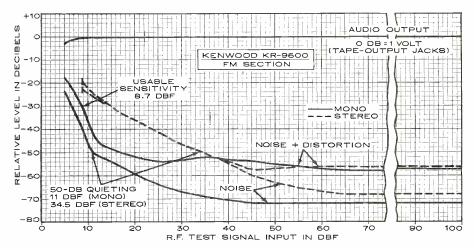
In the rear of the receiver are the many input and output jacks, including preamplifier outputs and main-amplifier inputs, joined by removable jumper links. There are outputs for connection to an oscilloscope for multipath indication; the horizontal output is also intended to drive any future discrete fourchannel FM decoder when and if it becomes available. There is a hinged AM ferrite-rod antenna, and terminals are provided for 75and 300-ohm FM antennas as well as an AM wire antenna. Insulated spring clips are used for the speaker outputs, and there are DIN sockets as well as phono jacks for the taperecorder connections. One of the three a.c. sockets is switched. Price: \$750.

• Laboratory Measurements. Following the standard preconditioning period, during which the receiver became only moderately warm, the amplifier outputs clipped at 189 watts into 8 ohms, 264 watts into 4 ohms, and 115.5 watts into 16 ohms (both channels driven at 1,000 Hz).

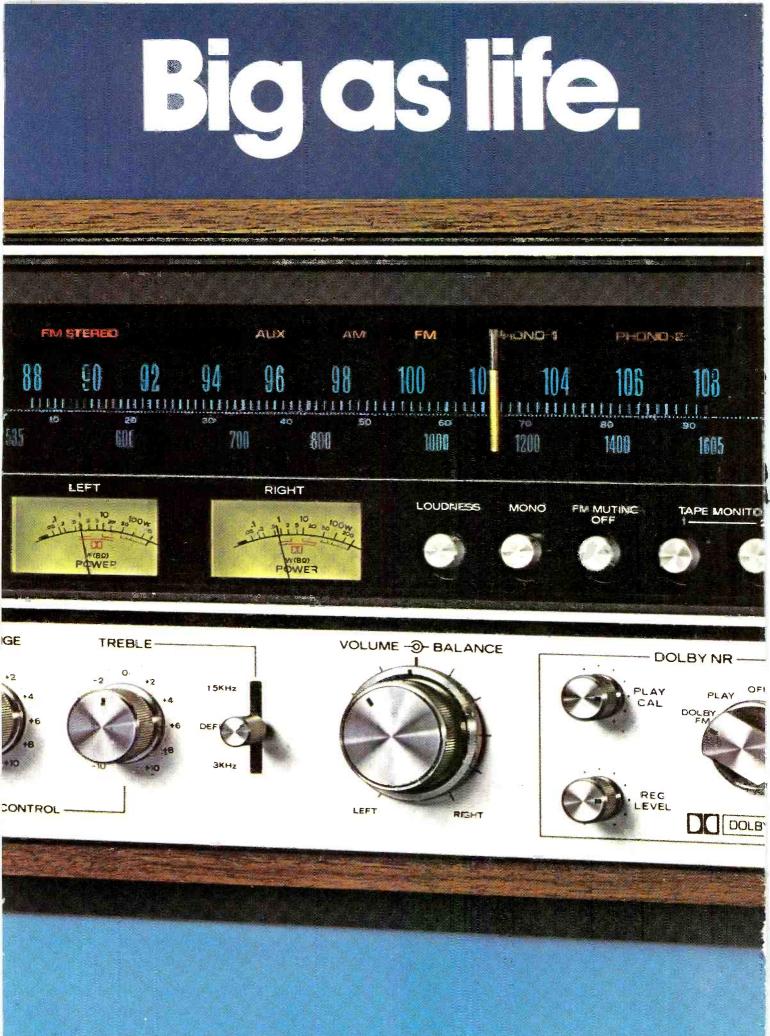
At most power levels and frequencies, the distortion was below our residual measurement level of about 0.003 per cent. With a 1,000-Hz test signal, total harmonic distortion (THD) was less than 0.003 per cent at all levels from 10 watts up to 180 watts, reaching 0.006 per cent at 190 watts just before clipping occurred. The intermodulation distortion (IM) was between 0.015 and 0.03 per cent from 1 watt to over 190 watts. It rose somewhat at very low power levels-about 0.2 per cent at 16 milliwatts. At the rated power output and at levels of -3 and -10 dB, the THD was about 0.02 per cent at 20 Hz and less than 0.003 per cent from a couple of hundred Hz to 10,000 Hz, climbing to 0.008 per cent at 20,000 Hz.

An input of 0.038 volt at the auxiliary input or 0.6 millivolt at the phono input was needed to develop a reference power output of 10 watts. The noise level was extremely low, with respective unweighted S/N readings of 81 and 79 dB. The PHONO 1 input-overload point was a very high 290 millivolts. This was the more sensitive of the two inputs; the other (not checked) should have half the sensitivity and twice the overload capability.

The tone controls, as expected, could pro-(Continued on page 54)



STEREO REVIEW





new top receivers.

SPECFICATIONS	9090 DB	8080 DB	হ ು00	70°C	6060	5050
Powe ⁺ Output Min RMS per channel, both channels driven into 8 omms at rated Total Harmonic Distortich.	125 watts @0.1% THD	85 watts @0.1% THD	11C wa tts @0.2% THC	୍ଟେ ଏକ୍ଟ ମ ପ୍ରିର 3% ୮୫୮୦	40 watts @0.4%THD	30 watts @0.5%THD
FM Sensitivity	9.8 dBf	9.8 dBf	9≝ dBF	°013 dB≝	10.8 CBf	11.2 cBf
Delby* Circuitry	Yes	Yes	No	No	No	Na
Twin Fower Meters	Yes	Yes	*æ	Yes	No	No

9090 and 909C DE, walnut veneer. All ather cabinets, simulated walnut grain

MODEL 9090.

Two power output meters. Two tuning meters. Triple tone controls. Turnover switches with tone defeat -20 dB muting switch. Mic-mixing with mic level control Two stereo headonone jacks.

MODEL 5350. Two turing meters. Mic-mi≤ing with mic level control. High filter Soeaker Selector.

TOTEL STATE

(54)

2

CORE FUNCTION OF A CONTRACTOR OF A CONTRACT OF A C 9090



MODEL 6060. Two run ng meters. -20 dB muting switch. Mic-mixing with mic level control. High and low filters. Speaker selector

MODEL 7070 Two power output meters. Two tuning meters. Triple tone controls Mic-mixing with mic level control. -20 dB muting switch. 7 position tape/play switch. Specke^{*} selector.

*Dolby, Dolbyized are trademarks of Dolby Laboratories, Inc.

7070

5050

Low numbers are one thing. But not everything.

Low 'tar' and nicotine numbers are important to me. But I smoke for taste. That's why I smoke Winston Lights. I get a lighter cigarette, but I still get real taste. And real pleasure. Only one cigarette gives me all that: Winston Lights.

Warning : The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health. vide a wide variety of response curves. The loudness compensation was very mild with either of the two selectable characteristics (which boosted only the low frequencies), making it one of the few we have seen that does not impart an unnatural 'bassy' quality to the sound. The filters had very gradual slopes of 6 dB per octave and removed too much of the program content for our taste. Their -3-dB response frequencies were 200 and 3,600 Hz. The RIAA phono equalization was within ± 1 dB from 20 to 20,000 Hz. It was affected negligibly by phono-cartridge inductance (less than 0.5 dB change up to 15,000 Hz, and only 0.5 to 1 dB at 20,000 Hz).

The FM tuner section had usable sensitivities of 8.7 dBf and 15 dBf in mono and stereo or 1.5 and 3 in microvolts (μ V). The 50-dB quieting sensitivity was 11 dBf (2 μ V) in mono with 0.75 per cent THD, and 34.5 dBf (29.2 μ V) in stereo with 0.3 per cent THD. The ultimate S/N at 65 dBf (1,000 μ V) was 71.5 dB in mono and 68 dB in stereo, and the respective distortion levels at that input were 0.13 and 0.34 per cent (the latter being measured with out-of-phase—or left-minus-right—modulation in accordance with the new IHF tuner standard).

The capture ratio at 45 dBf (100μ V) was 1.4 dB, and AM rejection was 57 dB. The muting threshold was 8.7 dBf (1.5μ V), the same value as the stereo switching threshold. Pilot carrier leakage was -73 dB and hum was -72 dB. The effectiveness of the tuner's circuits was demonstrated by its image rejection of 102 dB (just at our measurement limit) and by the alternate- and adjacent-channel selectivities of 91 and 9.5 dB.

The FM frequency response was flat within ± 0.4 dB from 30 to 13,000 Hz and down 0.7 dB at 15,000 Hz. Stereo channel separation was exceptionally uniform: 36 to 37 dB across most of the audio range, and better than 33.5

dB from 45 to 15,000 Hz. The AM frequency response was down 6 dB at 35 and 5,400 Hz for a somewhat wider response range than most receiver AM tuners exhibit. All of these figures matched Kenwood's specifications within the bounds of instrument error.

Because of the extensive metering afforded by the KR-9600, we also checked the accuracy of the meter readings. The power-output meters (referenced to 8-ohm loads) read from 15 to 50 per cent high at most levels, but this is probably adequate for their purpose. The FM deviation (modulation) meter was accurate at 100 per cent, which is the most important point, but read high by about 10 to 20 per cent at most smaller carrier deviations. This, too, is satisfactory for the intended use of the meter in setting up a tape recorder (especially since the maximum error was about 2 dB in the "safe" direction). The signal-strength meter gave useful readings at levels of a couple of microvolts and saturated at 370 microvolts, which gave a full-scale reading.

Comment. The Kenwood KR-9600 probably has more flexibility than most people will ever require, but such flexibility is expected of a premium-price product like this one. So far as we could determine, all of its many features worked exactly as claimed. In fact, it is such a smooth-handling and easy-to-use receiver that it can be operated, once one has overcome a sense of awe at its capabilities, as casually as any other.

The suppression of transients and other unwanted noises was so good that it was easy to forget that the amplifiers could deliver close to 200 watts per channel, which is sufficient to destroy many speakers. This attention to detail is fortunate (and surely not accidental), since pops and thumps that are a mere annoyance with lesser receivers can be disastrous with a unit such as this. In this regard, we were especially appreciative of the ideal operation of the FM muting circuit, a potential Achilles' heel in high-power music systems.

It is apparent that Kenwood has carefully matched the performance of the tuner, control-amplifier, and power-amplifier sections, utilizing each to best advantage. The tuner's performance is just shy of matching that of some of the finest separate tuners, but it is well beyond what we have come to expect in a receiver. The control amplifier is one of the quietest we have seen, and it has enough input and operating flexibility for most people, though not as much as many separate preamplifiers. The power amplifier takes second place to none we have seen in the under-200-watt-per-channel category. In fact, its distortion is literally unmeasurable without specially modified test equipment at almost any power level and frequency one will encounter in a home music system. If that is not perfection, it is certainly close to it.

Like other receivers in its power class, the Kenwood KR-9600 cannot be installed casually. It is simply too large and heavy to be stuffed into a piece of furniture (it must be adequately ventilated, since we found the temperature on the top of the cabinet to be nearly as high in normal use as during our tests). The handles on the panel are more than decorative, being the most practical way to lift or move the receiver.

When we come to the "bottom line" of value for the money, we must say that this is a very reasonably priced product for what it does (take a look at the prices of power amplifiers with comparable performance if you doubt this). If your speakers require a high-power amplifier (or can safely be used with one), the KR-9600 can give you top-quality sound in a single, handsome (albeit large) package at an affordable price.

Circle 107 on reader service card

JBL L166 Speaker System

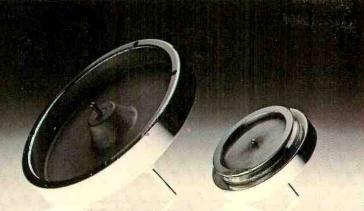
THE JBL L166 is a compact, three-way speaker system whose 1.75-cubic-foot cabinet makes it one of the larger "bookshelf" systems, and it would appear to be at least as well suited to floor installation. The 12-inch woofer (with a 3-inch voice coil) operates in a ducted-port enclosure. There is a crossover at 1,000 Hz to a 5-inch mid-range cone driver that operates up to 6,000 Hz. High frequencies are radiated by a 1-inch dome tweeter fabricated of resin-impregnated linen with a vapor-deposited layer of aluminum.

The oiled walnut cabinet has a distinctively sculptured, acoustically transparent, foam plastic grille that covers the entire front of the speaker. Behind the grille are calibrated level adjustments for the mid-range and high-frequency drivers. Their center positions are chosen to provide a flat "anechoic" frequency response. The calibrations cover a range of ± 3 dB around the flat setting (at the counterclockwise limit, each control completely silences its driver). Special twist-type binding posts are recessed into the rear of the cabinet.

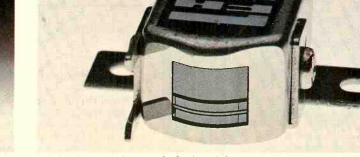
The foam front grilles are available in orange or in black.

The JBL L166 system is rated to handle up to 75 watts of continuous program material, and, like other JBL speakers, it is quite efficient. It has a nominal impedance rating of 8 ohms. Its polar dispersion is rated at greater than 150 degrees up to 20,000 Hz—an exceptionally broad coverage for conventional front-facing drivers. The cabinet is $23\frac{1}{2}$ inches high, $14\frac{1}{4}$ inches wide, and 13 inches deep; the system weighs about 50 pounds. Price: \$399.

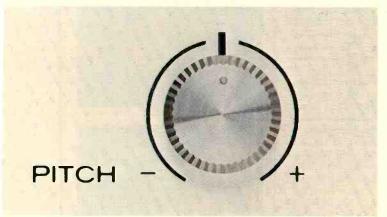
Laboratory Measurements. With its level controls set to "0," the averaged output of the JBL L166 measured in the reverberant field of the test room was very smooth and flat throughout the audio range. When combined with the bass output up to about 300 Hz (which was measured with close microphone spacing to simulate an anechoic measurement), the total response varied only ±3 dB from 50 to 20,000 Hz. (Continued on page 56)



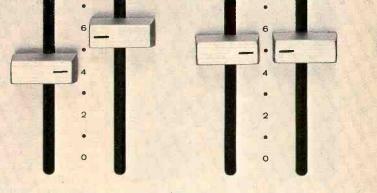
Our flywheel is larger than regular flywheels for a 0.08% wow and flutter.



Heat compressed super ferrite head for frequency response of 30-16,000 Hz and S/N of 62 dB with CrO_2 tape,

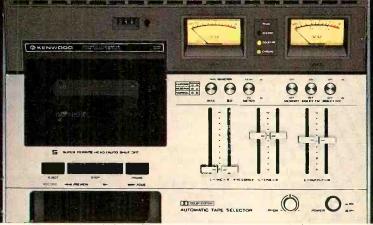


Variable pitch control to smooth out speed variations in playback.





Switchable VU and Peak meters for better recordings.



The KX-920. With cue, review and memory rewind.

STANDARD EQUIPMENT.

Some of the above features and performance specs are found in other cassette decks. But those decks cost a lot more than ours.

Now, the new Kenwood KX-920 costs less than \$300," but don't let that deceive you. Because the KX-920 is our top-of-theline. And the way we look at it, every top-of-the-line should have these features and the KX-920's performance.

The only option you should even think about is tape.

"Suggested resale price. Actual prices are established by Kenwood dealers.





A MICROCASSETTE recorder that's so unique, it's like having your own ministudio in your pocket with remarkably good fidelity for music as well as voice. It's smaller than a checkbook (5¼" from top to bottom, slightly thicker than a pack of cards), and lightweight (12 ounces with batteries), but it's packed with studio precision and professional features:

· 60 minutes recording time.

 Capstan drive for constant tape speed, built-in electret condenser microphone, AC bias, record-warning light.

- All metal construction for years
- of dependable service.
- One-hand operation; instant loading.
- Fast forward and rapid rewind.
- Automatic level control.

 Connects to your stereo or full-size recorder with a Compaticord, for both recording and playback.

The Pearlcorder-S performs beautifully in an office, in your car, even on airplanes; and it's backed by the reputation of the Olympus Optical Co., Ltd., a company famous for fine cameras, medical and other precision scientific instruments.

The Pearlcorder-S. Carry one. And have a studio with you.

Available at fine photographic, audio, and A-V dealers everywhere. Or write for our brochure, "Pocket Full of Miracles."

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In Canada: W. Carsen Co., Ltd., Ontario 60 minutes of sound in this actual-size MICROCASSETTE.®



JBL L166 Speaker . . .

(Continued from page 54)

The port contributed to the total bass output only at very low frequencies (below 30 Hz), and the low-frequency output dropped off very rapidly in the range below 50 Hz or so. Unlike some speakers whose output rolls off at the highest frequencies, the JBL L166 had a slightly rising output above 10,000 Hz to about +5 dB at 15,000 Hz. It should be noted that these measurements (except for the low bass) reflect the actual sound-pressure level measured in a normal listening room about 12 to 15 feet from the speakers, and therefore they are representative of what actually reaches the listener's ears in a ''real world'' environment.

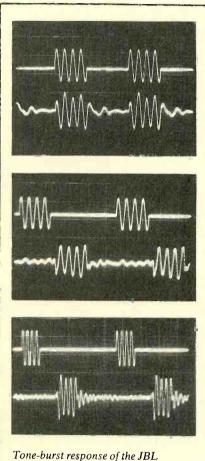
The distortion was very low down to about 50 Hz, and surprisingly it did not change appreciably when the power input was raised from 1 watt to 10 watts (based on an 8-ohm impedance). Below 50 Hz the distortion at 1 watt rose to about 6 per cent at 30 Hz and more rapidly below that frequency. We also measured the distortion with the drive level adjusted to maintain a 90-dB sound-pressure level (SPL) at a distance of 1 meter from the speaker grille. Down to 50 Hz it was identical to the constant-level measurement, but it increased more rapidly at lower frequencies as the drive was increased to compensate for the falling bass response. It measured 12.6 per cent at 40 Hz and could not be measured below that frequency.

The mid-range ("presence") control had a range of +2 to -5 dB between 1,000 and 6,000 Hz, while the high-frequency ("brilliance") control had a ± 3 -dB range above 2,000 Hz. The speaker impedance reached a maximum of about 60 ohms at 58 Hz and low values of 6 to 7 ohms at 25 and 125 Hz. Over most of the audio range the impedance was not far from its nominal 8-ohm rating (or somewhat higher), but it fell to just under 5 ohms at 9,000 Hz. The tone-burst response of the L166 was good throughout its range.

As expected, the L166 proved to be a very efficient speaker. Driven by 1 watt of random noise in the octave centered at 1,000 Hz, it produced an SPL of 93.5 dB at a 1-meter distance. This is about 6 dB greater than that produced by a typical acoustic suspension speaker. Putting it another way, the L166 would require about one-fourth as much amplifier power for the same listening level as a typical bookshelf speaker system.

Comment. Having listened to the JBL L166 for some time before performing any tests, we were not in the least surprised by our findings. From the first, it was evident that this was an exceptionally smooth, uncolored speaker. It gave an impression of strong bass response as a result of the slight resonance rise at 67 Hz which affects the band of frequencies from 65 to 100 Hz or so. The very low bass (under 40 Hz) is down somewhat from the midrange level, but because of the speaker's excellent octave-to-octave frequency balance, most listeners would not be aware of any lack of very deep bass. The extreme highs are excellent indeed. They impart a sense of crispness and definition that is often lacking in otherwise good speakers. Because of the overall flatness of the speaker's response, one never feels that any particular portion of the spectrum dominates the others. The dispersion, judged subjectively, was as good as was claimed—certainly at least as good as we have heard from any direct-radiator speaker system.

Having obtained confirmation of our initial hearing impressions through the response measurements, we expected the JBL L166 to



Tone-burst response of the JBL L166, shown here at (top to bottom) 100, 4,000, and 7,000 Hz, was good throughout.

do very well in our simulated live-vs.-recorded listening test. It did. On some of the selections, the JBL's sound could not be distinguished from that of the "live" reference. On others there was an indefinable difference too slight to be identified precisely. All in all, the Ll66 is one of the more accurate speakers we have evaluated in this way.

Anyone who has a stereotyped image of JBL as a manufacturer of "rock-sound" speakers will be surprised by an exposure to the sound of the L166; it is one of the smoothest, most listenable systems we have had the pleasure of using. It is also one of the most expensive "bookshelf" size speakers you can buy. If your budget can handle it, listen carefully to the L166; even if it is beyond your means, its sound may guide you toward a less expensive speaker with some of the same fine sound qualities.

Circle 108 on reader service card

CIRCLE NO. 29 ON READER SERVICE CARD

If you take a creative approach to recording, you'll appreziate the special versatility of the new Dual C 919 cassette deck. Four separate slide controls for the line-level and microphone nputs allow you to mix and record signals from disc, tape or FM with live voices and instruments. Output level controls eliminate the need to read ust your amplifier's volume when switching programs, such as to tuner cr record player. (These and additional features are shown below.)

The Dual C919 is so versatile, synchronous motor, tapeheods, elec-tronics and a uni-directional version you might think of it of the transport system of our new Auto/Reverse deck, which as a miniature Audio magazine reported as '_ .another outstanding example of the great recording console. strides in cassette deck technology in recent years. Wow and flutter

What about performance? The C919 uses the highly reliable Continuous Pole/ strides in cassette deck technology

was indeed extremely low, measuring 0.065% (WRMS)...total harmonic distortion...well below the 1.5% claimed...about the fastest and smoothest [wind] we have encountered... we also found that the Ducl deck was able to handle [C-120 cassettes] smoothly...A distinct feeling of quality...seems well worth the price."

Thus, whether you have special program-mixing requirements, or simply want superb overall performance, both are available in the C919 cassette deck. Less than \$450.00.

United Audio Products, 120 So. Columbus Ave., Mt. Vernon, N.Y. 10553

Exclusive U.S. Distribution Agency for Ducl



Level meters with VU characteristics; meters tilt for optimum viewing angle.

> Lewel controls for microphones and line inputs.

Dolby system with calibrators; can be switched to decode Dolbyized FM proadcasts too.

Dolby is a trademark of Do-by Laboratories, Inc.

Output level controls.

Memory for locating pre-selected passages on tape.

Headphone level control for precise stereo monitoring.

Bias and equalization for ferric-oxide, chromium-dioxide, and ferrichrome tapes.

Wow and flutter: 0.07%. Frequency response (±3dB): ferric-oxide, 20-16,500 Hz, chromium-dioxide, ferrichrome, 20-17,000 Hz.

Take a spin on our new fully automatic turntable. And leave the direct driving to us.



With Sony's new PS-4300, you just sit back and enjoy the ride. Wherever the record takes you.

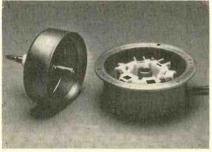
That's the blissful simplicity of a fully automatic turntable.

But the PS-4300 is more than purely practical. We like to think of it as a model union: combining the convenient and the complex.

It is a profoundly engineered machine, with intelligent design slashing through down to the smallest detail.

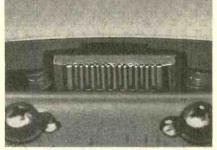
We gave brushes the brush.

The motor that powers the PS-4300 is brushless and slotless. Direct drive, if you will.



This deceptively simple construction makes for a smoothrunning motor with less friction and noise than traditional DC motors. And it eliminates cogging.

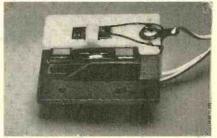
What's more, this smoothrunning motor is monitored by a



smoothly-engineered 8-pole magnetic pick-up head. And our magnetic speed sensor works through an intricate electronic feedback system; driving the platter directly—without a jumble of belts and pulleys getting in the way.

So our torque is not a turkey, and we've got low wow and flutter and high speed stability to boot.

An electric eye. For your ear. Hands off the PS-4300!

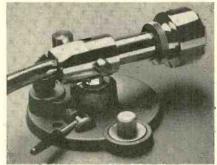


Our optical sensing system automatically returns the arm when your record is over.

Optical sensing is light years ahead of the conventional mechanical linkage. Eliminating the pressure and distortion you'd ordinarily get at the end of a record.

A tone-arm that's a strong arm.

Now we're not calling anyone clumsy. But there is the chance you might make a mistake and grab hold of the tone-arm while it's in motion.



That's why the PS-4300 has a tone-arm that's more than just statically balanced. It comes with a protective clutch device. (The only clutch you'll find on our fully automatic turntable.)

This latching set-up protects your arm against too much strain.

Moving from arms to feet, ours are designed to cut feedback. They're rubber-soled: suspended by cup-shaped rubber shock absorbers.

And they're adjustable, letting you level the turntable. So you might say our feet come with elevator shoes.

Our vibration-reducers are great shakes.

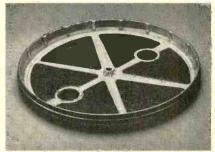
Sometimes the cabinet itself

can vibrate—distorting what comes out of it.

Not so with the PS-4300.

Our cabinet is built out of a material with a low Q. Low Q materials hardly vibrate, and nobody watches their P's and Q's like Sony.

Even our platter has been undercoated with a damping material.



And what looks like a bad case of acne on our record mat is a series of bumps that provide an air cushion and absorb vibration.

An exercise in self-control.

You can see that we've covered just about everything when we created the PS-4300.

Even the cover.

Our dust cover is ingeniously simple. When closed, it leaves the controls accessible.



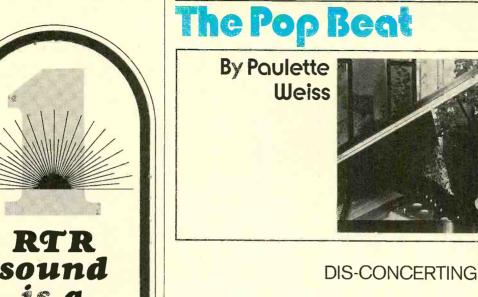
And what controls they are! One-touch, LED-indicated switches for start/stop and repeat.

One light tap starts everything going, while your record, under the dust cover, is in splendid isolation.

So if what you're looking for is an unmatched fully automatic direct drive turntable, drive on over to Sony.



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T has become almost common practice in critical circles to measure popular music, especially rock, by visual as well as musical standards. This is hardly surprising, for it became a necessity just as soon as the trappings of burlesque, the circus sideshow, and worse began to overshadow the musical aspects of many rock acts. Showbizzy production numbers-dancing teeth, live chickens, dismembered baby dolls, and all-were essential to the candle-brief career of Alice Cooper, for example, and they are now being echoed in the bad-copy shenanigans of such successors as Kiss and Parliament/Funkadelic. And we probably haven't even seen the end of itmore televised rock concerts and the coming of large-screen TV projectors in clubs and bars can be counted on to keep the fashion going for at least a little while longer.

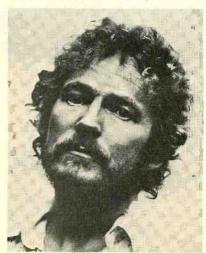
• Meanwhile, performers whose music is good enough to seize your whole attention through the ears without any distracting visual bait are getting pretty rare. Gordon Lightfoot is one of them. A long string of recordings (his latest, "Summertime Dream," received an Honorable Mention in STEREO RE-VIEW's Record of the Year Awards last month) attests to the unvarying high quality of his music and his performances of it. His voice and his guitar are all this troubadour has needed since the early Sixties to command the respectful attention of his always sold-out houses. And that's all he needed the night I heard him in the newly refurbished Avery Fisher Hall at New York's Lincoln Center last November-that and a little electrified back-up group to beef up the sound of his acoustic guitar. He's a bit beefier himself these days, but then he's a whole lot looser too; he chatted comfortably with his fans between oldies such as If You Could Read My Mind and newer songs such as The Wreck of the Edmund Fitzgerald.

It is, when you sit down and think about it, surprising that such a simple kind of presentation can work at all, but then Lightfoot is an exception, his showmanship of a subtly personal kind not many can muster. We *need* showmanship, of course; a performance that is totally lacking in it can bore us just as quickly as one that is composed of nothing else. All other things being equal, the flick of a nicely timed blood-red spotlight just at the high point of a familiar song can be as exciting as the wonderfully unexpected new guitar riff that accompanies it.

What is needed for the best of all concert worlds is a balance between the artistic substance—in this case the music—and the effective, glamorous, yes, even gimmicky manner of its presentation. The successful artists of any time are those most skilled in attaining that balance. It is a skill that comes mostly from experience, but you needn't necessarily be as old an old-timer as, say, Bing Crosby to have picked it up. Such relative youngsters as the Who have it. So do the Stones, Wings, Elton John, and Bruce Springsteen.

Patti Smith almost has it. In a recent appearance at the Bottom Line (which she dubbed the "AM" of New York clubs, CBGB's and Max's being examples of "FM") she was gut-level powerful, easily establishing an aura of camaraderie with her tough-kid rap, moving into white-hot treatments of Jolene and Redondo Beach, and uninhibitedly using the audience's food-and-drink-littered tables like a stripper's runway. It was theatrical and it was exciting, and had she been able to sustain that momentum and build on it from song to song it would have been devastating. Instead, she noodled around between numbers, chatted, played with the sound equip-(Continued on page 62)

GORDON LIGHTFOOT: respectful attention



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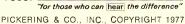
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If you are in a hurry for your catalog please send the coupon to McIntosh. For non rush service send the *Reader Service Card* to the magazine. CIRCLE NO. 23 ON READER SERVICE CARD ment, and generally dissipated the energy she had so effectively built up before.

Sohn Denver—if you are ready for a really mighty change of subject—has it too. His musicianship is impeccable, his voice excellent, and although his too-sweet tunes and downhome sentiments lack the grit I need in my aural diet, I can't fault his showmanship. A soldout pair of concerts at New York's Madison Square Garden late last fall found him arenacenter each night atop a little wedding-cake stage with his band spread out one tier below him. Through the evening I began to realize that Denver was turning ve-e-ery slowly so that he faced each part of the audience for an equal amount of time. The platform he was standing on was motorized, going through the 360 degrees so slowly that movement was not visible. Thoughtful, effective, and probably very expensive. Add to this a perfectly paced selection of his fans' favorites new and old (including some from his most recent album), excellent-no, fabulous-lighting, and you had a tight, fumble-free little show that left the crowd delighted and satisfied despite the fact that Denver (contrary to usual pop practice) sings no encores.

Contrast that display of balanced professionalism with another concert I went to shortly after: a legendary super-group, one I've loved for years despite its waxing and waning popularity; the long-awaited return of a much-missed founding member of the group; a stage set extravagantly rigged with palm trees, a sand-colored floor to suggest a beach, and a sixty-foot-long sloop strung with multicolored lights to flash and throb with the beat. Nothing but good vibrations, a setup for a perfect concert evening, right? Wrong. If, as a kid, you ever wanted-really wanted-a chemistry set for your birthday, and you got this package of exactly the right size and shape only to find that it contained sox and underwear, then you may have some idea of my disappointment. What I wanted in this case was the Beach Boys; what I got was . . . well underwear.

Management-type VIP's on hand assured me that the Boys were merely having a Bad Night, but I still feel like spitting. They were all having tantrums, it seemed, which hardly holds with the old show-biz dictum about smiling though your heart is breaking. Things started off with a few old favorites (Wouldn't It Be Nice and like that), but everything fell apart about twenty minutes in. Harmonies crumbled, Mike Love seemed to be taunting the returning Brian Wilson who, at the piano, was being treated (live!) to a neck massage administered by his personal roadie. Later, Dennis Wilson stalked off stage in a huff, no explanation. He returned later to help pull the show together, but by then it was too late for me. Two brand-new songs by Brian were poorly received, and somehow even the spirited last segment of classics (Heroes and Villains, Good Vibrations, and Surfin' U.S.A. among them) failed to revive my spirits. Maybe their new studio album will be different; at least I'll get a chance to really hear those new songs of Brian's. And then there's that promised solo album by Dennis.

Editor's Note: Steve Simels, sometime proprietor of this column of pop-music commentary, has moved on to the fresh woods and new pastures of television writing, but he will continue to alarm and enlighten us all with his salty opinions in the monthly review section.

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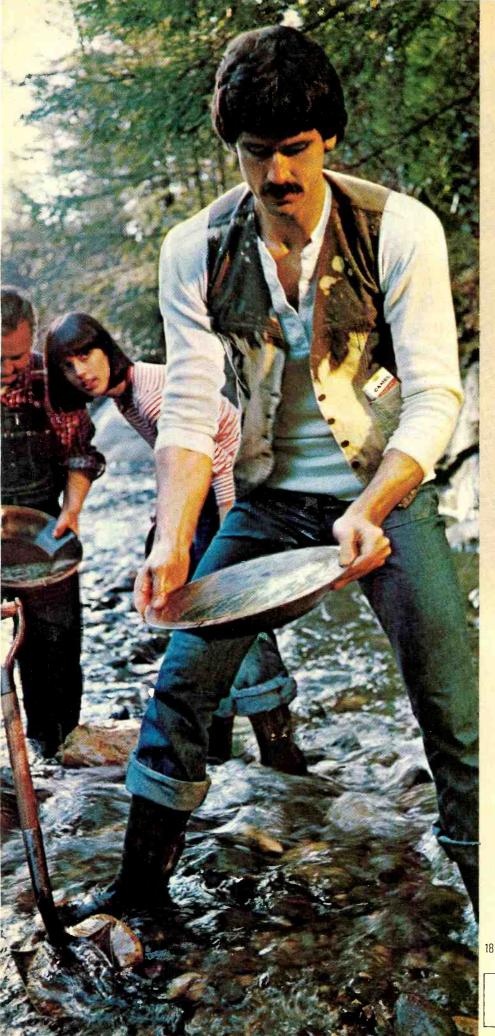


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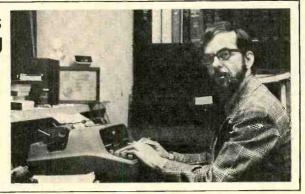


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Going on Record

By James Goodfriend



CONCERNING WARHORSES

LOT of people listen to warhorses, a truism made evident by a sampling of our concert programs and record catalogs. What is a warhorse? One can define the term by example. Just rattle off the first hundred or so compositions that come to your mind when someone says to you (as even some younger people are saying today): "I want to start lis-tening to classical music." Beethoven's Fifth, Dvořák's New World, Rimsky-Korsakov's Scheherazade, Tchaikovsky's 1812, Beethoven's Moonlight Sonata, Grieg's Peer Gynt, Debussy's Clair de Lune, Ravel's Boléro, Puccini's "Un bel di," Verdi's Anvil Chorus, Mozart's Jupiter, Schubert's Trout, Gershwin's Rhapsody in Blue, and so on down the line. You will find one peculiar thing about the list, however: outside of the fact that they were all composed in the two hundred years between about 1730 and 1930, the only thing that ties those hundred or so pieces together is their ubiquity. They are not all symphonies, not all orchestral, not all lyrical, not all programmatic, not all nicknamed, not all singable, not all romantic, and not all Europeanand they are certainly not all masterpieces.

The point comes up because in the peculiar musical sophistication of the society in which we now live there are some people who will listen only to warhorses and others who will listen to anything except warhorses. The former attitude comes about through the misconception that anything that has become that popular must be great, and that a herd of warhorses, therefore, is a herd of thoroughbreds, a carefully considered collection of masterpieces. But that can hardly be true. No one familiar with Ravel's music, for example, would ever choose Boléro as his greatest piece. No one conversant with Tchaikovsky's music would ever choose the Overture 1812 as anything close to the peak of his musical achievement. And yet it is Boléro and 1812 that are the warhorses, not L'Enfant et les Sortilèges and the "Rococo" Variations.

People who never listen to warhorses do so on the grounds of definition: a warhorse, says the dictionary, is a musical composition which, from much repetition as part of the standard repertoire, has become hackneyed. Since they do not want to waste their time listening to something that is hackneyed, they, of course, avoid warhorses. Now, that may have been rational behavior back in the days when all the classical music one could hear was in a concert or operatic presentation or on the radio; you had a choice of listening or not listening, but not of listening to something else. With the number of private thousandrecord collections today, though, those limitations no longer apply—and neither does the definition. For me, for instance, Schubert's C Major String Quintet is a warhorse—I've heard it as often as any other piece of music and Tchaikovsky's 1812 is a once-in-a-decade experience.

Needless to say, I don't consider the Schubert Quintet hackneyed, no matter how many times I hear it, and I feel just the other way about the Tchaikovsky. The question then arises: are all warhorses hackneyed or only some of them? To push the matter further, can a masterpiece ever really become hackneyed, or is a predisposition to that woeful state intrinsic in some music and brought out only by repetition?

I submit that it is the latter, and that, when it comes to defining what a "warhorse" is, the dictionary is wrong. Scheherazade, 1812, Poet and Peasant, Boléro, Les Préludes, Peter and the Wolf, The Fountains of Rome all become hackneyed through repetition because they



are to a degree hackneyed at the start; their musical content is not rich enough to stand up to constant repetition. But Beethoven's Fifth, Mozart's *Eine Kleine Nachtmusik*, Schubert's Unfinished, Debussy's Afternoon of a Faun, Schumann's *Kinderscenen*? No matter how negatively one reacts to the sound of the first few notes, no matter with what honest intensity one says, "Oh, not that again," one is inevitably drawn into the musical experience. All these pieces may be warhorses, but some are better warhorses than others.

A warhorse is a warhorse, then, becauseand only because-it is played and played and played. Its quality must only be sufficient for someone to want it to be played again. One wonders, though, how it was that certain pieces became warhorses in the first place. Was it the total lack of complicating counterpoint in Scheherazade that gave rise to its popularity? Did the audience at the first performance of The Sorcerer's Apprentice clamor for a repeat performance the following week-and every week thereafter? Was there some omnipotent imp at the première of The Firebird who said to himself, "This piece must be played and played to death and I will see that it happens"? Such are the little unanswerable questions of musical history-like wondering just where all those MacDonalds came from.

Do, while the information is still fresh in the mind, I propose a number of pieces that, for various reasons, seem to me to qualify today as warhorses—and with these nominations I include, for posterity's benefit, the reasons:

Richard Strauss' Also Sprach Zarathustra, because it has made it into not one but at least two Hollywood films (can you name the second?), at least one television commercial, and innumerable half-time band entertainments at football games where it is invariably said to represent "the future" (brrr!).

Hugo Alfvén's *Midsommarvaka*, because, under the title of "Swedish Rhapsody" and in brutally hacked-up form, it was a juke-box staple some years ago, and besides, it is, in its original form, probably as good a nationalistic rhapsody as anybody has written regardless of geography.

Stravinsky's Le Sacre du Printemps, because, even disregarding its appearance many years ago in Walt Disney's Fantasia, it is consistently represented in the catalog by at least two dozen recordings, new ones arriving as older ones are deleted, and it has even become some people's favorite piece of music.

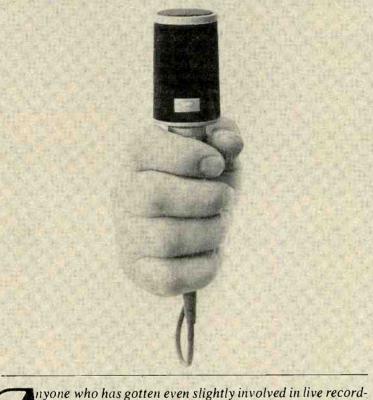
Joaquín Rodrigo's Concierto de Aranjuez, because it has been recorded by every guitarist with any pretensions at all—by some of them twice—excepting only those unable to convince their record companies that what the world needs is yet another recording of it. Also because it has been played and recorded (at least in part) by Miles Davis, the Modern Jazz Quartet, Gil Evans, and other non-guitarists, making it, perhaps, the First Classical Guitar-music Crossover Hit.

Jean Joseph Mouret's Suite de Symphonies No. 1 (Fanfares for Trumpets . . .), because it is heard every time Masterpiece Theater goes on or off the air, which is a lot more than it was heard in Mouret's lifetime, and a lot for any piece to be heard.

Carl Orff's *Carmina Burana*, because it long ago left behind its original categorization as a pleasantly derivative, quixotic piece of pseudo-antiquarianism to become a public nuisance, both on and off records.

TAPE RECORDING

A professional shares a few of his tips on how to do it right



Nyone who has gotten even slightly involved in live recording very quickly comes up with a list of questions the how-to books and audiophile friends can't seem to answer. Trial and error will ultimately provide the solutions to most of the problems, but only at the expense of far too many bad takes, wasted sessions, and maybe even some inappropriate but costly equipment. Why do your recordings sound so echoey? Or dull? Or distorted? How can you get the proper mix between voices and instruments? In short, what are you doing wrong and how do you go about doing it right?

I recently brought John Woram, a well-known recording engineer and consultant, together with a small group of amateur recordists for a question-and-answer session, and his notes were the basis for the question-and-answer exchange that follows. Certainly you won't find all your problems solved here (everyone has at least one unique question), but you may be surprised to learn how many of them are common to most beginners—particularly the very first one. —Larry Klein

How much should I expect a good recording setup to cost?

A. That depends on the type of recording you intend to do. For example, if you plan to tape the church choir or organ, you'll need only a basic stereo recorder, two microphones, and a pair of headphones that can be driven by the recorder output. Anything more than that may just confuse the issue. Make some test recordings with the microphones at various locations, listen to the playback over the headphones, make a decision about the best microphone-to-sound-source working distance, and you're ready for your first take.

A simple stereo setup such as this puts very little strain on your budget, and with a little practice it will produce excellent to superb recordings. On the other hand, if you plan to record a rock group so that it sounds like a modern studio production, you'll need something more elaborate. At a minimum, you'll probably want a four-channel recorder, a small mixing console, earphones for each member of the group, a number of microphones, and some sort of monitoring system.

At stores specializing in semiprofessional recording systems you'll find basic, "just getting started," no-frills setups for about \$2,500, assuming you have at least *some* stereo playback equipment on hand already. But, since it's not unusual for a serious recordist to invest many more times this amount as time goes on, as his system grows in size and complexity, I'd have to say that an "adequate" recording system can cost anywhere from less than \$1,000 to more than \$20,000. Of course, you can go much higher than that too.

Won't headphone playback monitoring be somewhat misleading as compared to the usual control-room type of setup using loudspeakers?

A. Yes, but given the acoustic environment of churches and other large areas, the sound from loudspeakers may also be misleading. During playback between takes you will hear the room's "ambiance" doubled once as it was recorded and again as the recording is being played back within the same room. Of course it would be fine if you could set up a nearby control room with loudspeakers, but in a typical case this may not be practicable. It may be easier to make a number of test recordings during on-location *rehearsals*, listen to the results in familiar surroundings while comparing them with your notes as to mike locations, etc., and then, having decided what sounded best, return for the actual recording session.

Olf you're recording at an actual concert, how do you eliminate audience noises?

A. Unfortunately, you can't. Human perversity is almost sure to cause the chronic coughers to seat themselves as close to your microphones as they can get. And normally wellbehaved babies, if present, are simply bound to scream during quieter passages, maybe from having just been terrified by a fortissimo. To avoid all this, you can try to get the cooperation of the group you are recording: they may agree that a pre- or post-concert performance without audience is worth the extra trouble.

QWhat kind of microphones should I buy?

A. For a basic two-microphone stereo setup, your best bet is probably a pair of unidirectionals. These are usually known as "cardioids" because of the characteristic heart shape of their polar patterns—the graph of their directional sensitivity.

A stereo pair of cardioid mikes are often placed quite close to each other but angled apart about 90 degrees. Since the unidirectional mike is most sensitive to sounds originating directly in front of it, each mike favors one side of the ensemble, and a good stereo image is therefore recorded. In the case of large orchestral and/or choral groups, a carefully placed stereo pickup conveys an excellent impression of the breadth and depth of the ensemble as well as the acoustical ambiance of the room in which they are playing.

O. If it takes so few mikes to make a good recording, why do so many of the pros set up a regular "forest" of microphones?

A The simple two-microphone arrangement demands ideal conditions—perfect ensemble balance and excellent room acoustics. But recordings are made in the real world; ideal conditions are usually found only in magazine articles. An extra mike or two may therefore be required here and there to help bring out a section which might not otherwise get picked up on the recording. Again, maybe the acoustics of the room are less than perfect, in which case it might be preferable to put up several extra close-up mikes to pick up more of the ensemble and less of the room sound.

But, as you can see, it's very easy to wind up with an "extra" mike on just about everything. This gives the engineer lots of control over the eventual total balance, but it sacrifices stereo perspective in the process. As a general rule, it's wiser to keep your extra microphones in their boxes, using them as sparingly as possible. An obvious exception, of course, is in recording rock, where it is customary to use one or more microphones on each instrument. The reason is that stereo perspective is not nearly as important as being able to experiment, in the final mix, with different balances and signal-processing techniques. But before you commit yourself to a dozen or so microphones on, say, the drums, be sure you know what you are sacrificing in terms of "real" sound.

Are there any special rules for buying mikes that are to be used for rock recording?

A. Since the "proper" microphone for anything is almost entirely a matter of personal taste even among professionals, it's best that you do a little experimenting with different types before you buy. More often than not, once you've established rapport, a reputable dealer will let you try out various mikes before you make your final decision. Have confidence in your own ears; if you like the way a certain mike sounds on the electric guitar, that's reason enough for using it.

There are a few basics to keep in mind while you are doing your experiments, however. For example, the cardioid microphone is most sensitive to sounds coming from directly in front, and that seems to make it a good choice if you wish to focus on just one instrument within a group. But most inexpensive cardioid mikes have other characteristics that may rule them out even for that: the "proximity effect" causes low-frequency response to rise as the mike is moved closer to the instrument, and "off-axis coloration" is another hazard—sounds from surrounding areas are picked up with (at times) severely distorted frequency response. A cardioid mike that is perfectly satisfactory in other respects may nonetheless give you too much bass when it gets too close and too much off-axis coloration when it is backed off. You may get better results with an omnidirectional mike which has neither of these weaknesses. As I said, experiment.

When the microphone is very close to a loud instrument won't its output be distorted in any case?

Not if it's a dynamic moving-coil A. microphone. The distortion you hear will be the result of overloading the console (or tape recorder) input with the mike's high-level signal. The microphone itself is capable of withstanding an incredibly high sound-pressure level-much higher than the output of any musical instrument. A condenser microphone, however, has a preamplifier built right into it, and this can possibly be overloaded by very high signal levels. Some condenser mikes have a switchable attenuator pad within to handle such levels, but if yours doesn't you'll have to back off a bit or choose a different microphone.

O. Is there a "correct" way to set up a recording area before the musicians arrive?

The best rule is to follow your own A. Ine best fuic is to concern. musical instincts. In most cases, there is no point in separating the musicians widely to keep the sound of one instrument from "leaking" into a microphone that is meant for another. If the distance is great enough to prevent such "leaks," it is also probably great enough to keep them from playing together-remember that properly proximity is an important factor in ensemble playing. In any case, you are better off moving your mikes in closer to the musicians than moving the players away from each other.

If you are using a pair of microphones for an "overall" coverage of the sound, make sure that the outputs of any extra close-up mikes are not handled in the mixer in such a way that they conflict with the seating plan. Otherwise, the overall mikes will be telling you that the guitar, say, is somewhat left of center while the guitar's own mike is panned way off to the right; the conflicting directional information will blur the clarity of the whole recording.

Also remember that more-distant mikes will hear the program a bit later

TAPE RECORDING...

(and with a more "echoey" quality) than the close-up ones do; if there are appreciable differences in distance, the combined outputs of the close-up and overall mikes may work to confuse or destroy the sense of space. Thus your mikes may have to be moved about quite a bit before and even during the session, and you should remember this when making your initial equipment setup. When you run your cables between mixer and mikes, plug the cable into the mixer first, then string it out gently to the mike. That way the slack, if there is any, is near the mike stand and available for moving with a minimum of tangle.

Q.What sort of mixer should I get?

For a simple two-track stereo re-A for a simple two track of the target of ta microphones directly into the tape recorder and you're ready to go. As soon as you start using more than one mike per recorded track, however, you are going to need a mixer to plug them into. Depending on your requirements (and your budget), you can spend anywhere from \$100 to \$100,000 (!) on a mixer. Some engineers consider the \$1,000 low that are "mixers" and above it they are "consoles." An appropriate mixer or console should enable you to route the outputs of several microphones to any track (or tracks) on your tape recorder. For example, if you've just finished recording two guitars on track 1 and a piano on track 2, you may now flip a few switches and route one of the guitar microphones to track 3, the other guitar and the piano to track 4-and that, of course, is the beginning of "creative mixing."

How do the musicians get to hear these previously recorded tracks so they can play along with them?

A The musicians listen over headphones to whatever was recorded previously. If the material is on just one track, it may be possible simply to plug the phones into the headphone jack on the tape recorder and monitor the *output* of the track already recorded along with the *input* of the track being recorded. (It may be necessary to install a low-power amplifier between the recorder [or mixer] and headphones to provide enough signal to drive sever-

al sets of phones.) Thus the musicians hear both the old material and the new over their headphones.

A more flexible headphone monitoring system (it is often called "foldback" or "cue") is built into some consoles—the console itself regulates the headphone feed. A separate set of controls permits the engineer to mix the previously recorded program with the new material for headphone listening while the new material is simultaneously being recorded on previously unused tracks.

If your mixer lacks this facility most of the inexpensive ones do—an alternative arrangement is often possible. Just route the previously recorded tracks to one or more of the mixer's line inputs. Then assign the related "faders" to one of the tracks that have already been recorded. Since you won't be pushing the record button for this track, the mix will not be recorded—but it can be routed to the headphone system to give the musicians a balanced combination of new and old material.

When there are several tracks of previously recorded program in the headphones, the musicians often have trouble hearing what they are doing "live." You may therefore want to assign the new live material to the headphone mix as well as to the separate tracks on which you are recording it.

OHow do I keep the new material synchronized with what was recorded earlier?

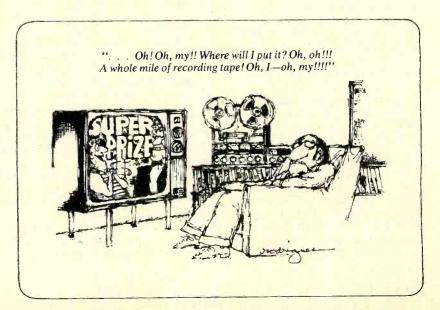
A Make sure your tape recorder has a track-synchronizing feature. Various companies label it differently— Sel-Sync, Simul-Sync, Self-Sync, Sync-Trak, and so forth—but the principle is the same in every case: while recording new material on an unused track, the previously recorded tracks

are listened to from their corresponding gaps on the *record* head. As the musicians play along with what they hear, the "active" gap on the record head records the new material directly in line on the tape with the old, thereby preserving the synchronization. Later, when all the recording has been done, the tape is played back from the playback head in the usual manner.

What do I do if I run out of tracks on my tape recorder before the group runs out of instruments or voices to be recorded?

With a bit of electronic juggling, A With a bit of clock of the succes-you can record an endless succession of instruments, even on a fourchannel recorder. When you've recorded three tracks' worth of information, rerecord them as a single mix on track 4. (Since the original three tracks are going to be erased immediately after, this transfer process may be done using the playback head, for all the information will be on one track and there is no need as yet to sync it with anything else.) Now you can record new material on tracks 2 and 3 while monitoring track 4 (it contains the mix of the old tracks 1, 2, and 3) in the sync mode. If you like, you can then mix new tracks 2 and 3 with track 4 and feed everything via the playback head to track 1, which will then contain a total of five tracks of information-and you are again left with three tracks to record on. You can keep doing this for as long as you can stand it-but remember that you will be accumulating more tape hiss with each transfer.

In a perhaps more likely situation, you may find you need just one or two more tracks than are available on the recorder. Let's say, for example, that the first three tracks have been recorded on your four-channel machine and you need two more. Mix tracks 1 and 2



together and record them on track 4, this time using the sync facility so the mix will remain in sync with track 3. Tracks 1 and 2 may now be reused for a total of five recorded tracks.

Aren't there any problems with bouncing tracks around in this fashion?

A Just two. First, remember that the playback head may be used for the transfer only when all previously recorded tracks are intended to be reused. Also note that, when using the sync facility, it is usually not possible to transfer material onto an adjacent track: track 3 may be mixed with track 4 and recorded on track 1, but not on track 2. The reason for this limitation is the crosstalk within the head itself. Track 3 "hears" a little of what is being recorded on track 2, and if track 3 is being simultaneously recorded on track 2, the crosstalk results in a feedback squeal which will make the transfer impossible.

In any case, a judicious mixture of the two techniques described should give you all the tracks you are likely to need.

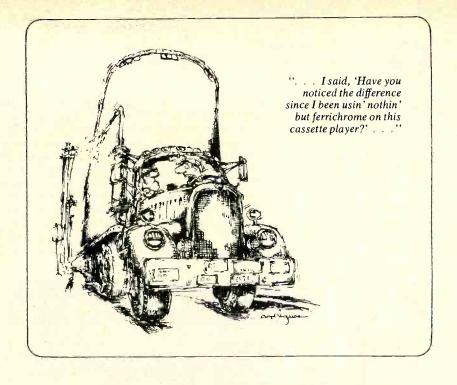
Olf I record only one or two tracks at a time, do I need more than two channels of noise reduction?

A Yes. You need one for each track on your tape recorder, plus two more if you wish to prepare two-track master tapes from your four- (or more) track original recordings. When multiple tracks have been recorded, each must be played back through its own noise-reduction channel before being mixed with the other tracks. And then, of course, two additional channels will be needed to process the mix as it goes onto the two-track machine. But, in any case, the multitrack tape may not be mixed together first and then fed to a single stereo noise-reduction system. Therefore, although you may need only one or two noise-reduction channels as you assemble your multi-track tape a track or two at a time, you'll need a full complement later for playback or mixdown work.

QIs it necessary to build a studio to record in?

A If you are recording choirs, orchestras, or marching bands, there's little point in building your own studio. Your local church, school auditorium, or football field usually provides the best recording location for such groups.

Rock music, on the other hand, is more often than not recorded in a studio no bigger than most living rooms,



and, if your neighbors don't object, there's no reason why you can't make excellent recordings in a living-room "studio." Since a major acoustic overhaul will cost you a fortune, you're probably better off confining your remodeling to moving a few chairs out of the way.

But won't such recording be disturbed by outside noises?

A Probably not. With close miking, it is unlikely that any microphone will hear much except the instrument it's aimed at. Of course you'll have to pause now and then for fire engines, ambulances, and low-flying planes unless you want to work them into your aural composition. In any case, the inconvenience is more than offset by avoiding the expense of actually *building* a studio.

What about those signal-processing add-ons that give you reverb and so forth?

As your recording system grows, you will want to experiment with one or more of the many signal-processing devices available. It would take a couple of columns just to list and describe very briefly *all* the special effects that are possible, but the most popular devices are the compressors and expanders (of the program's dynamic range), the equalizers, and the reverberation systems.

In the case of compressors, expanders, and equalizers, the signal to be processed is routed through the device, which is then adjusted to produce the desired effect. It is often wise to do your recording work first, however, and add the signal processing later when you mix the recorded tracks together to produce the master tape. Then, if it turns out that the signalprocessing effect is not working out the way you expected, you can make changes or eliminate it completely. On the other hand, if you add too much compression to the guitar while it is being recorded, it is just about impossible to remove that compression later. Of course, if that guitar was being recorded with several other instruments onto one track, any processing later on would affect all the instruments on that track, so if you want a compressed guitar, compression would have to be applied at the time of recording.

When applying reverberation to an instrument or group of instruments, the sound is first balanced as desired. In addition, those instruments that require reverberation are routed to the reverberation system, whose output is then combined with the total program to produce the desired proportion of direct and reverberant sound. Many reverb systems have two outputs, and these may be fed to the left and right to produce a more natural simulation of stereo. As with compression and other forms of signal processing, artificial reverberation is usually applied during mixdown, not during the live recording session.

QI've got at least ten more questions—what'll I do with them?

A. Write them down and send them to STEREO REVIEW. Larry Klein and Craig Stark will find good use for them in their columns.

NE wonders sometimes just how great a handicap intelligence is in the pop-culture business. Too much depth would seem to disqualify one from writing for, say, People magazine, among others, not to mention any number of television programs. And it seems to be true in popular music that Elton John was giving sensible advice when he said the songs ought to be disposable. In a world of junk food, the Hostess Twinkie is going to do better than the hand-made eclair. Occasionally, when our bellies are full, we see the light and make a case for something in life beyond Sell-

always seemed a little too classy for its environment.

"I've always had problems with record companies because my records don't sell. That's basically it," the younger Wainwright told me in a Greenwich Village place called the Elephant and Castle. "I've just finished my sixth album, and only one of the first five even paid for itself, to my knowledge." Of course, he's always been highly regarded by critics (his "Unrequited" album, for example, won an honorable mention in STEREO REVIEW'S Record of the Year awards for 1975), and we had this talk before

Any time you grow tired of Twinkies, you might try



LOUDON WRINWRIGHT III

ing. We're not in such a period now, obviously, but one could cycle in again. Stranger things have happened. Until then, there are a few lonely figures in the pop arts who seem destined to hang in there, more repulsed by the idea of boring themselves than by the idea, or the reality, of obscurity. It can be hard on the nerves, watching what the biz does to them, but then a whole episode could prove inspirational. One such figure is the relatively obscure Loudon Wainwright III.

The name itself is un-pop, elitistsounding. Not his doing, of course, but it seems to go with his too-much-class image and visions of his native land, the fancy Westchester County to the north of New York City. It is a heardof name, however; his father was with *Life* magazine for twenty years as an editor. He wrote a column that, to me, the new album, "T-Shirt," caused a mild jangling of cash registers, thanks largely to a song kidding the fuss we were making over the Bicentennial.

The earlier "successful" album was the one that contained his hit that shot all the way up to number twelve on the charts, *Dead Skunk in the Middle of the Road*—"which," he said, "is a nice enough song but not really representative of what I do. . . I'm with Clive Davis now, and we've known each other for several years and I think he has a pretty good understanding of what my capabilities are, so I feel somewhat more at ease with Arista. Nevertheless, my relationship with record companies and executives has been pretty strange.

"I've felt they could've put a *little* more effort into selling my records. After a while, you get into worrying about whether the records are any goodbecause they don't sell. And you start to feel apologetic about them. It's an uncomfortable feeling."

N stage, where Wainwright thinks he's at his best, he doesn't come across as a serious intellectual. Indeed, he is not that in his songs, either; they have an anarchistic, bebop swing to them, a recurring let's-see-where-the-chips-fall attitude. But he does tend to deal with matters that apparently scare people, with feelings and thoughts and possibilities that no doubt scared him before he dealt with them. He softens this with humor, and the only problem with that is that so much of the record-buying generation regularly misses the joke. Businessmen, John Jacob Niles says, tend to laugh in the wrong places; perhaps the hard times we've been having have convinced young people they'd better be businesslike.

"A lot of the songs are serious on one level," Wainwright said. "I have these 'love' songs that depict men and women not getting along together, which can be construed as a serious matter--when people are at each other's throats. That's not funny on one level, but on another it is, and I choose to treat it that way. My experience, in my own love relationships and friendships and from observing other people, is that love is great and nice and one of the best things around, but when it's rough, it's rough. And, as John Cassavettes said, 'Otherwise, it wouldn't be worth it.' If it were easy, it would be boring.

"I use exaggeration and artistic license, and sometimes I don't even try, but basically I think the songs are true. And I feel good about that. I know that sometimes the songs make people feel uncomfortable, and that's another reason why I ham it up, to sort of buffer it. If I have a lyric like—"

—"'Slit your throat'?"

"Right. Or, 'You used to say I came too early but it was you who came too late'—that can make a lot of men feel uncomfortable, because that happens a lot. It happens to me (not all the time!). But it's constructed so people automatically laugh. Luckily, when I'm on stage, I've had the ability to use other things, visual things, my face and my body. So they laugh. But it's serious and it's the truth.

"I don't want to make anyone feel terribly uncomfortable. I feel great about being able to inform and educate; that's wonderful if it happens, but basically it's entertainment. That's what I'm paid to do and that's how I basically see myself, as an entertainer."

He set out from Westchester County and the boarding schools of his youth to be an entertainer of another sort, an actor. And, although he was taken with the coffee-house folk music of the early Sixties, he didn't write his first song, didn't try to, until 1968.

"The only two things I did in boarding school were act in school plays and be in a guitar club," he said. "When I got through that I'd pretty much decided I didn't want to go to a regular college, so I went to acting school, the drama department of what was then called Carnegie Tech in Pittsburgh. I'd formed jug bands and sung in folk clubs, but I still thought I wanted to be an actor-until I got to acting school. I really got bored with that. It was a good school, but I just wasn't interested. So I left after a year and a half. I really didn't know what I wanted to do, but by then it was Hippie Time, 1967, so I went to San Francisco and concentrated on growing my hair and taking psychedelic drugs.'

The first song, written when he came back East, wasn't very good, he says, but the writing process appealed to him, leading to more songs, leading to some of his originals being heard by Milt Kramer (now his manager), who signed him to a publishing contract.

B_{ACK} East, he also met Kate McGarrigle, a folk singer from Montreal. She was then teamed up with guitarist Roma Baran and is now teamed up with her sister, Anna. "Kate & Anna McGarrigle" is one of those rare debut albums that had critics behaving like freshman cheerleaders.

"Every review I've read of it has been an absolute rave," Loudon said. "It's very heavy for me. My ego is doing back-somersaults. It's really a critics' favorite, and rightfully so; it's a great record." His and Kate's marriage is about six years old. They were expecting their second child quite soon when we talked. Loudon had already celebrated (?) fatherhood with such songs as *Rufus Is a Tit Man*.

Since many of his songs deal with the strain of real marriages, real relationships in the real world, I've been wondering what would happen if Kate's enterprise attracted the big, general audience that has so far eluded him. The McGarrigle album seeked to click with the articulate minority, the way Loudon's albums do, but the commercial potential seems to be there, and what if their second one takes off? Well, of course, facing this kind of thing and his own feelings about it is the kind of thing Wainwright does. I asked him some question attempting to get at how lonely a job that is, something phrased in my fumbly way about ego-feedback.

"I'd like to think there are people out there really getting into my records," he said, "but I don't have much perspective on my albums. I just throw them out there and then don't listen to them. I could tell this new one was about finished because I was starting to hate it. I'd rather listen to Bob Marley and the Wailers.

"In a way, though," he said, "it's good to confuse them, the majority of the audience, or to shake them up, or even send them away angry.... Sometimes I encounter hostility. It's interesting. I *am* arrogant in supposing I'm smarter than a lot of people—but one of the most obvious reasons is I play for people who are ten years younger than I am, people who are nineteen or twenty and in college. I think as you get older you get smarter. I wasn't very smart at nineteen.

"That's one of the reasons why, as I get older, I begin to realize that pop music—well, I don't have to get *out* of it, but I don't know how much more I can get *into* it. I can play for just so many colleges—and college people are very nice, you know, they're young and attractive and have lots of energy and are open to stuff, and a lot of them are really bright, nice human beings but I think about branching out into some other area.

"It makes me uncomfortable sometimes, to the point where I start to get snotty on stage, and that's bad. You can't just get snotty; that doesn't do anyone any good. It's one thing to toy with them, to *use* condescension and patronize them to bring about an effect. Nothing wrong with that. Marty Mull does that; he'll do the peace-sign trip and talk down to them, but he makes it so obvious that they know exactly what it is. His whole thing between songs is putting down his audience. I can do that to a certain extent, but after a while it turns in on me and becomes un-

"...I went to do this thing for a Skunk Festival in Little Rock, Arkansas...."

comfortable for me and uncomfortable for them. And people who do buy records and come to concerts are, by and large, between fifteen and thirty, at the outside, more like twenty-five. My audience—well, I've got to start reaching people my own age [twenty-nine], and hope to keep reaching some younger and some older. It's been neat, doing this for seven years, but it starts to wear thin."

This last may have been colored by his memory of a recent Carolina concert that had gone badly—he characterized it as "traumatic"—partly because his audience wasn't particularly inclined to listen to words ("I don't think I make it so hot with the Ripple wine crowd") and partly, he thinks, because his energy was low.

Still, it seems fair to say Wainwright is wary of the kind of life that would go with being a pop star.

"I'm infatuated with power," he said, "or fascinated by it. On one level, I can experience it. But I have this thing in me that—I don't know what it is. Power freaks me too much. It's too scary. I've resisted it to a certain degree. When I had that successful record, I didn't want to use that producer for the next one. I went to Bob Johnston and we did the next one ["Attempted Mustache"] in five days; it was a rush job and we weren't trying for singles or anything like that.

"I felt the whole success of the Dead Skunk thing freaked me. What really freaked me was I went to do this thing in a parking lot for a Skunk Festival in Little Rock, Arkansas. Mark Lindsay was the emcee, the lead singer for Paul Revere and the Raiders. That freaked me. We got met at the airport in this limousine, and we drove through the crowd in the parking lot to this place, a kind of mobile radio station they'd set up. And I went in there and the song had been number one in the area for a couple of weeks-apparently that song really took off in the South-and all these faces were pressed up against the glass, and it really made me nervous. Really made me nervous. I feit . . . uh, embarrassed. They were all young kids and they had a look that I couldn't relate to. I really like it when someone comes up after a show on a one-to-one basis and says I'm great, and then if there are sexual ramifications I get off on that. But when you get a bunch of people pressing up against you, it's different. It scares me.'

VHAT scares me is the idea I sometimes have that the Wainwrights in pop culture are an endangered species, the notion that there'll be nothing left but so-called artists willing to bore themselves if that's what it takes to make money. In the process, those types will encourage people to glance off one another and-worse still-themselves. But confronting one's own demons, which is what Wainwright one way or another encourages, just ain't going to be a national pastime around here; I realize that. His stuff may be a little too heady to take in massive quantities, anyway. However, any time you grow tired of Twinkies. . .

By Noel Coppage

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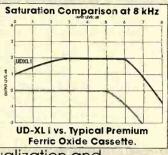
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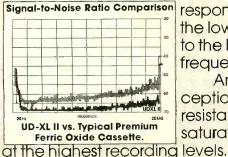
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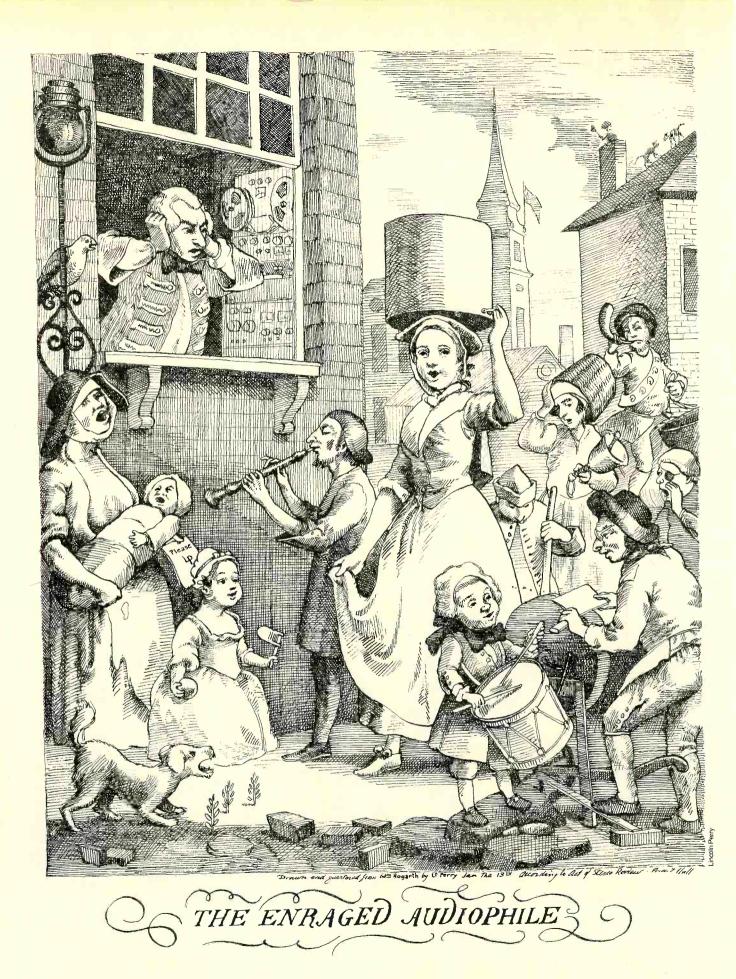
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Factors such as playback level, listening environment, and dynamic-range compression and expansion present the recording industry with a real



Noise enters our private worlds from many sources, in many forms, and most of it is an unwelcome intrusion on our activities. Noise appears where we work, in the communities in which we live, even in our own kitchens. In some cases it constitutes a danger to our health; in others it is merely an annoyance. Noise that turns up in our music-reproduction systems is much more than a mere annoyance, however, for it can actually limit the ability of the system to reproduce fully all aspects of a recorded musical performance.

That is why noise—or the degree of its absence—appears as a specification for most audio components. Noise reduction has become a major concern for manufacturers; it has fostered the design of special circuits and separate components, most of them devoted to lessening the noise in tape recording. Though no one will dispute that the hum and hiss that distract us from our enjoyment of recorded music should be reduced, today there is something of a dispute concerning the *extent* to which this ought to be done.

A famed acoustical scientist tells a story about his experience at a school which had engaged him to correct a problem in its new library. The library had been designed with the utmost care to prevent the intrusion of outside noise. Double-glazed windows, walls with high transmission loss, the right amount of acoustic absorption, muffled ventilation ducts, and other measures had successfully brought about a very low measured noise figure in the room. Nevertheless, the librarian complained that it was too noisy. And, in fact, it was too "noisy." Every page turning, every footfall, every door opening, every deep breath, throat clearing, or cough could be heard clearly and distinctly. For, although the sound levels of these noises were low, they were "...compression in recorded material may be necessary because of the noise in the listening environment."

significantly higher than the background noise in the room. The cure was simple: in place of the acoustically well-designed (meaning quiet) ventilation grilles, noisier ones were installed. The noise produced by the air rushing through them was a steady—and therefore unobtrusive—"shhh" sound that served to mask the intermittent discrete noises.

With the exception of ticks and pops on phonograph records, most of the noise that appears in a music-reproduction system is of this steady and (one might suppose) unobtrusive type. Yet such noise *is* objectionable in a music system. This is because the sounds that are masked are usually part of the music: system noise not only obscures the low-volume passages of a musical selection, but it can also cover up contrasting quiet notes in louder passages. In short, audio-system noise such as hiss can be said to "distort" the musical content.

It is the nature of masking by noise that any desired signal slightly quieter than the noise will not appear to mixwith the noise, but will instead simply *disappear*. Does this mean that a signal that is, say, at a -40-dB level will be inaudible on a tape recorder with a modest 38-dB signal-to-noise ratio?



The question has unexpected complications. Most noise measurements lump all the noise over a wide frequency range into one figure. This is known as "broadband" noise. The masking effect, however, occurs in narrow frequency bands that psychoacousticians refer to as "critical bands" of hearing. The exact width of these bands in hertz varies with frequency, but they are generally wider at low frequencies and narrower as frequency increases. They also vary with other characteristics of sound, whether it is "hissy," a pure tone, an impulse such as a drum-beat, or some combination of these. Nevertheless, over most of the audio range these critical bands correspond more or less with the oft-mentioned one-thirdoctave bands used by acoustical engineers. Thus, while the total noise of a tape player in the 20- to 20,000-Hz frequency range might be 38 dB down from a given reference level, the noise in any given one-third-octave segment (assuming that the noise is uniform with frequency) would be about 50 dB down. The music could therefore be as much as 12 dB below the rated 38-dB signal-to-noise ratio and still be heard. Further, if the noise level varies with frequency, as it often does (some types of transistor noise increase at very low frequencies, for example), then a signal in one of the quieter noise bands might be even lower and still be audible.

Figure 1 shows that what we have been describing is the *dynamic range* that is, the range between the highest and the lowest sound levels the reproduction system can handle. The highest level of sound is, of course, the point of audio-system overload; the lowest is the point at which the desired sounds will begin to be masked by system noise. And, as we have seen, even a poorly rated tape recorder can provide a dynamic range in excess of 40 dB at some frequencies. (overleaf)

NOISE DILEMMA...

So far we have been discussing only the noise of—or in—the system. However, playback systems invariably find themselves operating in a physical environment which is itself acoustically noisy. The home listening room suffers from the noise of ventilation and airconditioning systems, traffic outdoors, appliances, etc. Therefore, while the noise level in the reproduction system determines the lowest "floor" of loudness for the *equipment*, the noise in the listening room really establishes the lower level of audibility for the reproduced *sound*.

A typical suburban living room may have a mid-frequency noise level of around 20 dB SPL. If the output level of the tape recorder we have been using as an example is adjusted so that *its* noise is at approximately the same level as the room noise, the recorder would then be able to hit 70 dB SPL maximum, which is at about the level of semi-loud conversation. In contrast to this, the sound pressure lev-

el of a symphony orchestra measured at the front orchestra seats may run as high as 100 dB or so, and that of a rock band might run a steady 115 dB or more. If the playback controls are set to obtain a 90-dB loudness level in the living room, the noise of our taperecorder example would then be pushed up to 40 dB SPL (or 20 dB above the 20-dB background room noise). This would be very noticeable, not to say obtrusive (see Figure 2). It is easy to see how the various noisereduction systems now available for use in recording and playback are really vital if we are to come even close to achieving the full dynamic range possible in a reasonably quiet living room.

But what if all recordings were made to take advantage of this full range? In a fairly noisy environment-such as the interior of a moving automobile-the softest passages of music would be completely inaudible, totally masked by road noise. If the volume control is turned up to make these quiet passages audible, then when the music gets louder the sound gets too loud and/or the system overloads. A similar situation occurs if your listening room has only a couple of thicknesses of plasterboard between it and your neighbor's. There is no way you can use the full dynamic range of your system. When you keep the volume down so the loud passages aren't heard through the walls, the soft passages are lost in the normal background noise. So, even though technical advances have made it unnecessary to use electronic compression (reduction of dynamic range) in the commercial recording process to squeeze the music into the narrow space between the noise and the overload point, compression in the recorded material may still be necessary because of difficulties in the listening environment.

HE recording industry, having developed the technology to solve the noise/dynamic-range problem, thus finds itself on the horns of a dilemma. Should it produce recordings that accurately preserve the full dynamic range of the music and then let the public buy compressors if they are needed to reproduce the music satisfactorily in a given environment? Or should they continue to provide compressed music with limited dynamic range, as is the current practice, leaving the audiophile to buy an *expander* to restore the lost dynamic range? Given those choices, which would you prefer?

Daniel Queen, a previous contributor to these pages, is president of Daniel Queen Associates, which does consulting and design work on audio and electroacoustic systems.

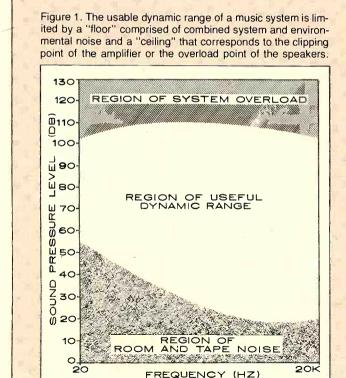
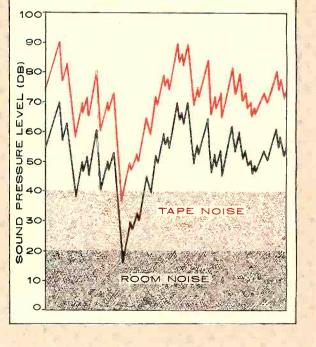
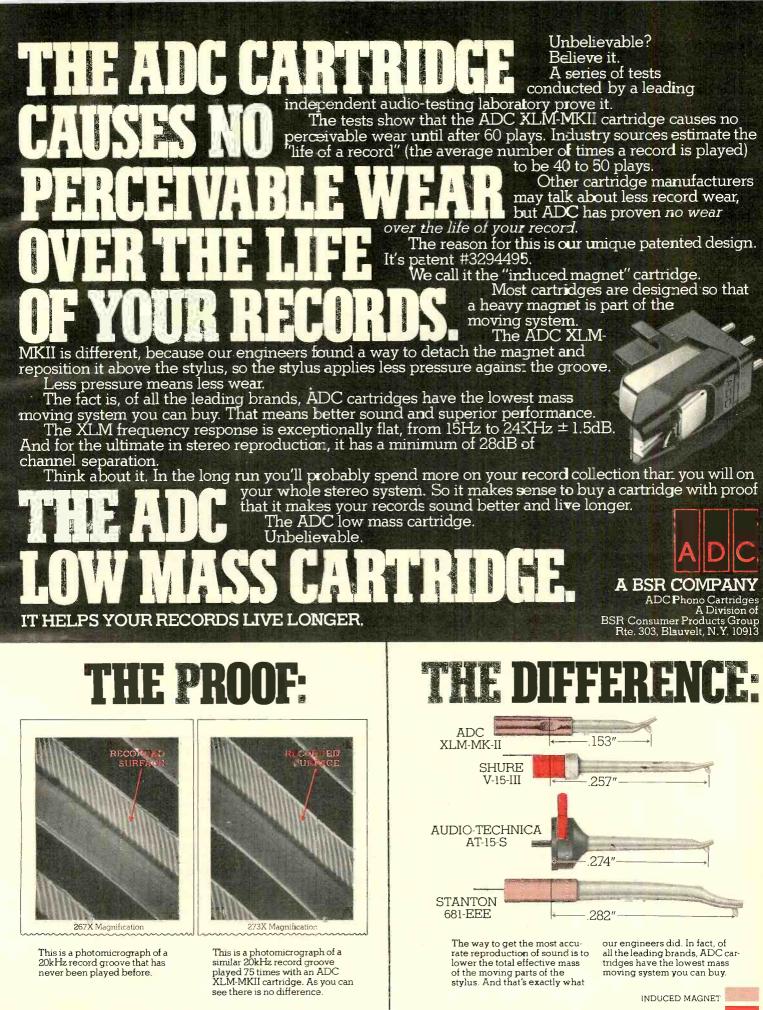


Figure 2. If our hypothetical tape recorder is adjusted to play back with a noise level equal to the room noise, the music is too soft. Increasing the volume for the right music level makes the noise from the tape machine obtrusively loud.





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ATIANA TROYANOS is famous for her dramatic interpretations on the operatic stage, but there is nothing particularly dramatic about the way she achieved stardom. She wasn't an overnight sensation, obscure one day and world-famous the next, nor did she spend years on the treadmill, as Beverly Sills did, before public, press, and impresarios finally recognized her. From her days in the chorus of the original Broadway production of The Sound of Music to her triumphant Metropolitan Opera debut as Octavian in Der Rosenkavalier last March, the dark-haired, dark-eyed mezzo-soprano from New York City has made a steady climb to fame.

Her status as a leading mezzo diva was verified last fall when London Records issued a complete recording of Bizet's *Carmen* in the *opéra-comique* version (with spoken dialogue), in which she sings the title role opposite Placido Domingo in a performance conducted by Sir Georg Solti. ("The best opera conductor in the world!" she says spontaneously.) Both the London *Carmen* and Troyanos' recording of Bartók's *Bluebeard's Castle*, conducted by Pierre Boulez (Columbia Records), were reviewed in the Best of the Month section of recent issues of this magazine.

Carmen holds no terrors for Troyanos; she has sung it "everywhere on earth." Her first Carmen was in English in Louisville, and she has sung it since in either the dialogue or recitative version in Hamburg (in German), London, Geneva, Palermo, Munich, and on tour in the United States with the Metropolitan Opera. "I was in the German cast in Hamburg, so I didn't get to sing it there with Placido," she said. "I'm very happy that he is the Don José on the recording." (Domingo sang the French version of Regina Resnik's Hamburg production with Huguette Tourangeau.) Trovanos favors the original dialogue even though she doesn't speak French fluently. "I have no trouble with the accent. Often it is cut, but on the recording we used practically all of that marvelous dialogue.3

Troyanos found the recording sessions stimulating, but she says "the schedule is so tight that there is never enough time to repeat things you think you can do better." Solti's coaching was as much an inspiration as his conducting. "He's a fantastic pianist. I remember when we were doing *Bluebeard's Castle* with the Chicago Symphony and sometimes the rehearsal pianist would be late. Solti would sit down and rip into that music. It was wild!"

She knows a lot about piano technique since she started her musical training as a pianist. She doesn't play much any more and speaks regretfully of it. "I can work out a new role at the piano, but it is too difficult to concentrate on two things at once---playing and singing. I was attracted to music as a child. I always wanted to sing, but my voice was so dark and I had no top. So I started with piano lessons."

Troyanos is the daughter of Greek and German immigrants who were divorced shortly after she was born. Both have remarried and live in the East. Tatiana is on good terms with them, but she seems to seek parental relationships with others as well. She speaks about her voice teacher, Hans him long distance when she's 'in doubt about something.''

In 1964 she auditioned for Risë Stevens for the Metropolitan National Company, and Stevens was so impressed that she suggested an audition for Rudolf Bing and the Met itself. A contract was duly offered, but it was turned down by the young mezzo because of the "nebbish" roles it involved. She sang a short season and a half with the New York City Opera, but parted from them when a promised *Carmen* was withdrawn. Still, Julius Rudel thought enough of her to cast her opposite Beverly Sills in *Ariodante* during the opening week of the Ken-



Heinz, with the affection one might reserve for a father.

"I was studying at Juilliard and it wasn't working. My teacher wanted me to be a contralto; she didn't think I could sing high notes. I wanted to study with Hans Heinz but they wouldn't let me, so I quit. Incidentally, that doesn't happen any more—the school is very good now about letting you work with the teachers you want." After a hiatus during which she worked as a secretary and waitress, Heinz became available and Tatiana went back to Juilliard to finish her schooling.

"I finally graduated, but I didn't go to my graduation. I'd had enough of school by that time. It was embarrassing because I won an alumni scholarship and I wasn't there to receive it." The scholarship allowed her to continue private lessons with Heinz, who still teaches her. "There are wonderful coaches everywhere and I work on my roles with them. But for specific problems or technical matters, I go back to Hans. He opened my top, taught me musicality." She also frequently calls nedy Center in 1971. She nearly walked off with the performance. The *Christian Science Monitor* reported that "her execution of the vocal ornamentation was brilliant, bringing her thunderous ovations."

By 1965 it was apparent that Troyanos was going to have to take the European plunge. Heinz urged her to audition in Germany. The Martha Baird Rockefeller Foundation, which had been offering support, was reluctant to sponsor such a wild shot, but when she returned with *three* European-contract offers the Foundation agreed to pay for her trip.

She accepted an offer from Rolf Liebermann, director of the Hamburg Opera. "I'm not sure why I chose Hamburg rather than Frankfurt or Zurich, but Professor Liebermann [now director of the Paris Opera] is a wonderful man, a most dynamic personality who takes a personal interest in the careers of his artists. I was there ten years, six as a member of the ensemble and four as a guest artist."

Her debut role in Hamburg was Lola

in Cavalleria Rusticana, and she later sang Santuzza in that opera. Among her other Hamburg roles were Eboli in Don Carlo, Dorabella in Così Fan Tutte, Giulietta in Tales of Hoffmann, and Poppea in Monteverdi's L'Incoronazione di Poppea. Unlike some impresarios who jealously guard their charges, Liebermann encouraged Troyanos to make guest appearances with other companies. He recommended her to the Aix-en-Provence festival where in 1966 she sang her first Composer in Strauss' Ariadne auf Naxos with Régine Crespin as Ariadne and Georges Sébastian in the pit. The reviews were raves.

Tatiana Troyanos

"Everybody is always asking when I'm going to sing soprano. I like being a mezzo—we are in a mezzo renaissance right now."

From there she went on to Vienna, Salzburg, London, Geneva, Rome, and Milan, where she sang a concert with Stanislaw Skrowaczewski at La Scala. The only major house left for Troyanos to conquer is the Paris Opera, and she is scheduled to make her debut there this year as Octavian ("If they stay open") and then to sing Didon in *Les Troyens* under the baton of Colin Davis—the first time Berlioz's opera will have been presented complete in Paris.

While making her way in European opera houses she was also recording for Deutsche Grammophon, Philips, and RCA. She recently added London and Columbia to her collection of labels, and this year she is scheduled to make a recording of Purcell's *Dido and Aeneas* (her second of this work) with Raymond Leppard for Erato.

About her experience with the Metropolitan Opera, Troyanos says, "I'm glad that the first contract the Met offered me was so *nothing*—and that they didn't renew the offer at the time. Things *do* work out for the best. It was much better for me to come into the house in a role like Octavian." The critics thought so, too. *Newsweek* said: "Troyanos steals the show." The New York *Post* declared her "the star of the show . . . the most aristocratic Octavian at the Met in years."

The partnership of James Levine (music director) and John Dexter (director of production) at the Metropolitan has her full approval. "I'm all for an ensemble company; maybe it's my European training." Levine, an old friend, conducted her last summer in Mozart's Clemenza di Tito in Salzburg. She thinks Sextus (a trouser role) in that opera is a great one ("Those arias!"), but she doesn't blame Janet Baker for switching from Sextus to Vitellia in the Covent Garden production ("That's a great role, too."). Has she thought of a similar switch? "Everybody is always asking when I'm going to sing soprano. I like being a mezzowe are in a mezzo renaissance right now." To illustrate the point she named Baker, Yvonne Minton, Mignon Dunn, Marilyn Horne, Frederica von Stade, and Shirley Verrett.

Anticipation at the Met before her debut was high not only because of Troyanos' well-known European successes but because in the last year she had been having similar ones all over America. Sarah Caldwell's revival of Bellini's *Capuleti e i Montecchi* in Boston had the New York *Times* raving over Tatiana's "Callas-like intensity." Her Poppea and Adalgisa in San Francisco resulted in critical acclaim and public frenzy.

She particularly liked her San Francisco roles because they got her out of pants and into glamorous costumes. "Trouser roles suit me," she says, "because it seems that those young men are all just like me: passionate, temperamental, in love, enthusiastic. But there is also a side of me that wants to be feminine, soft, gentle, not so emotionally involved on stage." Asked if she has considered moving from Octavian to the Marschallin in Der Rosenkavalier, she says, "Yes, I've considered it. But I think my voice might be too dark, at least for the time being."

Thoughts of the Marschallin bring up the subject of romance. Asked about her personal life, Tatiana, who was visiting a friend in San Francisco at the time of this interview, burst into a radiant smile and said: "It's great, everything is just great!" But if she is considering marriage, she is keeping it a close secret. "It is very rare that two people in the same profession can make it work, make their relationship come first. My friends Tom and Evelyn [Stewart and Lear] are a rare example. If I couldn't have *that*, what they have, I wouldn't want it at all. With a career you can't always adjust to another person's needs; you have to take advantage of what is coming your way."

Despite sudden explosions of frankness and confidence, Tatiana is shy and wary with strangers and has a vulnerability that makes her seem much younger than she is, a singer in her thirties enjoying all the attendant fame and glory of stardom. She isn't interested in playing the prima donna, and her manner is down-to-earth and unpretentious. "Temper tantrums take energy," she says forthrightly. "And besides, all that star stuff is passé, old-fashioned, and silly in an American."

She admits that when things were not going her way in Hamburg, she fought for bigger parts. Yet she was willing to sing roles she isn't sure today she approves of. "When you are young and starting out, you have to take the roles they give you. I had to do Jeanne in Penderecki's Devils of Loudun: it was assigned to me. But it was difficult, and the Rosenkavalier I was working on at the same time suffered for it. That kind of music destroys your line and now I stay away from it." She recognizes that new, innovative productions of modern operas are important for an opera house's prestige, but she warns young singers to "be very, very careful" about singing in them.

DESPITE her strictures about modern music, she doesn't seem to be afraid to sing anything. Her repertoire runs from Poppea and Cavalli's *Rappresentatione* di Anima e di Corpo to Penderecki's Devils, with stop-offs at Purcell, Stravinsky (Jocasta in Oedipus Rex was her City Opera debut role), Gluck, and various bel canto composers.

This season at the Metropolitan she is singing two roles that could hardly be more different: Amneris in *Aïda* and Gräfin Geshwitz, the lesbian countess in Alban Berg's *Lulu*. When I talked with her, she had not yet sung Amneris, and she expressed some doubts about it. "It's a heavy role. The tessitura in the Judgment Scene is killing; it just might be too dramatic for me."

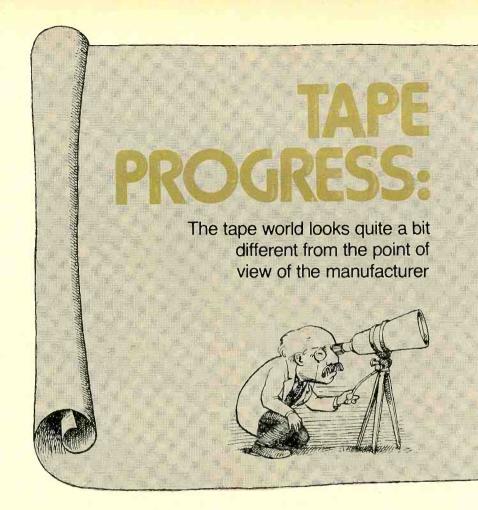
She needn't have worried. When she sang her first Met Amneris, Raymond Ericson in the New York *Times* said, "Hers was a freshly conceived character, sure in its details and a pleasure to watch." And discussing the Judgment Scene specifically, Speight Jenkins in the *Post* said that her "richness of tone, evenness of sound, and musical and dramatic intellect made the whole scene more than memorable." It does rather make one curious about the response to *Lulu* this month.

By Stephanie von Buchau

HE audio trade shows most of us are familiar with deal mainly with upcoming consumer and professional audio products or with the technical developments behind them. Recently, however, I had the opportunity to attend a very different type of industry get-together: the Sixth Annual Seminar of the International Tape Association in Tucson, Arizona, The ITA is a forum that brings together many of the top executives of companies engaged in the magnetic-tape industry worldwide. They meet to pool their knowledge and experience on everything from graphic design for cassette packaging through video-tape manufacture and uses in industry and education, to global economic and political forecasts of trends and events that will affect the tape business. In addition, this influential organization (it has grown in a few short years to include over two hundred corporate members) has assumed a major role in the industry's self-regulatory effort by handling consumer problems, setting and updating standards, and policing questionable practices. (The ITA has its national office in New York City.)

Getting a chance to see the industry as a whole did occasion a shift-or rather expansion-in my perspective of the tape world. When you and I think about tapes or machines, we are typically concerned about some practical performance question. And when some significant technical advance is made, we wonder why everyone doesn't rush right in to emulate it. From the businessman's point of view, however, the situation is rather different. The dedicated tape enthusiast who worries about differences among premium tapes, for example, represents an almost negligible percentage of the market, meaning that the lion's share of the profits is being made elsewhere. Take, as one small example, the matter of the improved ferric oxides that take advantage of the CrO₂ switch position on cassette machines: the great majority of the "machine population," according to the consensus of those to whom I spoke, consists of under-\$100 units that don't even have a "normal-chrome" switch!

As an example of just what is involved over in the "lion's share" area, Terry Wherlock of Intermagnetics Corp. described his company's worldwide ventures, particularly in the Asian countries. Though his company is aiming for an annual production of 200 million (!) cassettes by 1980, he estimated that a typical *small* factory, with a capacity of perhaps 6 to 10 million cassettes annually, would involve a capital investment of about \$250,000 (a larger plant, capacity 25 to 30 million annual-

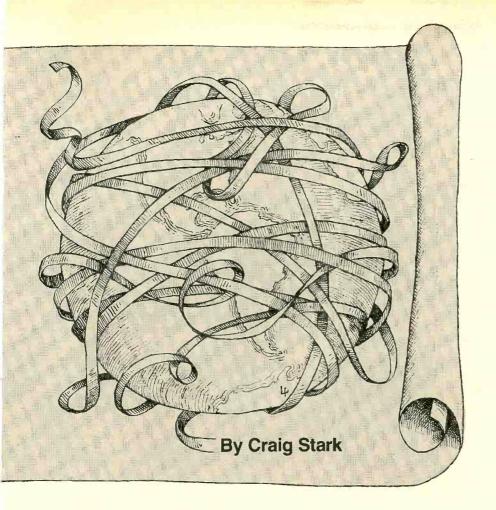


ly, would cost between \$450,000 and \$750,000).

• Better Tape •

The subject of the audiophile's persistent quest for better tapes was not ignored, however. David Monoson, consultant to Maxell, described the coating techniques used by the firm in its high-quality tapes. It all starts with a multi-stage pre-mixing process (aided by ultrasonic agitation) in which all the solvents, resins, and other chemicals are completely blended before the actual oxide particles are added. In this way, the oxide needles themselves spend less time being ground around within a ball mill before the coating is applied, so fewer of them become crushed and broken. It is these smashed, very much undersized particles whose unstable magnetic characteristics are prime contributors to hiss and print-through, and the new technique is claimed to reduce their incidence by half. Alan Lindquist of Pfizer (which, together with Hercules Powder, makes much of the "raw" ferric oxide used in tape throughout the world) expressed some doubt that particle breakage in ordinary milling was quite as significant a problem as Monoson implied, but, of course, any reduction in the number of crushed oxide needles represents an improvement when quality is the goal.

At each stage of the process, from depositing the wet "slurry" (the liquid binder materials plus the oxide particles, each of which must be completely coated by the binder) onto the base film, through the drying stage (where microwave energy can be used in addition to infra-red heating), to the final surface polishing or "calendaring," a number of highly sophisticated techniques are involved in making topgrade tape. One, still in the experimental stage, particularly caught my interest. It has long been known that you can improve the signal-to-noise ratio of a tape by approximately 6 dB if, while the oxide particles are still wet and free to move about in the binder, you line them all up in the same direction by passing the tape through a powerful unidirectional magnetic field. (For audio purposes, the needles are aligned lengthwise along the tape; for quadraplex [broadcast] video application, they are set perpendicular to the tape edge). Unfortunately, however, not all the particles do line up while under the influence of the magnetic field, so the full benefit of the technique is never realized. But, according to Monoson, experimental results have shown that



if, during the alignment process, the wet tape is simultaneously subjected to ultrasonic agitation, the percentage of particles achieving proper orientation increases, giving a net improvement of between 1 and 2 dB in signal-to-noise ratio. That's hardly worth the bother for mass-market tapes, but it would mean just that much more music to the ears of audiophiles. Memorex's Bob Murashige expressed it best at breakfast one morning when he said, "You know, you hear some of these guys saying that the hi-fi market is maybe only five per cent of the machine population. But the whole thrust, the thing that's made the cassette market what it is today, has been the effort to be as good as open-reel."

• Tape in Education •

Still, the principal focus of attention in the working sessions *was* on nonhi-fi applications for tape, particularly in industry and education. Executive and employee training and motivational programs using tape (sometimes cassettes with workbooks or slides, sometimes video tapes) seem to be blooming like flowers in spring, requiring the support services not merely of tape duplicators, but of companies that prepare the programs, companies that

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package them, and even companies that make splicing-tape dispensers to attach your tape to the short leaders that come with C-0 (empty, that is) cassette housings.

One man, who said he represented "the Christian market" (gospel music and sermons, one would imagine) inquired about packaging methods that would draw customers' attention to displays of his cassettes which, he said, tended to be impulse purchases. I couldn't help smiling when, in recommending the vacuum-formed blisterpack technique, his answerer laid heavy emphasis on the fact that this form of display was the most pilferproof. A representative of the U.S. Selective Service told how, with a staff of only twenty-one people (and automated equipment) they have been able to produce a million slides and fifty thousand cassettes a year to help keep four thousand local boards up to date on interpreting the draft law.

Harry McGee, Executive Vice President of the National Audio-Visual Association, told of uses for tape all the way from alerting people to the danger of fire in the upper stories of high-rise buildings to a grocery chain that employed a continuously running audiovisual program to persuade customers of the special merits of grass-fed beef. Educators abounded, from Dr. Donald Hess, whose Granite School District (Salt Lake City, Utah) utilizes more than six hundred video player/recorders and fifty thousand video cassettes, to Dean Walter J. Fahey of the University of Arizona, whose Microcampus produces video tapes of college courses you can take for credit, with titles as diverse as Women and the Novel and Electrical Engineering.

Speech Compression •

With so much emphasis on information transfer and the spoken word, it is not surprising that the hottest topics at the ITA Workshop on "New Concepts and Technology'' were speech compression and the microcassette, both of which may be somewhat new to STEREO REVIEW readers, but will not remain so for long. The type of "compression" we're most familiar with is amplitude compression, in which the loudness difference between a whisper and a shout is reduced. This is what gives the voices on TV commercials their peculiar force and punchiness (pushiness?), even though they seem to be delivered at normal conversational levels. But the kind of compression comoderators Ed Hanson (North American Philips) and George Saddler (Fuji) had under discussion was time compression-something I wish I'd been able to employ on the twenty hours of tapes I brought back with me from Tucson! With this technique, ordinary speech can be speeded up (it can also be slowed down if you like) as much as the listener wants, and without any change in pitch-the "Mickey Mouse" effect that normally results from playing a tape at a higher speed than that at which it was recorded.

It has long been known that the normal person can read many times as fast as he talks, so the brain is obviously capable of processing information much more rapidly than the ear normally receives it. It would therefore be a boon to many—the blind perhaps most of all, though the interest potential is clearly broader—if speech could be speeded up without sacrificing its intelligibility.

The first attempts to produce speeded-up speech used the clearly impractical method of *physically* editing out excessive pauses between words and syllables with a razor blade (history does not record whether the person who first undertook the task suffered early retirement to a rest home). In recent years it has become technologically possible to chop out selected bits of speech sound and join the severed portions together electronically, but it required an entire relay rack of expensive equipment to do so. *(overleaf)* TAPE PROGRESS...

Now, however, the entire task of slicing speech into tiny time intervals, throwing about half of them away and rejoining the rest, plus controlling the playback speed of a recorder, can be built into two or three integrated circuits containing an "analog shift register" (more commonly called a "bucket brigade," the same sort of device used in several audiophile room-reverberation units). All this can be fitted into just about any recorder while adding only \$50 or \$70 to its cost.

A panelist brought such a modified machine to the Tucson sessions; we all used it, so I know it works. Research conducted by the University of Louisville indicates, further, that information retention using the speeded-up speech is actually better than when we listen at a normal speed, presumably because we find it easier to concentrate on the material. Within five minutes all of us at the table could work very comfortably at two or two and a half times normal speed, so, where information must be gained through the spoken word, this new application of contemporary technology offers a tremendous time saving.

Microcassettes

The whole history of tape after the Second World War has been one of finding ways to put more and more information on less and less tape. Daniel E. Denham of 3M noted in a luncheon address that not so long ago it took 4.5 square yards of material to record what, in cassette form, now requires only 0.6 yard. So, anyone for a halfspeed cassette about the size of a small matchbox? In a word—or, perhaps, two—that's the "microcassette" or "minicassette." Though the two are similar in appearance, the Philips entry (the "mini") is-truly, this time!intended as a dictation device. It is hub-driven, so the actual tape speed (and hence frequency response and dynamic range) depends on the relative amounts of tape on the two "reels." The Panasonic and Olympus "micro," on the other hand, is capstan driven at 15/16 ips and is, according to some pundits, already as good as regular cassettes were only a few years ago. There are those who are convinced that the microcassette will eventually drive out its "big" brother, just as cassettes themselves have supplanted open reel for all but the most critical applications. Think of it—a year's worth of music in a glove compartment!

• Tape and the Law •

At another of the round-table seminars, attorneys Ernest Meyers, Jules Yarnell, and Sidney Diamond, along with Thomas Valentino (whose firm supplies music and sound effects for TV commercials, industrial training programs, and the like) presented a very thorough discussion of current copyright law. At present we are operating under an amendment (effective February 15, 1972) to the 1911 act, although a new, comprehensive copyright law (S. 22) has finally ground its way through the legislative process and will take effect after January 1, 1978.



"... it is not lawful to borrow a disc from a friend to make a copy for oneself"

As these gentlemen were the first to confess, even the new law, which was intended to simplify matters, has a text the size of a small telephone directory—and is far harder to read.

From the perspective of the audiophile, whether under the old or the new law, several things are very clear—but the rest is so muddy that one needs an attorney to make sense of it. In the first place, the home recordist does have the legal right to make tape copies of broadcasts, and of records and tapes which he owns, for his personal and private use, assuming he has no intention of capitalizing commercially on them. This "home use" provision was written into the law, according to Mr. Yarnell, so that senators and congressmen wouldn't find themselves in the position of making their own children criminals for making cassette or eight-track copies of their own record collections (that's a joke, son). Secondly, however, it is equally clear that it is not lawful to borrow a disc from a friend to make a copy for oneself, or to make a copy of one's own disc for a friend. Obviously, as a practical matter, no one is likely to bring an action against you for an occasional minor infringement of this latter kind, but it is against the law. And, where the practice becomes flagrant, as has been the case where college students have each bought a record or tape, made several dozen copies of it, and then organized a swap session, warning letters have in fact gone out and schools have put a stop to the practice where they could.

In cases where the master tape of the work copied antedates February 15, 1972, the offense is not technically an infringement of copyright but is known as "piracy," against which almost all states now have specific statutes. As Meyers put it, piracy "would violate . . . the common law of all states where the courts have considered the question." Further, whatever the date of the material, "home use" provisions do not permit a dentist, for example, to dub background music that he will later play in his office, for that brings the matter into the field of commercial use. Dentists, restaurateurs, and even elevators are therefore advised to deal with a music service which has obtained all rights to the recorded entertainment it purveys.

Even if you buy a record or tape, you are not free to make a commercial application of it. And if, like me, your chief recording interest lies in capturing the sound of the live performance, be sure you obtain authorization to do so, or you will be guilty of "bootlegging," which, as Meyers pointed out, "may violate state laws designed to protect artists against the misappropriation of their performances, as well as constituting an infringement of the underlying copyrighted musical work."

• Prerecorded Tape •

At still another round table, quality control was the focus of attention. Audio Digest has made available a cassette subscription service for the medical profession which enables doctors to use odd moments (such as time spent driving to work) to keep up with developments within their field. Having a limited market potential has made it extremely important to ensure customer satisfaction, and Audio Digest's ex-

traordinarily low return rate (0.2 per cent) was the envy of everyone who sat in on the discussion. The secret, unhappily, seems to involve not only extreme care in selecting commercial duplicators who can be relied on to keep their equipment in good condition, but in requiring them to use specific brands of tape and/or specific brands of C-0 cassette housings. Audio Digest discovered their workable combinations purely on the basis of experience, and it appeared from the discussion that their approach increases costs for the raw cassette from about a half dollar to perhaps twice that. Most of the premium tapes you and I buy are not even affordable by the typical supplier of prerecorded tapes, given the tight profit margins he must work within.

I raised the point that the complaints I get from readers aren't usually that their prerecorded cassettes jam, or have tracks recorded on them backward, or the like; freedom from this kind of gross defect is taken for granted. My complaints center on the fact that the frequency response, distortion, and signal-to-noise ratio on prerecorded tapes-both open reel and cassette-simply don't match those of the equivalent disc, yet the customer is expected to pay a premium for tape. Buyers very quickly become aware that they can usually make a better dub from a new disc themselves than the one they can buy in a store. Is the highspeed duplication process inherently incapable of making hi-fi copies?

Various answers issued from various quarters, but in the final analysis they all boiled down to the question of cost. Paul Lloyd of Infonics (maker of a medium-speed duplicator that operates at 10.7 times playing speed) pointed out that his equipment left the factory flat to 14,000 Hz, was 3 dB down at 15,000 Hz, rolled off sharply thereafter, and added no more than 3 dB of hiss to that already on the master tape. But when the equipment got into the hands of the duplicating company, all kinds of problems could develop if it was not maintained and operated properly. In his view, keeping frequency response out to 15,000 Hz was imperative, though it might require running the copies at a slightly lower signal level (meaning a couple decibels of loss in signal-tonoise ratio) than is customary. "The long-haired kids you kicked out of your stores fifteen years ago are now the heads of curricula at the colleges or they're disc jocks; in either case they insist on that high end and they'll listen to the music through the hiss.³

Bill Lawless, whose Recortec duplicators operate at the more customary *thirty-two* times playing speed, was willing to settle for a top end of 12,000 Hz (arguing that only a tiny handful of consumer playback machines were flat to 15,000 Hz). In his view, hiss is the primary problem. Good high-speed duplicators (not only his own company's) *are* capable of adding no more than 2 or 3 dB of noise to the master tape—a figure all of us would gladly settle for.

But why, then, isn't that what we get? It goes back to carelessness on the part of the duplicator in adjusting levels, bias, tape tensions, etc. for the different batches of tape he uses (skilled personnel costs money), as well as involving a higher percentage of rejects and time spent in adjusting rather than running the machines. And, once again, it involves the quality control of the materials used to make the copies. Lloyd was the first to admit that



". . . the feasibility of having the ITA certify manufacturers with good performance records. . . "

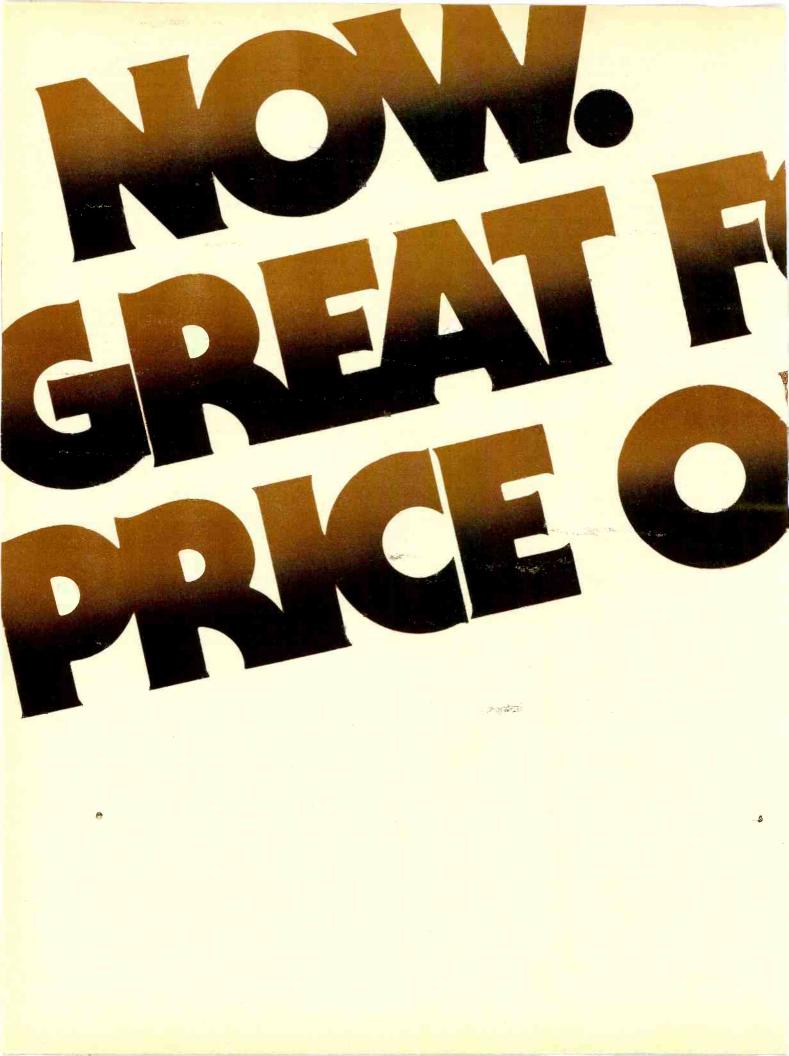
"you've got to have a helluva good cassette" to get truly high-fidelity results. To general agreement, he spelled it out this way: "You add up all the pieces in the cassette, and if you try to keep everv part in that cassette within a tight tolerance, see how much it costs you. You've got a C-0 that you're buying for 13.5¢, with two halves, two slip sheets, two hubs, a couple of pins, a little piece of bronze, iron, and a felt pad. All those pieces are made and put together, and the next thing that happens is that someone comes along and loads the tape into it, raising the total to 48¢ or whatever. Look at all that went into that 48¢—it's the best buy in the world.

But if the raw cassette sold for $98\notin$ instead of $48\notin$, then the manufacturers of all those little pieces and the guy who put it all together and the guy who put the tape into it could afford better quality-control procedures. What happens now is that a \$3 program is put on a $48\notin$ plastic assembly, and you shouldn't do that. The end user gets hurt because the people who have the program won't pay for a quality cassette to put that program on."

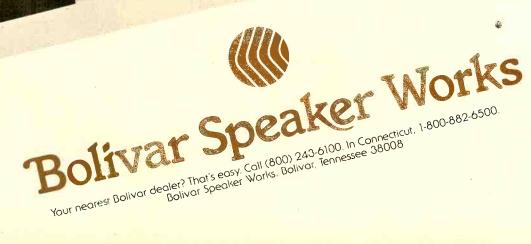
Cassette Standards

Another end-user went on to point out that money alone was not the guarantee of satisfaction, for in many areas there just aren't adequate, qualitygraded standards available, standards that are comparable, say, to military specification classifications. While some question arose about the feasibility of having the ITA certify (subject to recall) a list of manufacturers with good performance records, this suggestion did go into the matter of standardsetting, a field the ITA is just entering. After several years of cooperative work among many manufacturers, the ITA published its first set of trial standards for cassettes and eight-track equipment last year, and, while the press was barred from attending the closed-door meeting of its technical committee, it is clear that this important work is continuing vigorously. Enough leaked out from that meeting in subsequent private discussions with participants to indicate that the matter under consideration right now is that of establishing biasing standards for the ever-proliferating number of "new, improved" cassettes on the market. The hope is that tapes might be capable of being given ratings for bias requirements comparable to the ASA numbers assigned to film types. This would permit machine manufacturers, in turn, either to provide more standardized "bias and equalization" switch positions (perhaps even a calibrated control!) or, alternatively, to specify more accurately that their recorders are adjusted to use any cassette bearing such and such a numerical rating (or color code).

■HE ITA is still a young organization, put together originally on less than a shoestring by the boundless energy of its founder, Larry Finley. With its first publication of industry standards, to be expanded and updated continuously, Finley eagerly observes that the ITA has reached a definite turning point. If it can keep going in this direction it will benefit not only the mass market, but "the relatively small percentage" of us finicky audiophiles as well.



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





NORMAN BAILEY: a relaxed, warm, human Hans Sachs

Jochum vs. Solti: Two Eminent Conductors Offer New Versions of Richard Wagner's Comic Masterpiece Die Meistersinger

W ITH the long-awaited arrival of two new recordings of Richard Wagner's *Die Meistersinger*—one from Deutsche Grammophon under the baton of Eugen Jochum and another from London under Sir Georg Solti—we now have a choice of four modern versions in the current catalog. Both of the new sets offer a considerable number of attractions, as did the previous two (Angel/Karajan and Philips/Varviso), though neither shines with the blinding light of unmistakable superiority.

Solti and Jochum are both eminent Wagnerians whose general approaches to this complex opera do not always coincide, yet they remain, in their own ways, equally valid. Solti paces the music more broadly, but his overall timing is only four minutes longer than Jochum's, a negligible difference for an

opera of such length. (Karajan's time falls between the two, and Varviso's is considerably shorter.) Solti's personal imprint is more noticeable than Jochum's: his leadership exhibits a characteristic dynamism; a firm, at times robust, rhythmic foundation; massive sonorities; and grand, sweeping gestures. Jochum's more intimate approach may have been influenced by the strengths and limitations inherent in the casting of his Sachs, but more about that in a moment. His leaner orchestral sound reveals fewer of the details in Wagner's complex vocal and. orchestral scoring than Solti's occasionally remarkable nuances do, but this is not always detrimental. In Solti's treatment of Act II, Scene 6, for example, Sachs' Cobbler Song ("Jerum, jerum") is almost overshadowed by the

vocal strands surrounding it, while Jochum keeps it constantly, and properly, in focus. Just the same, on the basis of the orchestral performance alone, I lean toward the London set because Solti makes the festive moments decidedly more imposing and memorable, drawing magnificent playing from the Vienna Philharmonic (the Vienna horns and woodwinds are definitely superior to their Berlin counterparts), and because the London engineering gives us a wider range of dynamics and a splendid richness of low string sonorities.

Unquestionably, the most eagerly anticipated pleasure of the DG set is Dietrich Fischer-Dieskau's longtalked-about Hans Sachs, and I am happy to report that his deeply felt performance has moments of incomparable rightness. A good example is the



EUGEN JOCHUM AND PLACIDO DOMINGO: a little avuncular advice

lovely soft intoning of the phrase "Dem Vogel der heut' sang" toward the end of the Fliedermonolog, and there are other tender caressings of phrases as well as subtle infusions of wisdom, irony, humor, or dejection that denote the sensitivity of the recitalist. But there are also distracting mannerisms: clipped, curt phrasing, overemphases and exaggerated vocal gestures, and at times a simple inability to conceal the voice's limitations of range and weight. Remarkably enough, some of Fischer-Dieskau's best singing is done in the great "Verachtet mir die Meister nicht" exhortation of the opera's finale, which perhaps was wisely recorded in the early sessions-few are the baritones who are able to retain vocal freshness after four hours of arduous singing.

After the demanding complexities of the Fischer-Dieskau interpretation, it is almost a relief to turn to the Sachs of Norman Bailey: relaxed, warm, human, unaffected, full of the traditional virtues and devoid of all irritating idiosyncrasies. But it is also, alas, devoid of what is essential here: the mellow sound of a sonorous, firm, well-equalized bass-baritone. Neither Bailey nor Fischer-Dieskau supplies that sound; in the other stereo sets only Karl Ridderbusch (Philips) approximates it.

Deutsche Grammophon's adventurous casting assigns Placido Domingo to the role of Walther, and he responds to the challenge in a manner characteristic of his musicianship and versatility. He is certainly the most opulent-sounding among the recorded Walthers, even though his notes above the staff do not ring out freely. For all his excellent efforts, however, he does not appear to be at ease with the German text. The experienced René Kollo, with his lighter sound and more careful diction, may be preferred in that respect. Unfortunately, Kollo's top range is even more restricted than Domingo's, and he is further handicapped by Solti's excessively slow tempos for both the Trial Song and the Prize Song. Domingo's best singing is in the Prize Song; my prize, therefore, goes to him.

Passing quickly over the melancholy observation that neither Catarina Ligendza (DG) nor Hannelore Bode (London) is more than an adequate Eva, let us move on to the Beckmessers, where the picture is more encouraging. Both versions have lyric baritones in the role, fine singers who can spin out the required high A-natural without faking and who appear as genuine contestants rather than singing clowns-Beckmesser was, after all, a master singer! A certain amount of comic characterization is lost thereby (on records, at any rate), but I applaud the idea of having a singing Beckmesser as well as the two excellent artists who do the singing (I prefer Bernd Weikl on London by a slight margin).

Both Davids are excellent lyric tenors, youthful in sound and resourceful in negotiating the considerable demands of the first act. Horst Laubenthal (DG) is virtuosic here, but Adolf Dallapozza (London) is not far behind. I find Julia Hamari (London) the better of the Magdalenes; Christa Ludwig sounds a bit maternal in the role and is at times tonally unfocused. London's Pogner, Kurt Moll, a firm and sonorous bass, is superior to DG's Peter Lagger, who handles the conversational passages smoothly but has problems with the upper part of the role's tessitura.

Gerd Nienstedt (London) brings routine strength to the delightful character Wagner created in Fritz Kothner, but Gerd Feldhoff (DG) steals the show with his enthusiastic and rich-toned singing. And if you are intrigued by the unlikely name "Werner Klumlikboldt" in the cast list, let me assure you that there *is* no such singer: the name masks Kurt Moll and Bernd Weikl, who divide the delicious music of the Nightwatchman between them. Both are good—and so is DG's gimmickless Victor von Halem in the same role.

In sum, faced with a choice of four essentially good versions in the stereo catalog, I would choose London/Solti for sonic excitement, general soundness of conception, and consistently satisfying, though unspectacular, casting. The DG/Jochum set offers the unconventional pluses and minuses of Fischer-Dieskau's Hans Sachs and the best Walther, David, and Kothner of the lot to boot. The Angel has, in addition to certain remarkable Karajanesque qualities, the only acceptable Eva: Helen Donath. And finally, Philips/Varviso offers Bayreuth realism along with the best of the current Sachses. —George Jellinek

WAGNER: Die Meistersinger von Nürnberg. Dietrich Fischer-Dieskau (baritone), Hans Sachs; Peter Lagger (bass), Veit Pogner; Roland Hermann (baritone), Sixtus Beckmesser; Gerd Feldhoff (baritone), Fritz Kothner; Placido Domingo (tenor), Walther von Stolzing; Horst R. Laubenthal (tenor), David; Catarina Ligendza (soprano), Eva; Christa Ludwig (mezzo-soprano), Magdalene; Victor von Halem (baritone), Nightwatchman; others. Chorus and Orchestra of the German Opera, Berlin, Eugen Jochum cond. DEUTSCHE GRAMMOPHON 2713 011 five discs \$39.90.

WAGNER: Die Meistersinger von Nürnberg. Norman Bailey (baritone), Hans Sachs; Kurt Moll (bass), Veit Pogner; Bernd Weikl (baritone), Sixtus Beckmesser; Gerd Nienstedt (baritone), Fritz Kothner; René Kollo (tenor), Walther von Stolzing; Adolf Dallapozza (tenor), David; Hannelore Bode (soprano), Eva; Julia Hamari (mezzo-soprano), Magdalene; Werner Klumlikboldt (bassbaritone), Nightwatchman; others. Vienna State Opera Chorus and Vienna Philharmonic Orchestra, Sir Georg Solti cond. LONDON OSA 1512 five discs \$34.90.

Berman-Giulini: An Odd but Successful Partnership for the Liszt Piano Concertos

T will seem odd, perhaps, that Carlo Maria Giulini, who makes few concerto recordings and is just about the last conductor one might associate with Liszt, conducts the two Liszt concertos in his first Deutsche Grammophon release. The combination of pianist Lazar Berman and conductor Giulini must look odd on the face of it, too, for the solo works of Liszt in which Berman has been heard on records have for the most part shown him in the role of dazzling pyrotechnist and Romantic thunderer—not at all the sort of music-making one associates with Giulini.

As it turns out, however, the combination was an inspired one: soloist and conductor are together to an incredible degree, as if each had nurtured this conception of the Liszt concertos all his life and had only now found his ideal partner. I recall reading some musician's comment to the effect that, while he and his friends discussed the *conducting* after most concerts, after a Toscanini concert they found themselves discussing the music itself: that, in essence, is the effect this uniquely compelling pair of performances leaves with the listener. What remarkable, original, imaginative, majestic, exciting, deeply poetic works these concertos are, after all, and how much extraordinarily effective writing they contain for the orchestra (No. 2 in particular) as well as the piano!

Obviously there is no conventional razzle-dazzle in these performances. The approach is expansive and unhurried, projecting a feeling of immense power confidently held in reserve and an uncommon regard on everyone's part-every member of the orchestra is swept along in the magical Berman/ Giulini mutuality-for the astonishing *beauty* of these scores. Every brilliant effect is made, but made within the context of an integrated whole which it somehow strengthens instead of merely ornamenting. Liszt has never, never been so well served, and neither have those who listen to him. The recording itself is just about perfect technically.

—Richard Freed

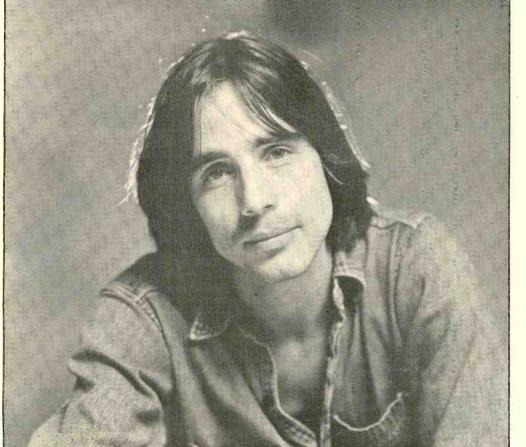
LISZT: Piano Concerto No. 1, in E-flat Major; Piano Concerto No. 2, in A Major. Lazar Berman (piano); Vienna Symphony Orchestra, Carlo Maria Giulini cond. DEUTSCHE GRAMMOPHON 2530 770 \$7.98; © 3300 770 \$7.98.

Jackson Browne's "Pretender" Continues His Search in Those Inner Spaces

ACKSON BROWNE had been in the studio for three weeks to give birth to his fourth album, "The Pretender," when his wife Phyllis killed herself with sleeping pills. He is quoted in *Rolling Stone* as saying, well, yes, "The Pretender" is the story of Phyllis and himself, but adding, "I'm not sure how worthwhile my describing such a personal tale is . . . I think it might be more worthwhile if it weren't taken that way."

In fact, the album refuses to be taken just that way, and not simply because it isn't specific about what she said and he said. It also is the story of yourself, of myself; it is about the self and the conflicts and contradictions it continually has to house. The word "story," though, with its implication of completeness, is a little off the mark. Browne's albums aren't Separate Projects to be compared to one another but installments in his odyssey through his inner life, wherein perhaps reside truths about your inner life and mine as well. It is a trip he has undertaken according to old and valid wisdom: know yourself and you will know humanity.

"The Pretender" is about frustration and optimism. If you analyze the songs and put them in one column or the other, you'll see that the undertone of optimism is not rational, that Browne's observations turn up too much evidence that the game is fixed; the album is about the human spirit refusing to do the reasonable (rational) thing, which would be to lie down and quit. The title song, quite an extraordinary piece of work, projects an "outer" life into what would seem a logical adjustment to this world: "I'm going to be a happy idiot . . . And struggle for the legal tender." But the protagonist there is



JACKSON BROWNE: an undertone of non-rational optimism the pretender; his soul is up to something else. The Fuse, which starts the record, is also supposed to go just after The Pretender, something like the way the lead-off man bats after the pitcher and gives you hope that things will pick up again. In this song the spirit assesses its own toughness.

Browne's words in this installment are just a shade more earthy than in previous ones. His structuring of verses and his curving of melodieswhile these continue, characteristically, to refer back to turns he's taken before-are just a little more conventionally "songish," a little more basic. It is at once simpler and more complicated music than that of "Late for the Sky." "The Pretender" is just as strong musically, but in a different way. Jon Landau's straightforward production and good ideas-such as having a harp plucked in ways that suggest mariachi phrasings in Linda Paloma, a song that acknowledges Mexican musical influences but can't afford to have that overwhelm what the listener perceives in it-get at the essence of Browne's thematics. I think Here Come Those Tears Again is structurally and melodically too complicated for the sense of its own words, as if Browne felt he had to write it before his subconscious had coughed up a full set of instructions. Most of the others sound as if they came to him after he had done all the difficult and painful work involved in preparing the way. Well, the truth is already there, all of it, some of it in the outside world and a lot of it in Jackson Browne and in you and me and maybe even in the other fellow who looks to us like a happy idiot. Say a prayer for all of us pretenders. —*Noel Coppage*

JACKSON BROWNE: The Pretender. Jackson Browne (vocals, guitar); Jeff Porcaro (drums); Leland Sklar (bass); Craig Doerge (piano); other musicians. The Fuse; Your Bright Baby Blues; Linda Paloma; Here Come Those Tears Again; The Only Child; Daddy's Tune; Sleep's Dark and Silent Gate; The Pretender. ASYLUM 7E-1079 \$6.98, (1) ET8-1079 \$7.97. (2) TC5-1079 \$7.97.

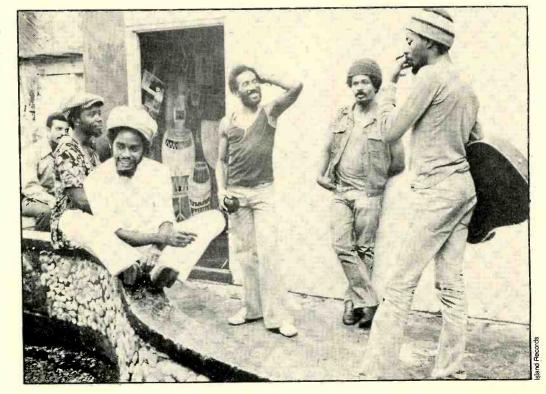
"War Ina Babylon": Max Romeo and the Upsetters Present Music to Get Upset By

VERY so often (unfortunately not often enough) an album comes along that seems to redefine a whole genre. Reggae, which has taken such a beating lately at the hands of no-talent bandwagon hoppers that it's sunk almost to the level of the cha-cha-cha in musical interest, has needed such an album. Now, suddenly and unassumingly, there appears Island's new "War Ina Babylon" by Max Romeo, and this is reggae—tender, urgent, crude, cruel, sarcastic, and powerful, truly a music to get upset by.

It is no accident, of course, that Romeo calls his group the Upsetters, for he has been in the "upset" business for some time. Max Romeo (real name Maxie Smith) was a notorious figure in English pop as far back as 1968, when he had a hit, banned by the BBC, with a song called Wet Dream. It was pushed onto the charts as a result of its popularity with the "skinheads," a strange tribe of British youths who cut their hair extra-short, wore heavy work boots, and placed themselves (often quite literally) stubbornly athwart the fashionable progress of the long-haired Beatles cult. He followed that with such risible rarities as Pussy Watch Man, Wine Her Goosie, and Mini Skirt Vision. In Britain his records were considered "rude"-and I would guess they mean a little bit more by that than we do. Around 1971, however, Max cut the kidding around and got serious. During this period he wrote, among other religio-socio efforts, Let the Power Fall. It became the rallying anthem of the People's National Party in the Jamaican general elections of 1972. And for the last few years he's been working in a quasi-comic vein that gives him room to take broad swipes at just about all the social issues confronting the West Indian black man.

This album, meticulously and grittily

MAX ROMEO (ON WAll) AND THE UPSETTERS: broad swipes at social issues



produced by Lee Perry (he also collaborated on several of the songs), is a fascinating glimpse into Romeo's work. His voice has a natural, taunting sweetness that is both seductive and threatening, and he uses it expertlylike a machete. In the title song he seems almost to be sending up the lyrics (about a tribal war) with his cozy, teasing delivery. But as chorus builds on chorus the listener suddenly realizes he has been infiltrated in an oddly unsettling way. Uptown Babies, addressed to those who happily know nothing of the ghetto, and Stealin', about corrupt churchmen, are sung in a curious monotone that glitters somehow with resentment and anger. And Norman is a flashy dude scornfully and good-humoredly dissected. In everything Romeo does there seem to be double levels of meaning, and even the sugar coatings are tainted with prussic acid. You may never grow to like Max Romeo, but if you listen you will find it hard to deny he's an authentic voice speaking in a form he intends to enrich, not merely capitalize on. -Peter Reilly

MAX ROMEO & THE UPSETTERS: War Ina Babylon. Max Romeo (vocals); orchestra. One Step Forward; Uptown Babies; Chase the Devil; War Ina Babylon; Norman; Stealin'; Tan and See; Smokey Room; Smile Out of Style. ISLAND ILPS 9392 \$6.98, (a) Y81-9392 \$7.98, (c) ZC1-9392 \$7.98.

Soprano Summit: A Jazz Quintet Featuring Soprano Sax Duets

NLIKE other jazz instruments, the soprano saxophone has had but one true master, the late Sidney Bechet. Sure, Johnny Hodges occasionally doubled on the soprano, and he did so extremely well, but it was Bechet who fully explored its potential and laid down the ground rules. Strangely neglected by other reed men in the early years of jazz, and totally bypassed by the beboppers, the soprano has found a new following-owing to John Coltrane's adoption of it in 1960-among today's avant-gardists, but rarely does one hear the instrument played in the tradition established by Bechet.

That rich vibrato sound, slithering effortlessly from bottom to top register—as it did so delightfully in the



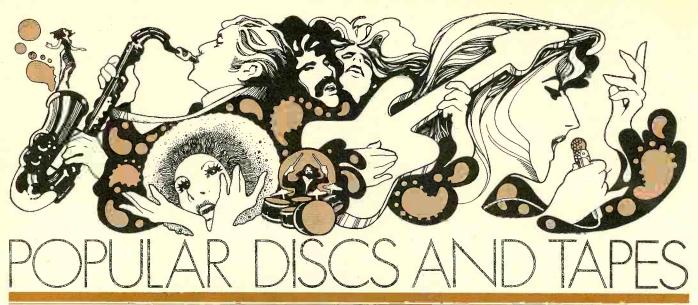
KENNY DAVERN AND BOB WILBER: in the Bechet tradition

hands of Bechet-is fortunately not extinct, however, thanks to Bob Wilber and Kenny Davern. Wilber learned the instrument firsthand as a student of Bechet during the latter part of the Forties. He has, in fact, recorded with the great New Orleans master, but, having studied with Lennie Tristano as well. his horizon is wide, and he is equally at home within a more modern musical context. Davern, the younger of the two, is not as well rooted in the Bechet tradition as Wilber, but he is capable of marvelous performances and, as evidenced by Soprano Summit's first album (on World Jazz WJLP-S-5), he is the perfect partner for this sort of thing. Completing the quintet are Marty Grosz, a wonderful, steeped-intradition guitarist whose full-bodied acoustical sound has appeared on revival jazz records for over twenty-five years, though all too infrequently; bassist George Duvivier, one of the most respected rhythm men around; and drummer Fred Stoll, about whom I know nothing except that he fits nicely into the scheme of things here.

As was the case on this group's first album, the program is a delightful mixture of tunes associated with Bechet, original material, and an early Ellington

item. Except for a rather straight-and, thankfully, brief-version of Danny Boy, the album is a joy from beginning to end. It takes its title from Chalumeau Blue, a Wilber original featuring two clarinets played, appropriately enough, in the lower register (the chalumeau was a forerunner of the clarinet, and the name is used to denote the lowest register of modern clarinets); the deep, reedy sound is one of the most beautiful around. Also beautiful, in its simplicity, is Debut, a Wilber/ Grosz duet featuring the former's first venture on the alto saxophone. But it is on soprano that Wilber really shines, and for pure foot-stomping value the zesty, scorching Nagasaki is hard to beat; it is the opening track of an album that is revivalist, to be sure, but far from imitative. -Chris Albertson

SOPRANO SUMMIT: Chalumeau Blue. Bob Wilber (clarinet, soprano and alto saxophones); Kenny Davern (clarinet, soprano saxophone); Marty Grosz (guitar, banjo); George Duvivier (bass); Fred Stoll (drums). Nagasaki; Chalumeau Blue; Black and Tan Fantasy; Grenadilla Stomp; Danny Boy; Everybody Loves My Baby; Linger Awhile; Slightly Under the Weather; Wake Up Chillen'; Ol' Miss; Debut; Some of These Days. CHIAROSCURO CR 148 \$6.98.



Reviewed by CHRIS ALBERTSON • NOEL COPPAGE • PAUL KRESH • PETER REILLY STEVE SIMELS • JOEL VANCE

ALESSI. Billy Alessi, Bobby Alessi (vocals); instrumental accompaniment. Do You Feel It?; You Can Have It Back; I Was So Sure; Big Deal (Live Without You); and six others. A&M SP-4608 \$6.98, (2) 4608 \$7.98, (2) 4608 \$7.98.

Performance: Pastel Recording: Clear

The Alessi brothers represent the boneless, vapid, pretentious pop music that seems to be endemic to southern California. The Beach Boys and the Carpenters (with rare exceptions), and Herb Alpert (with no exceptions) are other examples of the type.

Using harmonic techniques they've borrowed from the Beach Boys, and perhaps the Mormon Tabernacle Choir, the Alessis whine their cotton-candy songs while a string section wanders in and out like a breeze from Zuma Beach. Too much pap in the pop. J.V.

CHUCK BERRY: Chuck Berry's Greatest Hits. Chuck Berry (vocals, guitar); instrumental accompaniment. Roll Over Beethoven; Johnny B. Goode; Sweet Little Sixteen; Maybelline; and six others. ARCHIVE OF FOLK AND JAZZ MUSIC FS 321 \$5.98.

Performance: Walk-through Recording: Fair

These are *not* the original recordings of Berry's best and most famous numbers; they are

Explanation of symbols:

- $\mathbf{R} = reel-to-reel stereo tape$
- (8) = eight-track stereo cartridge)
- $\mathbf{\hat{c}} = stereo\ cassette$
- \Box = quadraphonic disc
- R= reel-to-reel quadraphonic tape8= eight-track quadraphonic tape

Monophonic recordings are indicated by the symbol \mathbb{W}

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

re-creations made around 1965 after Berry left the Chess label and signed with Mercury Records, which wanted a "greatest hits" album as catalog product to compete against the Chess packages.

The reprises lack the x factor, the chemical reaction of the originals. C. C. Rider and Ramblin' Rose, included here as filler, were never Berry hits. Rose is a rather bland reading of Nat King Cole's original version, while Rider, a cut from a live album released on Mercury in the late 1960's, is notable for the incompetence of the backing group. Poor bands were a distressing feature of Berry's performing career at this time; he used local pickup outfits and seemed to care little about their quality. I saw him perform in New York in 1966, and the combo behind him was so hopeless they couldn't follow the chord changes—all three of them—to Maybelline.

The Chess packages of Berry's originals are still available in some stores, although the label has closed down. Snap them up while they last, and avoid this sorry collection of an innovator imitating himself. J. V.

ELVIN BISHOP: Hometown Boy Makes Good! Elvin Bishop Band (vocals and instrumentals). Sugar Dumplin'; Sidelines; Twist & Shout; Yes Sir; Spend Some Time; and five others. CAPRICORN CP 0176 \$6.98, ⁽³⁾ M 80176 \$7.97, ⁽³⁾ M 50176 \$7.97.

Performance: Pointless craftsmanship Recording: Ditto

Here's a well-made piece of fluff, which is one of the things the music industry is trying to teach you to want these days, something like the way the automobile industry once taught you to want tail fins. There's not a song here that amounts to a hill of beans, except for *Twist & Shout*, which is shoehorned and pounded into a Caribbean arrangement that doesn't amount to a hill of beans. Anyway, there's so much shouting going on everywhere else—practically all the vocals and instrumentals are shouted, but in a slick, facile sort of way—that the old song wouldn't have any perspective for its essence to exist in even if they got at it. Slickness abounds; only the songwriting is ragged. Given a choice, I'd rather have it the other way around. N.C.

JACKSON BROWNE: The Pretender (see Best of the Month, page 91)

CATE BROS.: In One Eye and Out the Other. Ernie Cate (vocals, keyboards); Earl Cate (vocals, guitar); Steve Cropper (guitar); Scott Edwards (bass); Steve Foreman (percussion); other musicians. Start All Over Again; Can't Stop; Stuck in Chicago; Travelin' Man; Give It All to You; Music Making Machine; and four others. ASYLUM 7E-1080 \$6.98, ET8-1080 \$7.97.

Performance: Smooth Recording: Well produced

This is a pretty graceful try at the blue-eyed soul idea that never quite fades out of pop music. The Cate Brothers have nice, flexible, gritty voices, a batch of pleasant, low-profile songs, and, of course, a rhythm section that isn't bashful. Not much personality comes through, perhaps because everyone's too busy getting the stylized sound right. The music is affected, not in the pretentious or mannered sense but in the sense that they're consciously having to stay on it. How close they come-especially Ernie Cate, when he sings lead-to making it seem easy and natural is appealing. The other thing the album has going for it is the proposition that when your mind is done with it, which shouldn't take very long, you can always turn your feet loose on it. N.C.

JIMMY CLIFF: In Concert—The Best of Jimmy Cliff. Jimmy Cliff (vocals); other musicians. You Can Get It If You Really Want; Vietnam; Fountain of Life; Many Rivers to Cross; Wonderful World, Beautiful People; and five others. REPRISE MS 2256 \$6.98, M8 2256 \$6.98, M5 2256 \$6.98.

Performance: Fair

Recording: Dank

There are two traditional critical lines on Jimmy Cliff, neither of which I buy. The first is that, like Toots Hibbert, Jimmy is an Otis

Redding disciple, which strikes me as downright weird. Jimmy's high, pure voice is far more reminiscent of Sam Cooke or Clyde McPhatter-he's a crooner rather than a belter. The second is that he hasn't written a decent song in years, which is unfair, but at least I can understand the basis for it. Although there are indeed some marvelous things scattered across the albums he's made since The Harder They Come made him a star, his early songs were just so good, and their impact on an American audience hearing them for the first time all at once was so overwhelming, that it's made it difficult for his admittedly less consistent recent stuff to get the fair hearing it deserves

At any rate, a live "greatest hits" collection of songs covering the whole of his career would seem to be a good way for Jimmy to establish some album credibility now that reggae is a viable commercial commodity in this country. Unfortunately, "In Concert" isn't going to help him very much, and I can tell you why in two words: Andrew Oldham. Oldham is a great hustler, but despite his string of successes with the Stones he was always a lousy producer, and here he has absolutely outdone himself. The album sounds alarmingly like the Stones' "Got Live If You Want It," which up till now had the distinction of being the most poorly recorded live album in history; it seems not to have been mixed at all, and if I did not know for an absolute certainty that it was actually done in front of an audience, I would swear that Oldham had dubbed the crowd in-it sounds that unreal.

The bottom line on all this is: get *The Hard*er They Come soundtrack immediately if you don't already own a copy, hunt around for Jimmy's 1968 A&M album, and wish him a lot better luck next time. You can also ponder the question of whether Bob Marley's "Rastaman Vibration" made the Top Ten over here because of its musical content or because of Marley's outlaw reputation, and hope that Oldham doesn't secretly harbor a desire to remold Jimmy into a Jamaican Mick Jagger.

S.S.

BYRON KEITH DAUGHERTY: Let My Heart Be My Home. Byron Keith Daugherty (vocals and guitar); orchestra. Cry for Mary; Valhalla; I'm Leaving You; Evil Woman; Woman for All Seasons; and five others. FANTASY F-9515 \$6.98.

Performance: Good Recording: Good

Daugherty's voice has a warm, empathetic quality reminiscent of Don McLean, and his singing and guitar playing are extremely agreeable. He sounds intelligent enough, but his lyrics, with their raindrop, snowflake, flower-by-the-wayside, placebo messages, are clichés long ago worn to the nub by others. The title song, for instance, is an essay in selfpity that is maudlin to the point of embarrassment. His Woman for All Seasons makes his morning coffee and soothes his furrowed brow with all the assured dexterity of Julia Child rolling out pie dough. As a performer, though, Daugherty's quite good, and he manages to stay that way even in this sea of farina. It would be nice to hear him in less soulful material. P.R.

DIRTY ANGELS: Kiss Tomorrow Goodbye. Dirty Angels (vocals and instrumentals). Tell Me; Who Does She Do; One Time Woman; Bad Love; Alley Cat; and four others. PRI-

MARCH 1977

VATE STOCK PS 2020 \$6.98, ⁽³⁾ 8305 2020Н \$7.95, ⁽²⁾ 5305 2020Н \$7.95.

Performance: Incompetent Recording: Competent

This is a feeble kid band singing watery pop material. The group tries to growl and act tough, but it all comes out sounding like puppy yips and yelps. The photographs on the album cover show two members of the group doing their best to look like Mick Jagger did twelve years ago (are they possibly wearing padded lips?). There isn't much a record producer can do with this kind of group, and the producer here has done as little as possible.

J.V.

ENGLAND DAN AND JOHN FORD COLEY:

I Hear the Music. England Dan (vocals, guitar); John Ford Coley (vocals, guitar, piano); Jim Gordon (drums); Max Bennett (bass); other musicians. Used to You; Tell Her Hello; New Jersey; Idolizer; Mud and Stone; and five others. A&M SP-4613 \$6.98, **(a)** 8T-4613 \$7.98, **(c)** CS-4613 \$7.98.

Performance: Pleasant pap Recording: Very good

Four of these songs date from 1971 and are

here reissued from the debut England Dan and John Ford Coley album, which was on A&M and is out of print. The remainder were copyrighted in 1973; I don't know when they were recorded. The duo's "Nights Are Forever" album containing the hit I'd Really Like to See You Tonight is newer stuff on the Big Tree label. This isn't England Dan and John Ford Coley up to date, then, but it is a wellproduced album that doesn't represent them too badly. They come off pleasant and bland, the same way they still do: the latest thing in citybillies being almost indistinguishable from the next-to-latest, and so on, clear back to the Kingston Trio. So be it; there are worse things than helping keep the acoustic-guitar market going, and this kind of act does invariably improve AM radio (so would three minutes of silence every so often, but we can't get that). There are also worse qualities than blandness, as your local loudmouth jock and his mostly obnoxious records constantly demonstrate. N.C.

KINKY FRIEDMAN: Lasso from El Paso. Kinky Friedman (vocals and guitar); Eric Clapton (dobro); Rob Stoner (bass); Howie Wyeth (drums); other musicians. Sold American; Twinkle; Ahab the Arab; Catfish; Ol'

Adant Persons

"THEY looked at my heart and they looked at my head....They pulled my words apart and left them for dead," Melanie says, perhaps to clue us in that "Photograph," her new album for Atlantic, is an elaborate, purposeful answer to her critics of the early Seventies. It is also, I think, a work her old friends will love. Melanie always threw her heart into her music, but in winding up to do that she sometimes got her foot dangerously close to her mouth. Most of the bitching about her was unfair, though, and this album is going to make some people sit up and take notice.

Melanie's Back

She's been away for two years to be with her kids (let's not feel *too* sorry for someone who can afford to do that), and she's back with penetrating and courageously sentimental lines and with a richness of melody and atmosphere that may remind you of what you took to music for in the first place. The album—partly because echoes of the music hall are just naturally a part of Melanie—seems to have connections to several aspects of the pop-music past, but they are not there for gimmicky or exploitative purposes; it's just the way she is, and it is her voice today.

The best song in the album, one of the best songs of the year in fact, is Photograph, which says more (and says it better) about the longing for The Way We Were than did the movie by that name. Melanie is an unreconstructed romantic, bless her heart, and she hasn't gone against her own grain to mollify her old detractors. Quite the opposite: the album projects intelligence but in a cryptic way; Melanie won't mess up a scrumptious melody just to get a few more insightful words in. The album is grandiose, melodramatic, even a little schlocky, but it's how it's all those things that counts. I'm glad she's back. We need more people with the guts to be and to remain —Noel Coppage themselves.

MELANIE: Photograph. Melanie (vocals, guitar); Louis Shelton (guitar); David Paich (keyboards); Jay Wolfe (bass); Jim Gordon (drums); other musicians. Cyclone; If I Needed You; The Letter; Groundhog Day; Nickel Song; Photograph; I'm So Blue; Secret of the Darkness; Save Me; Raindance; Friends & Co. ATLANTIC SD 18190 \$6.98, (a) TP-18190 \$7.97, (c) CS-18190 \$7.97.

95

Ben Lucas; and seven others. EPIC PE 34304 \$6.98, [®] PEA 34304 \$6.98.

Performance: Home on deranged Recording: Okay

With this new album, Kinky Friedman seems to be moving into Shel Silverstein territory. Having exhausted the potential of his Sagebrush Semite routine, he is working on becoming the Rusty Warren of country-rock. (One of the great stories of the music business is that Warner Bros. president Mo Ostin passed on him because he was afraid to tell his mother that he had signed a band called the Texas Jewboys.) The result of this shift is an album that you don't listen to as much as you pull out for friends to listen to—a party record, in other words.

On that level, "Lasso from El Paso" has more than enough moments. There's a drunken updating of Ray Stevens' novelty classic Ahab the Arab; a thoroughly obscene Waitret, Please, Waitret; a charming children's choir and a piquant Eric Clapton solo embellishing the thoroughly disgusting tale of Ol' Ben Lucas (who "had a lot of mucus"); and, for grouches like Peter Reilly who think Bob Dylan has no sense of humor, the première of the Hibbing Minstrel's great baseball/soul/ protest song, Catfish (that's Catfish Hunter, of course). It's all pretty silly stuff, and some of it is in really colossally bad taste, but authentic wildmen like Kinky are a vanishing breed in rock, and they need our support. Besides, how can you help but love a guy who sneaks a perfectly serious, affecting version of The Ballad of Ira Hayes between two of the rankest bits of bathroom humor imaginable? They should have let him sing at the Inaugural. S.S.

FRANNIE GOLDE. Frannie Golde (vocals); orchestra. Love Is; I'm Hypnotized; All You Need Is Love; Just for Tonight; and six others. ATLANTIC SD 18196 \$6.98, (1) TP-18196 \$7.97, (2) CS-18196 \$7.97.

Performance: Musicianly but contrived Recording: Good

In her new album Frannie Golde comes on like an Upper East Side Bette Midler with a bra. It's scarcely what the pop world has been waiting for, but, as she goes on her fastidious, silky way, singing her own songs (the only exception being the Lennon-McCartney All You Need Is Love) in her big, carefully controlled voice, she does communicate a basic musicianship rare in young, white female singers. Too bad it's wasted on what she's chosen to do here. Her songs are fairly awful, but she puts so much real-sounding feeling into trying to put them over that eventually one defrosts. A little. Not enough, though, to overlook some of the "styling" gimmicks she attempts vocally-strictly "soul" by Bergdorf's and "blues" by Bendel. Ah, if only one could buy, or adopt, life experience P.R.

WOODY GUTHRIE: We Ain't Down Yet. Jess Pearson (narrator); Will Geer, James Seals, Dash Crofts (readers); Arlo Guthrie, Peter Yarrow, Hoyt Axton, Doug Dillard, John Hartford, Ramblin' Jack Elliot, others (vocals and instrumentals.) The Prophet Singer; Dear Mrs. Roosevelt; Build Me a World; Union Maid; Loneliness; Deportee; All of Us; So Long, It's Been Good to Know You; Wet Pair of Shoes; Win; The Grand Coulee Dam; We Ain't Down Yet; The Lady of the Harbor; Love Tonic; This Train Is Bound for Glory; Kids; My Daddy; Letter to Will Geer; Goin'



Down the Road; The Singing Cricket. CREAM CR-1002 \$6.98, **(a)** 8316-1002H \$7.95, **(c)** 5316-1002H \$7.95.

Performance: Another tribute Recording: Excellent

Now that there's a whole movie, Bound for Glory, devoted to the life of Woody Guthrie. it seems reasonable enough that somebody would want to issue still another album on the subject. Here Woody's "friends"-and the list is long and impressive-are on hand to quote him and to sing his songs of protest and exhortation. Such classics as So Long, It's Been Good to Know You, Goin' Down the Road, and This Train Is Bound for Glory are included along with a few songs that are not so familiar: the surprisingly patriotic piece he wrote on commission about The Grand Coulee Dam for the Tennessee Valley Authority, the war song My Daddy Flies a Ship in the Sky, and the wryly comic ballad The Great Historical Bum.

Not so effective as the songs are the quotations from the Wisdom of Woody, read all too reverentially between numbers by actor Jeff Pearson, who had the cooperation of Woody's widow Marjorie in assembling these excerpts from the letters and writings of what the news release from Cream Records describes as "America's depression hero." Woody could sometimes speak with homely eloquence in voicing his hatred of injustice ("I ache and I hate because the world needs so much fixin' "), but a little of this sort of thing goes a long way, and one just keeps wishing the next song would start. An exception is a touching moment or two in which Will Geer reads a letter he once got from Guthrie; the prose here sounds less as if it had been inscribed in stone with a clumsy chisel and more like the man I remember.

By now there must be a shelf full of these song/narration tributes to Woody. All of them are well-intentioned and feature generous lists of talent, but if you really want to hear a Woody Guthrie song done as it should be done, the best place to turn is still to one of Woody's own albums, where that so harsh yet strangely gentle voice is accompanied by the guitar that always sounds like some marvelous extension of the singer's quirky personality. May those records never go out of print!

P.K.

GEORGE HARRISON: Thirty Three and 1/3. George Harrison (vocals and guitar); Willie Weeks (bass); Billy Preston (keyboards); other musicians. Woman Don't You Cry for Me; Dear One; Beautiful Girl; This Song; See Yourself; and five others. DARK HORSE DH 3005 \$6.98.

Performance: Mostly routine Recording: Good

GEORGE HARRISON: The Best of George Harrison. George Harrison (vocals and guitar); other musicians. Something; While My Guitar Gently Weeps; My Sweet Lord; For You Blue; and nine others. CAPITOL ST-11578 \$6.98, . (a) 8XT-11578 \$7.98, (c) 4XT-11578 \$7.98.

Performance: Sublime to ridiculous Recording: Variable

Sorry, Beatles fans, but "Thirty Three and 1/3" is not the triumphant George Harrison comeback you've all been waiting for. True, it's better than anything he's done in ages, but *(Continued on page 102)*

GEORGE HARRISON: reasonable cleverness and Beatlesque whimsey

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meter indication, even at low-power levels. Special ballastic circuitry allows the meters to respond to peaks as short as a record click, making them extremely effective overload indicators.

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STEREO REVIEW

Heath Company, Dept. 40-27, Benton Harbor, MI 49022 CIRCLE NO. 25 ON READER SERVICE CARD



Paul: Live and Flying

WHEN Paul McCartney and his band Wings flew to America for their long-awaited debut tour last May, everyone seemed to be eagerly waiting for the former Beatle's act to be grounded. Critics had given his solo albums rather mixed reviews and, as is our habit with superstars who seem to think they are too super, we were ready to subject his every move to a cynical scrutiny. He had become, for many, rotten with success, more a music "personality" than a person who plays music.

But the tour changed all that. As STEREO REVIEW'S Steve Simels reported back then, "I came out [of the concert] almost ecstatic. I got chills. [McCartney's] so . . . endearing." Most critics agreed, and the twenty-one-city, thirty-four-performance cavalcade (airplanes have horsepower too) was a triumph. The keepsake of that tour, the memory book of that triumph, is a fancy-cover album containing three records, a poster printed on both sides, twenty-eight songs, and—oh, yes some very exciting performances. A pleasant switch from McCartney's seven other solo albums.

Those albums were often marred by painful pretentiousness and a sappy, sentimental selfconsciousness. The songs seemed to be overcooked and saccharine, like outtakes from a breath-mint jingle. But those some songs, oddly enough, removed from the studio candy box and set on the stage of the concert hall, work brilliantly, displaying some hard, rough edges that make us think more of sandpaper than of sandcastles. Moreover, McCartney sings them to communicate, not just to sound pretty. The result is a concert album of such realistic immediacy that you can almost smell

. . . about as close as we're ever going to get to a reunion . . .

the sulfur of the audience's lighted matches (yes, they do that for McCartney too).

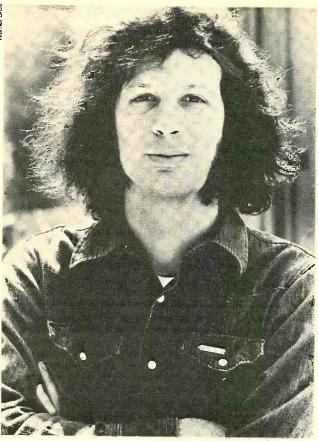
A good "live" concert album is, I think, always more exciting than a studio product. It's hard for a listener to imagine himself in the studio while the music is going on (granted that he would *want* to), but quite easy for him to imagine himself part of an audience that is already part of a recording. The performer has a lot to do with this. McCartney doesn't do a lot of talking on these six sides, but that doesn't matter. What he does do is concentrate on transfer of energy, picking it up from the audience, giving it back to them, and picking it up again in a warmly playful process of feedback that is almost palpable.

The album has fortunately avoided the pitfalls that await live-in-concert albums. Worst of these is the Greatest Hits trap, usually baited with enough sweetened laughter and applause for a *Lucy* rerun. This album does contain McCartney's hits, but there are also enough never-before-recorded songs to make the whole thing a new dish rather than a platter of leftovers. One of them is *Soily*, the album's second band and last encore. It sounds like a rousing cross between an Elton John rocker and an Indian war dance, but it is pure McCartney, energy-filled proof that the man *can* rock and roll.

WE didn't really need that proof, I suppose. Everybody knows McCartney is a rockand-roll star. But it's nice to learn from this album (and, of course, the tour that produced it) that he is such an accomplished performer, an entertainer who can keep an audience entranced for two and a half hours and a producer who can transfer all that excitement to disc. Nearly every concert on the tour was recorded, and McCartney himself listened to all the tapes, choosing five (!) versions of each song. Then he spent about six weeks (seven days a week, fourteen hours a day) making the final selections, mixing, and mastering. The finished product is a complete concert without a noticeable splice, but McCartney wisely refrained from adding any cosmeticsall the cracks, groans, and rough edges of his voice are intact.

The highlight for me is his performance of that unique Beatles classic Yesterday. Eerie, haunting, even a little chilling, it comes about as close as we're ever going to get to a reunion of the Beatles: a reunion of the old Paul and the new McCartney. If this album proves anything, it is that this Beatle has grown up, that he has come of age as a solo artist. His tunes may still be a little too predictably sweet-and-sour, but when he sings them right, when he reaches to the bottom of his performing gifts, then he does the impossible: he makes us forget about the Beatles. —Rick Mitz

PAUL McCARTNEY AND WINGS: Wings over America. Paul McCartney, Linda McCartney, Denny Laine, Jimmy McCulloch, and Joe English (vocals and instrumentals). Venus and Mars/Rock Show/Jet; Let Me Roll It; Spirits of Ancient Egypt; Medicine Jar; Maybe I'm Amazed; Call Me Back Again; Lady Madonna; The Long and Winding Road; Live and Let Die; Picasso's Last Words; Richard Cory; Bluebird; I've Just Seen a Face; Blackbird; Yesterday; You Gave Me the Answer; Magneto and Titanium Man; Go Now; My Love; Listen to What the Man Said; Let 'Em In; Time to Hide; Silly Love Songs; Beware My Love; Letting Go; Band on the Run; Hi, Hi, Hi; Soily. CAPITOL SWCO-11593 three discs \$13.98, \$X3C-11593 \$14.98, © 4X3C-11593 \$14.98. Narmer Bros



JOHN HARTFORD: lighthearted at last and much more fun

for largely negative reasons—Tom Scott's horns are almost inaudible, mentions of George's love for Krishna are held to a minimum (the Lord's in there a bit, but He's nonsectarian), a few of the songs have melodies, things like that. I have to admit, though, that I was sucker enough to have expected better. Granted, "Dark Horse" and "Extra Tex-ture," his two previous efforts, were perhaps the worst albums ever made by a musician with a major reputation, but George, as glimpsed recently on NBC's Saturday Night in performance with Paul Simon, and in two hilarious Eric Idle-directed promo films, both looked and sounded swell. Unfortunately, the two songs he premiered in the films provide the album's only worthwhile moments; This Song is reasonably clever and actually rocks a bit, and Crackerbox Palace is an addictive bit of Beatlesque whimsey that has some sensational guitar playing and an arrangement so alive that I find it hard to believe that the backing is provided by the usual hacks-Willie Weeks and company-who have made George and a slew of other famous artists sound exactly alike in the last year or two.

As for "The Best of George Harrison," the most telling comment that can be made about it is that while John and Ringo's greatest hits collections did not contain any material from their Beatles days, George's does—an entire side, in fact. That says more than enough about the declining state of George's creative powers. S.S.

JOHN HARTFORD: Nobody Knows What You Do. John Hartford (vocals, guitar, banjo, fiddle); Jim Colvard (guitar); Roy Husky Jr. (bass); Mac Wiseman (backing vocals); other musicians. You Don't Have to Do That; Didn't Want to Be Forgotten; In Tall Buildings; John McLaughlin; Granny Won't You Smoke Some Marijuana; Joseph's Dream; and six others. FLYING FISH 028 \$6.98.

Performance: Very good Recording: Good

I used to think, when John Hartford was straining metaphors in the shadow of Glen Campbell, that if he would take himself less seriously he'd really have something. I was right about this-he does take himself much less seriously here and most of this is great fun-but I didn't take into account something else I'd noticed about him: he tends to take a thing too far. Here he takes taking himself (and everything else) less seriously a little too far, which means part of the album is beyond fun and into a boring kind of absurdity. In The False Hearted Tenor Waltz and in the title song (which is constructed entirely of pointless innuendo anyway), for example, he lapses into a squawking falsetto by way of poking fun at his own singing voice. The instrumental Sly Feel might be fun to play for four and a half minutes, but a listener feels left out of the joke. Golden Globe Award really needs to be only one verse long to make its point and actually runs over four minutes. And so on.

But the album is better than it is bad. Hartford and Mac Wiseman use cornpone harmonizing to harpoon the mushy Somewhere My Love from Dr. Zhivago, and then graft a bit of Flatt and Scruggs' We'll Meet Again Sweetheart on the end to round it off. You Don't Have to Do That blends the kinds of gimmicks and messages found in such songs as Mama Don't Allow and Pretty as You Feel, and there's an excellent "straight" song about how awful the "normal" life looks to some of us: "Someday, my baby, when I am a man, and others have taught me the best that they can . . . They'll cut off my hair and sell me a suit, and send me to work in tall buildings." All the lightheartedness is played off against that; I guess he figured that called for a *lot* of lightheartedness, but he ought to post "Brevity is the soul of wit" or some such slogan above his desk. The instrumentation, charting some excellent country musicians through a hippie-folkie consciousness, is so good that it counters most of the excesses. Even though Hartford, with his intelligence, shouldn't have put those there in the first place, this is an album well worth checking out. N.C.

HOT TUNA: Hoppkorv. Hot Tuna (vocals and instrumentals). Santa Claus Retreat; Watch the North Wind Rise; It's So Easy; Bowlegged Woman, Knock Kneed Man; Drivin' Around; and five others. GRUNT BFL1-1920 \$6.98, BFS1-1920 \$7.98, BFS1-1920 \$7.98.

Performance: Good Recording: Dense

Here's Hot Tuna doing what it does, which is to run some basic, blues-based tunes through Jorma Kaukonen's massive, intentionally distorted electric-guitar chording and over Jack Casady's agile bass, and to package it all in a jacket and sleeve that are as ugly as they can make them. These electric and mostly electric Hot Tuna albums run together in my mind, however conscientiously I try to listen to them individually. Kaukonen seems to be trying for some such effect, I sometimes think, That would jibe with this other feeling I have that he's on an anti-stardom trip of some sort. The covers may be unattractive on purpose, this line of thinking goes, and that and the similarity of sound and material from album to album and the evenly modulated way Kaukonen sings may all be related. Exactly where he wants all this to lead is something I haven't figured out yet, but I'll keep trying. Meanwhile, here's Hot Tuna doing what Hot Tuna does. N.C.

ENGELBERT HUMPERDINCK: After the Lovin': Engelbert Humperdinck (vocals); instrumental accompaniment. After the Lovin'; Can't Smile Without You; Let's Remember the Good Times; I Love Making Love to You; This I Find Is Beautiful; and five others. EPIC PE-34381 \$6.98,
PEA-34381 \$6.98,
EXTERNAL State Stat

Performance: Nothing new Recording: Very good

Engelbert Humperdinck changed his name from he won't say what and got himself off a breadline in London about nine years ago to become an international singing star. Today, with his smooth, honeyed voice and flashy looks, he knows he doesn't have to try too hard to keep his following in love with himand try he doesn't. On this record, Humperdinck dispenses artificial ardor in indifferent ballads with lines in them like "I know that my song isn't sayin' anythin' new'' (he can say that again-and he does). The album should certainly keep his wife Pat and their four lovely children living in comfort in their mansion outside London until the next one is issued, which probably will be soon. No breadlines now. P.K.

KID DYNAMITE. Kid Dynamite (vocals and instrumentals). Shotgun; Feel a Whole Lot Better; Uphill Peace of Mind; Lovin' Don't Last Forever; Music Man; Mysterious Ways; (Continued on page 104)

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and four others. CREAM CR-1003 \$6.98, 8316-1003H \$7.95, © 5316-1003H \$7.95.

Performance: Uninspired Recording: Good

The jacket pictures and some of the sound (most of the vocals) suggest there's even more macho strutting going on here than normal for a rock group. It almost sounds like satire of that at times, but it doesn't go far enough and isn't clever enough to work that way. Val Garcia, who probably has a good voice if he would sing a song instead of act it, keeps turning the vocals toward a live-performance style, sounding as if what he really wants is not so much to be heard as to be seen. Yet much of the instrumentation seems canned. The band-two of its four members having trained under Steve Miller-is tight and technically competent enough, but that seems academic in this case, and I hear a lot more physics in it than chemistry. The songs, in any event, are hardly catalytic. Call it music to strike a pose by. N.C.

AL KOOPER: Act Like Nothing's Wrong. Al Kooper (vocals, keyboards, guitar, arrangements); instrumental and vocal accompaniment. (Please Not) One More Time; In My Own Sweet Way; Turn My Head Towards Home; Hollywood Vampire; This Diamond Ring; She Don't Ever Lose Her Groove; and six others. UNITED ARTISTS UA-LA702-G \$6.98.

Performance: Intellectual Recording: Very good

It's hard to tell whether Al Kooper is a musician or an entrepreneur; he seems to have been more involved in launching groups designed to a certain format than in staking out a claim for himself as a player. He was one of the Blues Project, a New York group of the mid-Sixties who approached the blues as if they were writing a doctoral dissertation. He next formed Blood, Sweat & Tears as an experiment in jazz/rock, but left the group after the release of their first album. He recorded several albums as a soloist or in company with other stars of the day, then journeyed south to survey local bands, where he discovered, signed, and produced early albums by Lynyrd Skynyrd on his own Sounds of the South label.

Now Kooper appears again with a solo disc, in which he demonstrates his talents as an organizer and musical arranger. The album is obviously the work of a capable and experienced man, but the material—mostly weak love songs—and his limp vocals undercut the arrangements and the strong support he receives from his sidemen. The performances give the impression that Kooper wanted to show us that he himself could make a wellcrafted album, but there obviously was little feeling involved. A little oomph would have helped. J.V.

L.A. EXPRESS: Shadow Play. L.A. Express (instrumentals); occasional vocal accompaniment. Nordic Winds; Double Your Pleasure; Shadow Play; Chariot Race; and five others. CARIBOU PZ 34355 \$6.98, (2) PZA 34355 \$7.98.

Performance: Hooey Recording: Good

I quote a statement made by this quintet on the back of the album cover: "Our music today reflects a special, free feeling of expression. The synthesis of complex musical conceptions united with pure simplicity, has produced a broad stage on which to create. The five of us along with our brilliant contributors are playing that stage."

Now, I ask you, does the playing of shoobee-doo-wah jazz from the Sixties, of a type that would make a four-week music student giggle in contempt, mixed with boom-boom disco, qualify as "a synthesis of complex musical conceptions united with pure simplicity"? As a matter of fact, what is "pure sim-

AL KOOPER Awell-crafted album from a rock entrepreneur



plicity"? Is "a broad stage" (a) an abstract conception, or (b) a literal conception, with curtains and lights and a stagehands' union and everything? And how important is the "broad"-ness of that stage to creativity? Couldn't L.A. Express "create" while standing on a dime? Furthermore, does "brilliant contributors" refer to friends, relations, spouses, lovers, hangers-on, the staff at chic Caribou Studios, and Ms. Joni Mitchell, who drew the album cover and sings ooo-ooo back-up vocals on one cut?

Let us assume that L.A. Express would not avail itself of the opportunity to be pompous, arrogant, and intimidating—for, as everyone knows, the denizens of pop music have for the last seven years conducted themselves in such an exemplary way that all the faithful cry hosannahs at all times. Still, I think it might have been more honest to have issued a statement something in the nature of the following: "Folks, we're ambitious hacks, pure and simple. Buy our album, please." J.V.

MELISSA MANCHESTER: Help Is on the Way. Melissa Manchester (vocals, guitar, piano); orchestra. Talkin' to Myself; Be Somebody; A Fool in Love; Headlines; Dirty Work; and five others. ARISTA AL 4095 \$6.98, (§) 8301-4095H \$7.95, (©) 5301-4095H \$7.95.

Performance: Raisin bran Recording: Fine

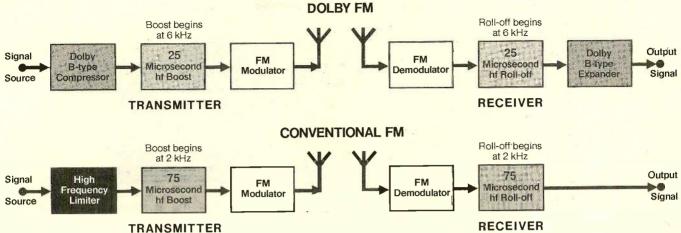
Melissa Manchester is still nattering away like one of those dreaded acquaintances who is grimly determined to be your "best friend," no matter how you feel about it. Here she is again, still at your elbow with her endless raisin-bran philosophizing and shining-hour sensitivity. All of this is probably meant to set your reeling mind and emotions at rest-rather like a double issue of the Reader's Digestbut, in truth, her fatuity brings out the murderer in me. This latest bowl of cereal has her wrestling with such eternals as hope (Help Is on the Way), faith (Be Somebody), and sex (Dirty Work). She has windy, novelettish answers to those problems and to just about everything else, all couched in her high-flown but carefully "street-wise" lyrics and performed with the mysterious sincerity of someone's hippie old Aunt Myrt. Fine, slick-paper production by Vini Poncia. PR

MANFRED MANN'S EARTH BAND: The Roaring Silence. Manfred Mann (keyboards); Chris Hamlet Thompson (vocals, guitar); Colin Pattenden (bass); Chris Slade (drums); Dave Flett (guitar). Blinded by the Light; Singing the Dolphin Through; Waiter, There's a Yawn in My Ear; The Road to Babylon; and three others. WARNER BROS. BS 2965 \$6.98, (1) M8 2965 \$7.97, (2) M5 2965 \$7.97.

Performance: One out of seven Recording: Very good

Manfred Mann's groups have gone through various personnel and style changes since the mid-Sixties, when Mann first became known here in the days of the British Invasion. At that time the band's hit singles were usually reworkings of American teen tunes like *Doo-Wah-Diddy*. Toward the end of the decade, though, they performed more complex and sophisticated material (*Semi-Detached Suburban Mr. James* and *Ha Ha Said the Clown*, for example), which was colorfully arranged and delivered with muscle. In 1969 the group had its biggest (and, to date, last) commercial (*Continued on page 108*)

Dolby FM and Conventional FM Symmetry is the Difference



These block diagrams show the difference between Dolby FM and conventional 75 microsecond FM. The difference is symmetry. With Dolby FM, the circuits at the transmitter are matched by complementary circuits in the receiver. Such symmetry of signal handling has long been valued in disc and tape recording - and indeed in noise reduction systems. Unfortunately, in conventional FM broadcasting the standards were set so long ago (back in the 40's) that modern widerange program material causes problems; high frequency limiting has to be used, and thus there is an extra process at the transmitter which is not matched by any complementary treatment in the receiver.

The Dolby B compression and ex-

pansion system is well known for its mathematically exact mirror-image operation: this is a key element in permitting FM stations and receivers to function in a symmetrical way. Here's how. First the conventional 75 microsecond high frequency boost and roll-off are reduced to the point where high frequency limiting is no longer required at the transmitter (this happens with a reduction to 25 microseconds, which gives a boost and cut beginning at about 6 kHz instead of 2 kHz) Unfortunately, this step is inherently accompanied by about a 5 dB increase in receiver noise. In the second step, however, the addition of the Dolby B system not only takes care of the additional noise but results in a noise level some 5 dB lower than conventional FM.

Thus, the overall effect is that about half of the 10 dB Dolby noise reduction capability is traded off for symmetrical signal handling. But, considering the two extremes of the dynamic range, there is still a genuine total increase of 10 dB in available dynamic range above about 3 kHz.

If you like the idea of a symmetrical FM system with reduced noise, then we invite you to write to us for further information. The following information is available:

- 1. Technical details and explanations of Dolby FM.
- A list of stations with Dolby FM encoder units.
- 3. A list of receivers with built-in Dolby FM circuits

Listening to Dolby FM

Basically, listening to the improvement brought about by Dolby FM is like listening to any audio equipment improvement - such as those made to turntables, pickups, amplifiers, and speakers. A particular improvement in a component may well be there all the time, but its noticeability will depend on various factors, such as the listening environment or the type and quality of the program material

In the same way, the overall Dolby FM listening improvement is subtle most of the time; occasionally, however, it will be quite obvious. It should be remembered that in FM the 10 dB action of the Dolby system is distributed nearly equally between the low-level noise and the high-level signals. The audibility of any change is therefore less obvious, and depends more on program material and other conditions, than the effect of the Dolby system on cassettes

Relative to the hiss level of conventional broadcasting and reception, a somewhat (but not startlingly) reduced hiss will be

noticed by listeners with weak-signal reception conditions; listeners with a strong signal will note no change (as with conventional FM, the noise will be determined by the station's source material. Listeners in any reception area, though, will notice a full recovery of source material high-frequency dynamics, regardless of signal strength. On most stations, cymbal crashes and other program material containing high-level high-frequency components will sound distinctly brighter and cleaner. Otherwise, for those rare stations which conventionally hold down modulation in order to preserve high-frequency signal integrity, the introduction of Dolby encoding allows an increase in overall level by several dB. Of course, this increase will be apparent to all listeners, regardless of location and whether or not they have receivers equipped with Dolby FM circuits

We think that critical listeners can hear and enjoy the various improvements described above often enough to make the extra cost of Dolby FM well worthwhile.

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Joni Mitchell's "Hejira": A Little Travelin' Music

LADY BUG mysteriously appeared on the A LADY BUG mysteriously appendic listen-arm of my old ratty-green music-listening chair in the cold, raw throes of November, just as I was getting to know Joni Mitchell's new album. The lady bug is a friend of man; back when I had a garden and other trappings of a fixed address, I used to order them through the mail and they would arrive and presumably eat up some of my enemies. This one was in such a wrong place at such a wrong time that I looked at it more closely than I once would have. What it looked like was a tiny pre-Rabbit Volkswagen, down to and including the orange paint job that has been available on those for several years. Where it came from is still a mystery, but what I hope is that it came in the mail, in the packaging with Joni Mitchell's album, for it is fitting that this tiny little live reminder of an automobile should accompany Mitchell's latest searching examination of wanderlust.

When Mitchell wrote Urge for Going years ago, she wasn't kidding. She has dealt with travel again and again in her music, travel and love, travel because of love, travel to sort out love, and even travel to escape love. Here, though, she has refined or distilled certain aspects of this into a seemingly irreducible poetry; she's articulated this connection between love and travel as she sees it, and she has gently fostered an acceptance of the whiteline fever in her soul, seeing the highway not as a place she is exiled to (as in "Hit the road, Jack, and don't you come back no more no more") but as a place of refuge.

EJIRA," the word Mitchell chose as the name of the album and of an important song in it, is a word rich enough in connotation to suggest she is talking about running away with her troubles and faith instead of from them. Specifically, the word, usually spelled "hegira," means the start of the Mohammedan era, A.D. 622, when Mohammed, trying to escape persecution, migrated from Mecca to Medina. The word is applied more generally to emigrations of the faithful; the Koran calls such emigrants Muhajirun and tells them they are honored persons. The idea of there being honor and dignity in being a refugee from one's home-one's love-nest in the case of this album, one's Mecca you might call it if the one you're dealing with loves love as much as Joni Mitchell has told us she does-adds a certain distinction to the album. Mitchell's way of

writing about travel as a person rather than as a performer is subtler than most of her colleagues can manage. Her lyrics are more direct and frontal than they've been recently and the lines are ear-catching. You may wonder what in blazes she's trying to do with sound, this time not because the melodies are difficult to track but because the arrangements seem so . . . well, unpremeditated. The instruments make sounds unlike themselves, almost random sometimes, except they do go together, and maybe this is what traveling music should sound like when the travel is for its own sake, rather than toward or away from something. We've been conditioned to think of traveling music as having a bee-line quality, with eight-wheel drivers heard through rhythm guitars, train whistles in harmonicas, and so forth. Mitchell's travels in the album are meandering, and her goals lie not at the end but in the process: "I've gone coast to coast just to contemplate."

A couple of times she seems to be writing to friends, putting down what she thinks to capture it for herself (as writers do) in *Amelia* and in *Song for Sharon*. And what she thinks about a lot is the old urge for going: "I slept on the strange pillows of my wanderlust... I dreamed of 747's over geometric farms ... Dreams, Amelia, dreams and false alarms." ... "Sharon, I left my man at a North Dakota junction, and I came to the Big

... doing what makes other people nervous is Joni Mitchell's job ...

Apple here to face the dream's malfunction." She unburdens herself quite a lot to Sharon, in fact, even to the point of facing what a temptation it is to stop, to settle down with a husband and the kind of life Sharon appears to have. That song runs for eight and a half minutes and doesn't seem long at all, it deals so well with doubts and longings that go with this nomadic state. "There's a wide, wide world of noble causes,'' she says, ''and lonely landscapes to discover . . . but all I really want to do right now is find another lover.''

Asylum Records

Images of herself traveling haunt every song in the album, in any case. Mitchell senses that movement symbolizes freedom down deep in the genes of the culture, and threatening freedom is one of the things love does. The culture, however, in its development, has conditioned and browbeaten us to put security ahead of both freedom and love, and this-since we also need security to some degree-has confused our contemplation of the old conflicting yens to be autonomous and yet to attach ourselves to others. One can have a little of all three, but the question is, what are the proportions that will work? Let us go and seek the answer, Mitchell says, not go somewhere, just go-which means, first of all, we have to think positively about the going. A hejira is a flight from something, but not a panic-driven mad rush with one's mind, one's faith, in a shambles; it is an emigration, a dignified process with hope in it. Most people, their security needs culturally inflated, don't do it. ".... It made most people nerv-ous," Joni says. "They just didn't want to know what I was seeing in the refuge in the roads.

WELL, doing what makes other people nervous, being brave and seeing what she can learn from what ensues, is Joni Mitchell's job as she has defined it. She's stood up well to her own tough standards here, producing not answers or platitudes or advice but a way of grappling with the questions—and producing literature, poetry, and, in the bargain, pushing back the frontiers of the sound of travel music a little.

Which reminds me: I wonder what kind of car she drives (probably not a Volkswagen; "I'm rich and I'm fey," she tells the ghost of W. C. Handy, and if I were those I wouldn't drive a VW). And that reminds me that I haven't seen the out-of-season lady bug for a couple of days. —Noel Coppage

JONI MITCHELL: Hejira. Joni Mitchell (vocals, guitar, piano); instrumental accompaniment. Coyote; Amelia; Furry Sings the Blues; A Strange Boy; Hejira; Song for Sharon; Black Crow; Blue Motel Room; Refuge of the Roads. ASYLUM 7E-1087 \$6.98, ©ET8-1087 \$7.98, ©TC5-1087 \$7.98.

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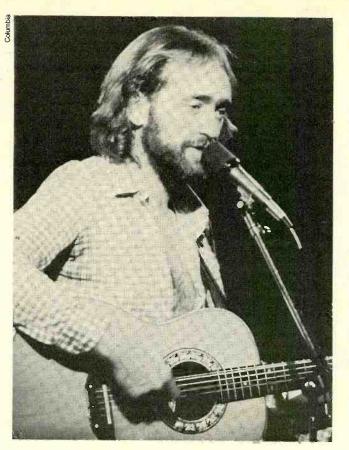
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DAVE MASON: some impressive singing and tasteful picking

success with a version of Dylan's nonsense drug song, The Mighty Quinn (Quinn the Eskimo), which drew an endorsement from Zimmerman himself. The follow-up singles, Fox on the Run and—one of my favorite titles— My Name Is Jack (and I Live in the Back of the Greta Garbo Home for Wayward Boys and Girls), made little noise.

The present group, the Earth Band, was formed in the early 1970's and almost had a hit with Living Without You. But by then Mann seemed to have given up on or lost interest in pop, turning to a free-form rock mixed about equally with jazz and British folk. He is a skilled keyboardist and a gifted arranger, but his meandering, amorphous, and ultimately pointless current style has never been as interesting or fruitful as his approach to pop material. Only one cut stands out on this album-a lithe, leaping performance of Bruce Springsteen's Blinded by the Light; Mann's arrangement and the band's pizzazz make it sound better than it actually is. Mann is an interpreter rather than a creator. It's too bad he doesn't spend more time applying his specialized talents to pop. J.V.

PENNY MARSHALL & CINDY WILLIAMS: Laverne & Shirley Sing. Penny Marshall, Cindy Williams (vocals); orchestra. Sixteen Reasons; Graduation Day; I Know; Five Years On; and eight others. ATLANTIC SD 18203 \$6.98.

Performance: **Poor** Recording: **Expensive and elaborate**

An enormous amount of expensive production work by Sidney Sharp and Jimmie Haskell went into the attempt to mask the indifferent singing talents of Penny Marshall and Cindy Williams, the stars of the top-rated TV series Laverne & Shirley. Lots of cutesie Fifties touches, songs that sound as if they were rejects from *Grease*, and elaborate arrangements can't hide the fact that Marshall and Williams can't sing their way out of a paper bag. This is a blatant commercial try at ripping off diehard fans, one that I hope doesn't succeed. What next, the Fonz reciting *This Is My Beloved*? *P.R.*

DAVE MASON: Certified Live. Dave Mason (vocals, guitar); instrumental accompaniment. Feelin' Alright; Pearly Queen; Show Me Some Affection; All Along the Watchtower; Every Woman; World in Change; Goin' Down Slow; and seven others. COLUMBIA PG 34174 two discs \$7.98, @ PGA-34174 \$8.98, © PGT-34174 \$8.98.

Performance: Mostly very good Recording: Good remote

Dave Mason does some impressive singing and his usual tasteful kind of picking here, but there's a live-album looseness about it. One tightly edited disc might have been more rewarding, if indeed such a thing is possible to pull out of live rock performances. Mason does a glancing retrospective of his own material, some blues, and a few covers of contemporary songs. He doesn't try to overhaul the covers or fish about for "alternative" interpretations; his version of one of the Eagles' best songs, Take It to the Limit, is individualistic not in obvious ways but in subtle ones. I really like that, and I like about two-thirds of a disc's worth of other odd particles, including the way he does his own Sad and Deep as You and most of the way he does Sam Cooke's Bring It On Home to Me. But there are several of those drawn-out, live-album instrumental breaks that are so boring in the privacy of the home, and there's the usual stuff it would be better to see than to hear. I've

thought of cramming twenty or thirty friends into the room to see if that makes the atmosphere fit the record—but where would a pop music critic get that many friends? N.C.

MURRAY MCLAUCHLAN: Boulevard. Murray McLauchlan (vocals, guitar, piano, harmonica); Silver Tractors (instrumentals). Harder to Get Along; Train Song; Met You at the Bottom; La Guerre C'Est Fini pour Moi; and five others. ISLAND ILTN 9423 \$6.98.

Performance: Fair Recording: Okay

Murray McLauchlan is a Canadian folk-rocker whose voice, material, and delivery depend too much on the occupational delusions of the average folk singer: that everything he says is important, that every character portrait or situation he provides is bathed in an aura of pure aesthetics, and that everybody out there in the audience is just dying to hear what he has to say. Average folk singers like McLauchlan (or annoyingly ambitious ones like Harry Chapin) insist that the listener recognize them as being important and worthy before they have demonstrated any claim to being so.

McLauchlan's material is about what you'd expect: a train song, broken-romance songs, anti-war songs. The band behind him, which is adequate, is billed as the Silver Tractors. If things don't work out in the folk-rock area for McLauchlan, perhaps he can try again as a hard-rock act and call himself Stutz Bearcat and the Platinum Studebakers. J.V.

SUSIE MONICK: Melting Pots. Susie Monick (banjo); David Amram, Steve Burgh, Timmy Cappello, "Charlie" Chin, Richard Crooks, Peter Ecklund, Erik Frandsen, Eddie Gomez, John Hartford, Bob Hipkens, Mark Hoffmann, Alto Madness, Tony Markellis, Bob Montalto, Tony Ramos, Jeremy Steig, Brian Torff, Tony Trischka, Jay Ungar, Kristin Wilkinson, Ted Wonder (instrumentals). Clinch Mountain Backstep; Daybroke Mybanyo; Whiskey Before Breakfast; Colts Creek; One Day on South Street; and five others. ADELPHI AD 4107 \$6.95.

Performance: A lot of a good thing Recording: Very good

Susie Monick has a talent for playing a mean banjo and another for surrounding herself with some of the liveliest musicians in the business. The roster of her accompanists in "Melting Pots" is almost more impressive than the lusty instrumentals of which the album consists. With thoroughgoing mastery, Monick can make all three types of five-string banjos she plays---the frailing banjo, the bluegrass banjo, and the solid-body electric banjo-do just about anything. Anything, that is, except not sound like a banjo, and that, even with all the master fiddlers, trumpeters, French-horn tooters, and dobro players on hand for the occasion, is a built-in handicap. Pieces like Marmalaid are rife with wit and ingenuity, and there is nothing wrong, I suppose, with naming a banjo composition after a cat named Orange Julius. But in the long run it all begins to blur together. Still, no record I've heard recently has come up with a better finale than Wicked Witch Breakdown, said to have been composed "after teaching seventysix banjo students to play Cripple Creek" and making use of everything from a musical saw to the cackling of the witch herself. It's a honey of a Hallowe'en piece, although even more (Continued on page 112)

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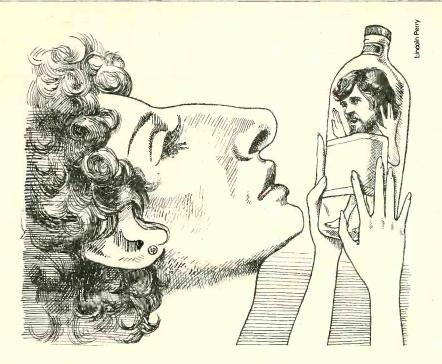
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The Streisand Version

STREISAND dux, Garland redux: dux because Barbra Streisand seems to have had the last imperious word on practically every aspect of the soundtrack album for her new film A Star Is Born (with the possible exception of the grade of vinyl it is pressed on), and redux because Judy Garland has been returned to us in a rerelease of her version of A Star Is Born, which is, apart from her "Live at Carnegie Hall" album, the best thing she ever did on records.

A Star Is Born, half dreary soap opera, half bitter truth about the entertainment industry and its corridors of power and fear, is a durable little tale. It made its first appearance in the Thirties, starring Janet Gaynor and Fredric March. In the Fifties came the Judy Garland and James Mason version with a score by Harold Arlen and Ira Gershwin—its first musical treatment. Now, in the Seventies, comes the Streisand version, with a new score drawn from a number of sources.

Briefly, it is the story of a great male star who meets a young girl struggling to make the Big Time. It traces their romance, her rise to superstardom, his gradual professional eclipse owing to alcoholism, and finally the 'way out'' of suicide. (The original by William Wellman and Robert Carson had echoes of the real-life story of Greta Garbo and John Gilbert. After a too-hot-not-to-cool-down affair with the Great Lover, Garbo went on to become the brightest star the movies have yet produced. Gilbert, the reigning matinee idol of the silents, became technologically unemployed with the arrival of the talkies-he had a high-pitched, untrained, and apparently untrainable voice. He turned to the bottle and ended an apparent suicide, walking into the sea just as the hero of the two earlier film versions of A Star Is Born did.)

The soundtrack of the Streisand version of this popular Hollywood myth is, frankly, a big

disappointment. The hero (Kris Kristofferson) is now a rock idol and the girl (Streisand) is a struggling singer, which ought to have made the problems of story/song integration a whole lot easier. Maybe too easy, for the songs (by several hands, and not a rocker among them—Barbra doesn't do that kind of thing) seem just to plop on by, one by one, pieces of special material tailored to the scale (larger than life) and the dynamism (considerable) of heroine Streisand.

There are, I must confess, three happy exceptions, all by Paul Williams and Kenny Ascher. Kristofferson gets one, *Hellacious Acres* (hell as an amusement park), and he performs it with a manic fury I didn't know he had in him. Streisand gets the other two. *The Woman in the Moon* is a really *good* song that

... lyrics ... that are as contrived as a Middleton double-crostic ...

may have just a superficial touch of women's lib about it ("I was warned as a child of thirteen/Not to act too strong"), but it moves beyond contemporary sexual politics to become a song about personal freedom for everyone. It is unquestionably a Streisand Song, and she bites into the highly charged lyrics ("Keep on pushin'/Don't believe a word about/Things you heard about/Askin' too much too soon ...") with the kind of dramatic conviction only she seems able to muster these days. Fan or not, one has to applaud that kind of steely magnificence.

Like any other great performer, Streisand has to have one big set piece per show, one rip-up-the-seats, get-'em-in-the-gut scene; in this case it is the third Williams/Ascher song, the finale, called *With One More Look at You*. That one more look lasts a good deal longer than you would believe in the movie, but on disc it sums up all the tender, protective, yet urgently erotic yearnings she feels for her lost lover in a bravura performance.

One of Streisand's least recognized (or perhaps least publicized) talents is her executive instinct. She has always had an unerring sense of the right person for the right job-that job being, of course, the provision of the material, direction, whatever, that sets Barbra off to precisely the best advantage. Part of that instinct was knowing when to give others their head as creative artists, when to step out of the kitchen. Here, for some mysterious, Jerry Lewis-ish reason, she stayed at the stove to cook up the music for The Love Theme from a Star Is Born, a wet-dream theme out of Brahms adapted for a TV deodorant commercial, and lyrics for Lost Inside of You (music by Leon Russell-he, at least, is a rocker) that are as contrived as a Middleton double-crostic. The result is a general lowering of standards; the songs contributed by Rupert Holmes, Donna Weiss, and Alan and Marilyn Bergman are all sadly, mechanically routine.

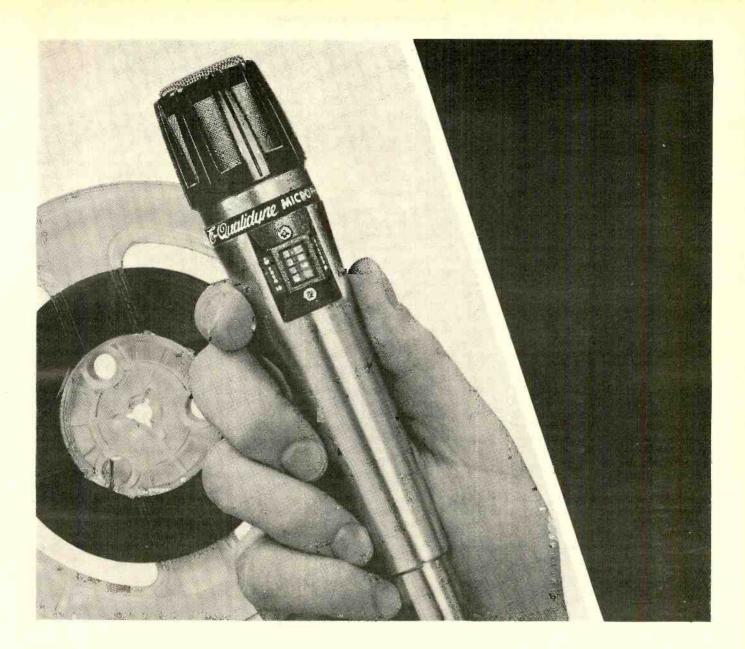
Streisand will most likely have to take the rap for the packaging too, from the tacky Scavullo photo of her and Kristofferson locked in a nude embrace to the series of stills from the film, mostly bare flesh and heavy breathing except for the "performance" shots, which manage to give the really spooky impression that A Star Is Born might actually be (pardon my irreverence) The Story of Sonny & Cher.

HE Garland version? Simply a joy to hear again. She is in wonderful voice, she has an immortal pop classic (*The Man Who Got Away*) to introduce, and she sings it every bit as well as Harold Arlen could possibly hope for. The Born in a Trunk number (*her* bravura scene) remains a wonderful montage of yesterday's pop hits assembled and unified by the style of the last great vaudevillian. Garland was the classic tragic gamine, primarily a singer, but she also had a specially communicative dramatic power with which she could convince you of almost anything.

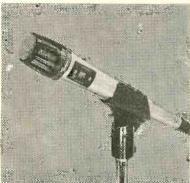
Of comparisons there can be none. It would be as pointless as comparing Laurence Olivier's Hamlet to Albert Finney's. Both are creative artists, both offer their quite individual conceptions of the material at hand. Streisand remains Streisand, Garland Garland. There are precious few like them in any theatrical century. —Peter Reilly

A STAR IS BORN. Original-soundtrack recording. Barbra Streisand and Kris Kristofferson (vocals); orchestra, musical supervision Paul Williams. COLUMBIA JS 34403 \$8.98, JSA 34403 \$8.98, JST 34403 \$8.98.

A STAR IS BORN (Harold Arlen-Ira Gershwin). Original-soundtrack recording. Judy Garland (vocals); orchestra, musical direction Ray Heindorf. COLUMBIA SP ACS 8740 \$7.98.



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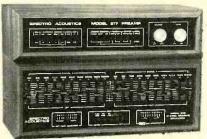
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scary is the idea of those seventy-six players being let loose on a defenseless world to launch banjo albums of their own. P.K.

MELBA MOORE: Melba. Melba Moore (vocals); instrumental accompaniment. The Way You Make Me Feel; Good Love Makes Everything Alright; The Long and Winding Road; Ain't No Love Lost; and four others. BUD-DAH BDS 5677 \$6.98, **®** 8320-5677 \$7.95, **©** 5320-5677 \$7.95.

Performance: Show-off Recording: Excellent

Melba Moore? Why, it seems only yesterday when that girl with the glorious gospel voice was knocking us dead on Broadway in Purlie. Now the still immensely talented Melba seems to be going the way of so many fine performers in her line-putting out a series of fancily wrapped gift packages with so much glitter surrounding the stuff that it's hard to find the gift. No mistake about it, Melba can still sing her heart out when she wants to, especially in a real gospel tune like Mighty Clouds of Joy, or when she's given a chance to be herself in a touching ballad like Lennon and McCartney's The Long and Winding Road. Most of the space here, however, is wasted in showy over-arrangements of shabby tunes in which Melba is driven, like a vocal trapeze artist egged on by some fiend of a trainer, to show off how high she can scream, how loud she can belt, how hard she can sock out her soul credentials. Swamped in the overproduction of it all, she made this listener wish she could buy back her own personality somehow and be the girl we all loved at the start, when the song was the thing, not the musical tricks and the showing off: P.K.

DONNY MOST. Donny Most (vocals); orchestra. Hey Baby; Terminal; Bony Moronie; Rock Is Dead; Early Morning; and five others. UNITED ARTISTS UA-LA696-G \$6.98.

Performance: For collectors Recording: Okay

Here's yet another refugee from a hit TV series to be immortalized on vinyl. This album, flintily produced and arranged as a disco record, showcases Donny Most (from Happy Days) in an awesome variety of musical moods and alternating rhythms. The problem is that Mr. Most cannot sing, and he is about as rhythmic as an attack of St. Vitus' dance. In addition, there is evidence here that his voice is in the process of changing—into precisely what I'm not sure. A real collector's item. P.R.

THE O'JAYS: Message in the Music. The O'Jays (vocals); orchestra. A Prayer; Let Life Flow; Desire Me; Paradise; Make a Joyful Noise; and three others. PHILADELPHIA IN-TERNATIONAL PZ 34245 \$6.98, [®] PZA 34245 \$6.98, [©] PZT 34245 \$6.98.

Performance: Routine Recording: Good

Here, from the Philadelphia kitchens of Gamble-Huff, is another *ragout de zilch*. Aimed at the guts of the disco market, it ought to put the average place out of business in one night. The nominal stars of the album, the O'Jays, are saddled with a batch of typically mediocre Gamble-Huff creations and almost obliterated by super-loud, super-busy arrangements. As they valiantly tried to boogie their way through it as if wearing lead shoes, they won my sympathy but no cigar. *P.R.*

MAX ROMEO & THE UPSETTERS: War Ina Babylon (see Best of the Month, page 92)

(Continued on page 114)

DONNY MOST As rhythmic as an attack of St. Vitus' dance



STEREO REVIEW

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that I heard things in the recordings I had not heard before despite many listenings.

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THE STAPLES One of the suavest vocal acts in the business

LEO SAYER: Endless Flight. Leo Sayer (vocals); orchestra. Hold On My Love; Reflections; Endless Flight; Magdalena; How Much Love; and five others. WARNER BROS. BS 2962 \$6.98, I M 82962 \$7.97, I M 52962 \$7.97.

Performance: **Disappointing** Recording: **Fancy**

Leo Sayer used to be one of the spritelier, more caustic spirits among us, but "Endless Flight" is a disappointingly bland and commercial album. There's probably not enough unfiltered Sayer here: he wrote only five of the songs; the arrangements, by various hands, have a shopworn sound; the production, by Richard Perry, is as fancy as it is unsure and scattered-as if afraid not to touch all bases; and Sayer himself sounds untypically forced and strident. No Business Like Love Business is undoubtedly the low point (it's a monstrosity), and the not very high point is Sayer's own I Hear the Laughter, a song about loneliness that at least has some echoes of his earlier, more sardonic work. You'd think that a man as naturally talented as Sayer is would be able to run through this kind of commercial bleep on sheer technique, but somehow it doesn't work out that way. Probably just as well for Sayer's own future. P.R.

BOB SEGER & THE SILVER BULLET BAND: Night Moves. Bob Seger (vocals); Silver Bullet Band (instrumental accompaniment). Rock and Roll Never Forgets; Night Moves; The Fire Down Below; Sunburst; Sunspot Baby; and four others. CAPITOL ST-11557 \$6.98, (1) & &XT-11557 \$7.98, (2) 4XT-11557 \$7.98.

Performance: Excellent Recording: Very good

Despite the rock media's strenuous assurances that Bob Seger, a Detroit hero, is exactly what national audiences should have been looking for all their lives, and that rock can't get along without him (just as the media can't survive without telling us such things), Seger is probably no more than a hard-working, better-than-average singer who occasionally surpasses himself.

His cougar-scream vocals and phrasing owe

quite a lot to the black Motown influence. No Detroit white singer has ever escaped the harping, aggressive peculiarities of the style, especially as portrayed by Levi Stubbs of the Four Tops and by Edwin Starr. But there are other influences. In the title tune, which owes its narrative plot and musical construction to Van Morrison's Brown-Eyed Girl, Seger phrases like the glorious Otis Redding, the Georgia genius. The Fire Down Below is in the manner of Who's Makin' Love and Take Care of Your Homework, both hits for Johnny Taylor of the Memphis-based Stax label in the late Sixties (Taylor was a subtler screamer than Stubbs, but harder than Redding), and the Silver Bullet Band plays in the two-fisted, slinky, air-tight Brown Sugar style of the Rolling Stones.

The other cuts on the album prove that Seger is a highly professional and experienced entertainer who enjoys his work and has thoroughly absorbed his influences so that he can deliver his performances with punch and bravado. He is not an original by any means, but he is solid and dependable. His previous album, a live recording of a Detroit concert where he was preaching to the already converted, was a noisy and flabby thing, but he seems to do better in the disciplined confines of the recording studio. It's not a world beater, but for what it is, and for who he is, this is a very good album. J.V.

SPARKS: Big Beat. Russell Mael (vocals); Ron Mael (keyboards); instrumental accompaniment. Big Boy; I Bought the Mississippi River; Everybody's Stupid; Nothing to Do; Confusion; Fill-Er-Up; and five others. Co-LUMBIA PC 34359 \$6.98, @ PCA-34359 \$6.98, © PCT-34359 \$6.98.

Performance: Misapplication Recording: Good

Sparks are the brothers Ron and Russell Mael, two Americans who were, until about a year ago, happily expatriate in England, where their dizzy songs, daffy stage theatrics, and LP's made them quite popular. They are now living again in the United States, and they are quoted in the press material that accompanied this album to the effect that they consider it "very guitar oriented, very hard

rock. . . . It's obvious, like rock should be, and more accessible than anything we've ever done before."

Unfortunately, the most obvious thing about this album is that Ron Mael's talent for writing and Russell's for comedic singing are simply too good for hard rock, and their attempts to pair it with that style's pounding monotony smashes their humor into a pulp. The Maels' sophisticated, dadaistic music belongs in a cabaret or a revue; for recordings the accompanying instruments and players should be tailored to the material, not the other way around. Sparks have made a wrong choice here. J.V.

RECORDING OF SPECIAL MERIT

THE STAPLES: Pass It On. The Staples (vocals); orchestra. Take This Love of Mine; Making Love; Precious, Precious; Pass It On; Party; and four others. WARNER BROS. BS 2945 \$6.98, **(a)** M8 2945 \$7.97, **(c)** M5 2945 \$7.97.

Performance: Excellent Recording: Excellent

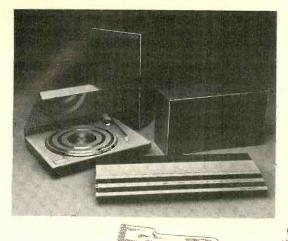
The Staples are one of the suavest vocal acts in the business, and they do their thing exceedingly well in this silver platter of an album. Curtis Mayfield wrote all of the material here (most of it's very good) and furnished a production that glistens and glows with firstrate professionalism. The three-girl, one-man group gallivants through such things as Party and the hokey Love Me, Love Me, Love Me with the kind of stylish, self-confident swagger that only the complete pro can handle without turning the audience off. Their clean, defined attack is a wonder to listen to, and the arrangements by Rich Tufo spotlight the sleekness of it all. "Pass It On" is a model of musical craftsmanship. P.R.



JEAN CARIGNAN: Rend Hommage à Joseph Allard. Jean Carignan (violin); Gilles Losier (piano). Reel de port neuf/Clog Double; Cotillion à huit/Quadrille de Beauharnois; L'Americain et l'Ecossais; Reel indien/Reel des chantiers; and twelve others. PHILO FI-2012 \$5.98.

Performance: Sprightly Recording: Pretty good

Joseph Allard, who died in 1947, had a reputation as one of the best fiddlers in Canada, and Jean Carignan was his friend, student, and protégé. Philo, a small record company in Vermont, has printed the liner notes for this album in English and French, apparently for distribution in Eastern Canada. Carignan is, as Allard was, a traditional or "folk" fiddler, which means, among other things, that he (Continued on page 116)



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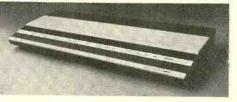
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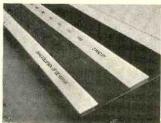
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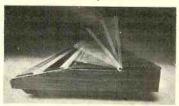
aluminum door that opens

and closes in a manner

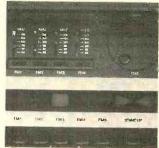
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FAMILIA CILIP SEN DE COLIMANS

CIRCLE NO. 6 ON READER SERVICE CARD

doesn't improvise. At a barn dance, the fiddler-being the only player, more often than not, and responsible for the whole melodic line-was constrained to play the tune the way it went. The fiddlers in show business, including Chubby Wise in Bill Monroe's band, were the ones who worked on improvisation. Carignan plays distinctively, however; the sound is cleaner than that of a typical Appalachian folk fiddler, more old-worldly and yet less likely to be sweet. He puts a brassy edge on it, and he is quite rhythmic; there's a vaguely recorded piano behind him here, but you can tell that Carignan is in charge of the beat. The program is dance music, not all that listenable unless you're dancing or studying folklore or looking to steal some melodic ideas, but those are all useful activities. N.C.

RECORDING OF SPECIAL MERIT

THE STARBOARD LIST: Songs of the Tall Ships. The Starboard List (vocals); instrumental accompaniment. Early One Morning; The 51st Highland Division's Farewell to Sicily; The Bark Gay Head; Wings of a Gull; Cape Cod Girls; Farewell to Tarwathie; Black Ball Line; Classic Yankee Clipper; Paddy Lay Back; and six others. ADELPHI AD 1025 \$6.98.

Performance: Shipshape Recording: Very good

The Starboard List is a foam-flecked bunch of boys named Charles O'Hegarty, Peter Marston, and David Jones. O'Hegarty, the son of a stevedore, grew up on the docks of England

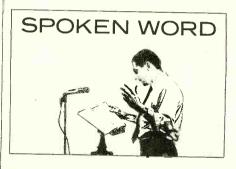
and has wandered the world as a sea cadet, a Royal Marine Commando, and a coal miner in Germany. Marston is an ex-merchantman. Jones started his musical career as a drummer in a Salvation Army boys' band and once climbed Mount Killimanjaro. And when these three get together to sing the old ballads of the high seas the results are as bracing as the sea itself. The generous program here ranges from bitter ballads of underpaid whalemen to comic songs about the ladies encountered on shore leave and sad ones about such matters as the mood of troops sailing off to war. One of the songs is an original by O'Hegarty called Classic Yankee Clipper; you'd swear it was a real classic just like the others. The singers are accompanied by all the right instruments-concertina, pennywhistle, fife, eighteenth-century guitar-and the album is as seaworthy as the sailing life it celebrates.



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THE ERNIE KOVACS ALBUM. Ernie Kovacs (comedian). Tom Swift; J. Walter Puppybreath; Albert Gridley; World's Strongest Man; Droongo; John; Percy Dovetonsils; and nine others. COLUMBIA PC 34250 \$6.98.

Performance: **Rapiers, not bludgeons** Recording: **Good**

Ernie Kovacs was born in 1919 and was one week shy of forty-three when his car skidded into a Beverly Hills telephone pole in 1962, depriving the country of one of its most endearing entertainers. As a comedian, Kovacs sought to embody a character who "shambled through life vainly attempting to cope with a world that is essentially copeless." Yet Kovacs himself coped better than most of his competitors. And, for those who have never stopped missing the presence of Kovacs in their living rooms, grungy cigar and all (I'm one of them), this album may temporarily relieve the mood of mourning. Here he is, knocking down such sacred cows as Tom Swift, in an episode during which the hero of heroes is kidnapped by unscrupulous rivals and left to shift for himself in the tuna-fishsalad slot of an abandoned Automat. With the machete of his contempt for sentimental pap, Kovacs smashes to bits one of those "heartwarming" tales about a precocious collie, in this case a specimen with a short memory who winds up biting a benefactor in the leg. Here is his eager interviewer, Albert Gridley, coaxing out of a guest some hazy recollections of dreary days out West. Here is Percy Dovetonsils lisping his way through an anecdote about a voracious bookworm who eats Proust for dessert. And here is J. Walter Puppybreath to share shallow philosophical bromides with an eager world.

If Kovacs' brand of humor sounds strangely gentle in this savage hour, it's a relief to hear a comedian content to aim his barbs at nothing more topical than the complicated rules of a children's game and who manages to do so without having to draw his vocabulary from the walls of men's rooms. P.K.



GEORGE BENSON/JOE FARRELL: Benson & Farrell. George Benson (guitar); Joe Farrell (flute, soprano saxophone); orchestra. Flute Song; Beyond the Ozone; Old Devil Moon; and two others. CTI CTI-6069 \$6.98; ® CT8-6069 \$7.98; © CTC-6069 \$7.98.

Performance: Formula Recording: Very good

I recently heard saxophonist Joe Farrell's group at New York's Village Gate, but the music was so overamplified that several customers actually sat there with their hands covering their ears, and with pained expressions on their faces; if anything of musical value was happening on the stage, it was drowned out by the noise. Listening to this record, I was at least able to control the volume myself, and what I heard was two excellent musicians (actually, "outstanding" is a better adjective for George Benson) wasting their talents on what can perhaps best be described as a modern version of the Hollywood "jungle" fare Les Baxter used to dish out to unsuspecting housewives. There are good moments, especially on Old Devil Moon, but this is not a record to be taken seriously. Benson is an extraordinary artist, and I am not faulting him for going after the wide market this kind of album might appeal to, but I wish he had treated us instead to some of the straight jazz he plays so well. C.A.

CHARLIE HADEN: Closeness. Charlie Haden (bass); in duets with Ornette Coleman (alto saxophone); Keith Jarrett (piano); Alice Coltrane (harp); Paul Motian (percussion). Ellen David; O.C.; For Turiya; For a Free Portugal. HORIZON SP-710 \$5.98

Performance: The bad and the beautiful Recording: Excellent

Bassist Charlie Haden's name is a household word in free-form jazz circles, and it is most appropriate that this album-his first as a leader in several years-should be devoted to duets, for Haden, unlike most bass players, rarely assumes the role of an accompanist. There are four duets here, two excellent ones, a fair one, and one that, quite frankly, sounds like a bad joke.

To take worst things first, side two consists for the most part of For Turiya, which is more for the birds, in my opinion, owing to the lamentable presence of Alice Coltrane. Much as I have tried to detect a trace of talent in this lady's work, I have not been able to come up with a single excuse for her relative prominence except that she was the wife of the late John Coltrane, and that is, of course, no excuse at all. Here, once again, she runs her fingers aimlessly along the strings of her harp, and, alas, she does so for twelve and a half minutes! If that has not completely dulled your senses, you might get some relief-eight minutes' worth---by listening to Haden's collaboration with drummer Paul Motian on something called For a Free Portugal; even with the dubbed-in battle sounds of a 1968 M.P.L.A. attack on Portuguese barracks, this track is easier on the ear than the preceding one

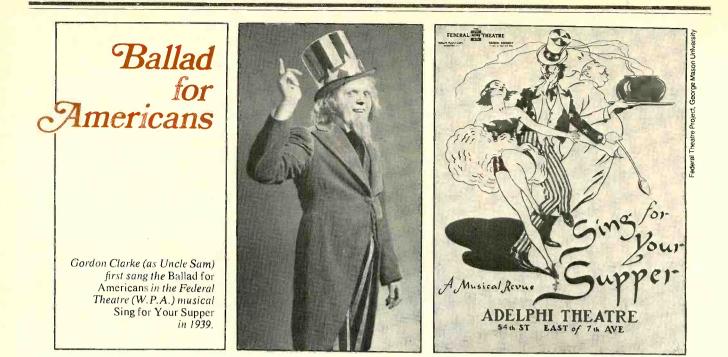
Now for the salient features of this album, the two duets on side one. Ellen David, Haden's tribute to his wife, is a brilliant, beautiful joint effort with pianist Keith Jarrett, with whom Haden has often played before. If

those nine minutes were all this album had to offer, \$5.98 would not be too much to ask, but the duet with Ornette Coleman that constitutes the second half of this side is equally impressive. Coleman shaped Haden's musical thinking, starting almost twenty years ago, and the rapport established then has not diminished. In his notes Haden states that he has always wanted to record a duet album with Coleman; it's a splendid idea. C.A.

RECORDING OF SPECIAL MERIT

JOHN HANDY/ALI AKBAR KHAN: Karuna Supreme. John Handy (alto saxophone); Ali Akbar Khan (sarod); Zakir Hussain (tabla); Yogish S. Sahota (tambura). The Soul and the (Continued on page 121)

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Ay back in the 1930's, when the patriotism that long had been regarded as the last refuge of scoundrels suddenly became fashionable among liberals (somewhat as it did again in the Bicentennial year), certain intellectuals of the period discovered "the people" and "the little man" and "the man in the street" as a political entity rather than the sentimental, slightly quaint folk-hero he had been for the romantics of the early part of the nineteenth century. This made for some perfectly dreadful and mercifully forgotten bad novels, poems, and pageants. Yet, some good things came of it, one of them being the Ballad for Americans, originally called The Ballad of Uncle Sam when it was presented as the finale of the government-sponsored Works Progress Administration musical revue Sing for Your Supper in 1939.

Its author was John Latouche, a brilliant poet who was twenty at the time (he later wrote the lyrics for, among other successes, Cabin in the Sky and the opera The Ballad of Baby Doe) and who wanted to write a sermon in verse protesting intolerance in general and the particular kind of persecution that was then sweeping Europe. The music was by Earl Robinson, who wrote in a tuneful idiom that "the people" and "the little man" didn't have to strain very hard to enjoy. Sing for Your Supper was denounced on the floor of Congress as a subversive left-wing plot, but when Norman Corwin managed to get it performed on his new CBS program Pursuit of Happiness, the Ballad for Americans became a nationwide hit. Soon no respectable liberal home was without a copy of the recording, which featured soloist Paul Robeson, just back after twelve years of self-imposed exile in London.

RCA Victrola's recent re-release of the *Ballad* is quite timely, even though, considering all this country has been through in the last forty years, the sentiments the piece expresses sound wistfully naïve today. Latouche's vision was of a homogenized, melting-pot citizenry, "an Irish, Negro, Jewish,

Italian, French and English, Spanish, Russian, Chinese, Polish, Scotch, Hungarian, Litvak, Swedish, Canadian, Greek and Turk/ And Czech and double Czech American." We all know what happened to *that* idea when ethnicity came into fashion. Still, the *Ballad* has its stirring moments. The sound has been cleaned up skillfully, and Robeson is not only a robust singer but a persuasive narrator.

On the other side of the record, however, all the power in the considerably powerful baritone of John Charles Thomas cannot rescue the simplistic cipher of a score George Kleinsinger applied to passages from Walt Whitman's *I Hear America Singing*, commissioned by the International Ladies Garment Workers' Union and first performed in 1940 at a Madison Square Garden rally in honor of Eleanor Roosevelt. (Kleinsinger got \$100 for the job; he was overpaid. He was to do better later with *Tubby the Tuba*.)

LEGENDARY as Robeson's performance in Ballad for Americans is, the work gets an even stronger treatment from Brock Peters in a revival on the United Artists label. Peters is just as eloquent as Robeson and, at the same time, less patently oratorical in his role as narrator. And he sings superbly (a step higher bearing Abraham Lincoln home to Springfield after his death. For all its penchant for *listing* things—a penchant it shares with many pieces of the period (see the Latouche quote above)—Lonesome Train has survived the vicissitudes of political and musical fashion rather better than the more famous Ballad. Here it is given a really superb treatment by Peters. Odetta, and a fine chorus.

A LL these works are of their period, and they all suffer from a peculiar paradox: the more they glorify simplicity and the "common man," the more pompous, affected, and unreal they tend to sound. Yet nothing has been written about America in the interim that is any better than the Ballad for Americans or Lonesome Train. A text for Ballad is supplied with the United Artists disc, none for Lonesome Train. RCA Victrola includes liner notes only—what do you want for \$3.98?

-Paul Kresh

ROBINSON: Ballad for Americans. Paul Robeson (bass-baritone); American People's Chorus; RCA Victor Symphony Orchestra, Nathaniel Shilkret cond. KLEINSINGER: I Hear America Singing. John Charles Thomas (baritone); ILGWU Chorus; RCA Victor

man" didn't have to strain very hard to enjoy

than Robeson, in the key of D). The choral and orchestral passages, rearranged by Luther Henderson, are vigorously performed and the whole thing is marvelously well recorded. Moreover, the companion piece on this record is the even more ambitious cantata *Lone*some *Train*, another Robinson effort—this time to an impressive text by Millard Lampell that rehearses the progress of the funeral train Symphony Orchestra, Nathaniel Shilkret cond. RCA VICTROLA @ AMV1-1736 \$3.98.

ROBINSON: Ballad for Americans. Brock Peters (vocals); chorus and orchestra, Leonard de Paur cond. Lonesome Train. Brock Peters (narration); Odetta (vocals); chorus and orchestra, Leonard de Paur cond. UNIT-ED ARTISTS UA-LA 604G \$5.98.

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TUDIO SERIES

Atma; Ganesha's Jubilee Dance; Karuna Supreme. MPS/BASF G 22791 \$6.98.

Performance: Good cultural blend Recording: Very good

Classical Indian music made an impact on Western pop culture in the latter half of the Sixties, when sitars and tablas cut through pot and incense from Monterey to Woodstock. As American interest in Indian music grew, so did interest in Eastern religion, the base from which the music springs. Gurus became cult heroes embraced by rock stars and their followers, albums bore dedications to whatever Eastern deity happened to be "in" at the moment, and importers of cheap Indian knickknacks enjoyed a business boom. Gurus, like love beads, giant afros, and peace signs, are passé now, but some of the pretensions linger on, having been adopted by jazz musicians vying for the attention of a rock audience; claiming to be moved by mysterious spiritual forces, they are willing to dilute their art beyond recognition in worship of the almighty-the almighty dollar, that is.

But if classical Indian music has inspired the insipid electronic stuff that passes for art in some musical circles these days, it has also made some fruitful unions, and this album is a delightful case in point. Predominantly Indian in sound-though some decidedly Western harmonic concepts creep into Ganesha's Jubilee Dance-the album brings together the centuries-old tradition of raga and that relative embryo we call jazz. The combination is not new, but it has never been as successful as it is here. Ali Akbar Khan, who ranks second only to Ravi Shankar (his brother-in-law) as India's most venerated musician, has admired jazz since hearing Duke Ellington in Calcutta some thirty-two years ago, and he has often performed with John Handy in the San Francisco area over the past six years. Handy-at fifty-five, eleven years Khan's junior-rose to prominence as a sideman with Charles Mingus in the late Fifties and has since led successful groups of his own. Handy is not playing any differently here than he would be if he were performing with a group of jazz musicians, but he has an obvious feel for Indian music and he is never obtrusive, which is what makes this such a fine blend. There are no gimmicks here (and bear in mind that, in the hands of lesser artists, the combination itself could easily be construed as a gimmick), just forty-one minutes of outstanding artistic display and thoroughly enjoyable, lasting music. C.A.

JAKE HANNA: Kansas City Express. Jake Hanna (drums); Bill Berry (trumpet); Richie Kamuca (tenor saxophone); Nat Pierce (piano); Monty Budwig (bass); Mary Ann McCall (vocals). Robbin's Nest; It's Sand Man; Castle Rock; That Old Feeling; Stompin' at the Savoy; and five others. CONCORD JAZZ CJ-22 \$6.98 (from Concord Jazz, Inc., P.O. Box 845, Concord, Calif. 94522).

Performance: Swing à la Basie Recording: Very good

It isn't often we hear this kind of driving, hot, small-band swing these days, and when we do it is rarely as well executed as it is on this album. Drummer Jake Hanna, who has propelled the bands of Duke Ellington, Harry James, Herb Pomeroy, and, most notably, Woody Herman, has surrounded himself with experts in the field of no-nonsense jazz, an over-forty group of players who remember



HARRY JAMES: the swing-era apostle carries on (shown here in the early Forties)

Columbia

the days when it didn't mean a thing if it didn't have that swing. With Nat Pierce on piano and such tunes as It's Sand Man and Doggin' Around in the program, an aura of Basie quite naturally prevails, but there's nothing wrong with that. Trumpeter Bill Berry and saxophonist Richie Kamuca are superb throughout, and Monty Budwig's light, bouncing bass is an inspiration. But the real surprise is vocalist Mary Ann McCall, a fiftyeight-year-old veteran of the big-band era (Dorsey, Herman, Barnet), who appears on three selections and is in remarkably good form. Her voice is slightly hoarse these days, but her delivery is intact and she blends in well with her impressive surroundings. The timing of this release is good, coming as it does during Woody Herman's fortieth anniversary as a bandleader-Herman has had each member of this crew under his wing at one time or another, and they have all done him proud with this offering. CA

BAIRD HERSEY: The Year of the Ear. Baird Hersey (guitar); Dave Liebman (soprano and tenor saxophones); others. Night in Tunisia; Credo; Winter's Light; and three others. BENT BRS1 \$6.98 (from Bent Records, 525 Beacon Street, Boston, Mass. 02215).

Performance: Excellent Recording: Excellent

These are mostly new names playing the socalled new music-and doing a much better job of it than many older names I could call. Leader Baird Hersey is responsible for all but one of the compositions, Dizzy Gillespie's Night in Tunisia, which is taken at an unusually slow tempo and played more conventionally than the rest of the program, but which nevertheless has a character all its own. The rest of the program consists of very dramatic, mostly morose music in which Hersey uses his thirteen to seventeen musicians to create, with very effective orchestration, sounds usually generated electronically with synthesizers. The result, sprinkled generously with good solos and free-form ensemble passages, makes this a most impressive record debut (if

Hersey has recorded before, it is a well-kept secret). Saxophonist Dave Liebman-whose reputation has been established by way of his work on the ECM label-contributes some fine performances here, but he does not overshadow the talent that surrounds him. The album's longest composition, First of All One Must Be Very Open Minded, is dedicated to Bill Dixon, a forward-thinking trumpeter/ composer who was a leader in the avant-garde movement of the mid-Sixties. I suspect Hersey is one of his students, and it would not surprise me if this were a student orchestra from which we certainly can expect some of tomorrow's "names" to spring. C.A.

HARRY JAMES: The King James Version. Harry James (trumpet) and His Big Band. Corner Pocket; Lara's Theme; Don't Be That Way; and six others. SHEFFIELD LAB LAB-3 \$6.98 (from Sheffield Lab, P.O. Box 5332, Santa Barbara, Calif. 93108).

Performance: As it was, so it is Recording: Excellent

As any swing-era bible will tell you, Harry James was one of the period's great apostles. He became a star by blowing crisp, fiery solos to the pulsating beat of Gene Krupa's drums in the Benny Goodman band of the Thirties, formed his own successful band in 1939, and added a touch of Hollywood glamour to his life during World War II by marrying pin-up favorite Betty Grable. The glitter and glamour have long since faded, but James has continued to lead Basie-oriented bands on and off since 1939, and-as this 1976 set of recordings shows-he is still a fine trumpet player whose style is totally unaffected by any post-swingera developments. The arrangements-by such writers as Thad Jones, Ernie Wilkins, and Ray Coniff-also fail to reflect what has happened to the music in the past thirty years, but it is all very pleasant and superbly performed nevertheless.

The excellent recording was achieved by using a system that feeds the signal from microphone to console and from console directly to the cutting lathe. Considering the headaches such a system invites, and in light of today's advanced tape technology, the resulting sound, fine though it is, is not commensurate with the effort it took to achieve it (a complete session had to be scrapped and postponed for four months while the equipment was being redesigned). But if, musically speaking, you like things the way they were when dancers still touched and you could go home humming the melody, you'll probably like "The King James Version." C.A.

RECORDING OF SPECIAL MERIT

PLAS JOHNSON: *Positively*. Plas Johnson (alto and tenor saxophones); Herb Ellis (guitar); Ray Brown (bass); Jake Hanna (drums); others. *Lover Man; Never More; Careless* Love; Dirty Leg Blues; and six others. CON-CORD JAZZ CJ-24 \$6.98 (from Concord Jazz, Inc., P.O. Box 845, Concord, Calif. 94522).

Performance: Yes indeed Recording: Very good

You may not have heard of saxophonist Plas Johnson unless you are one of those people who scrutinize album liner notes and credits, but chances are very good that you have heard Johnson play on someone else's record or on a movie soundtrack (the well-known theme from *The Pink Panther*, for example). Born in New Orleans, Johnson got a sort of basic training in the blues that made him eminently suited for the Fifties rock-and-roll dates he participated in on the West Coast. But there was more to his playing than funky honks, and he began to demonstrate that as the Sixties wore on.

This sextet date presents Plas Johnson at his very best, a far cry from the albums he did—in the early Sixties—as Johnny Beecher. With a topnotch rhythm section, which includes Herb Ellis, Ray Brown, and Jake Hanna, Johnson stomps, swings, and strolls with ease and eloquence through almost fifty minutes of unmitigated joy. C.A.

EARL KLUGH: Living Inside Your Love. Earl Klugh (guitar); vocal and instrumental accompaniment. Captain Caribé; I Heard It Through the Grapevine; Felicia; Living Inside Your Love; and three others. BLUE NOTE BN-LA667-G \$6.98.

Performance: Lax Recording: Good

The music here isn't exactly pop-jazz (that suspect hybrid); it is closer to what program directors at radio stations call middle-of-theroad—that is, it's not hot enough to wake anybody up and not gooey enough to put anyone to sleep.

Klugh, on the recorded evidence, is a capable if uninspired guitarist. He plays the acoustic, gut-string, "classical"-model concert instrument that doesn't have the ring of a steelstring acoustic but does have some advantages in depth and warmth of tone. The selections here are generally ho-hum stuff, and they're played accordingly. J.V.

JOACHIM KÜHN: Hip Elegy. Joachim Kühn (piano); Terumasa Hino (trumpet); Alphonse Mouzon (drums); others. Seven Sacred Pools; Santa Cruz; Bed Stories; and three others. MPS/BASF G 22794 \$6.98.

Performance: Interminable Recording: Good

Have you ever listened to a record and wondered where you heard it before? Well, in this case you will probably wonder where you *haven't* heard it before. "Please, if possible, listen loud (your neighbour will be grateful)!" reads a producer's note on the album sleeve. I submit that he will be unknowingly but eternally grateful if you don't play it at all. *C.A.*

ART LANDE AND RUBISA PATROL. Art Lande (piano); Mark Isham (trumpet, flugelhorn, soprano saxophone); Bill Douglass (flutes, bass); Glenn Cronkhite (drums, percussion). Celestial Guests—Many Chinas; Romany; Jaimi's Birthday Song (two versions); and four others. ECM 1081 \$6.98, [®] 8T1-1081 \$7.98, [©] CT1-1081 \$7.98.

Performance: Shades of middle-Miles Recording: Excellent

This is the first album by Rubisa Patrol, a San Francisco quartet led by pianist Art Lande. Lande is a former Berklee student who, at thirty, counts John Handy, Bobby Hutcherson, and Ted Curson among his past associates, but he seems to be more appreciated in Europe than he is here. This album is quite different from Lande's previous one on ECM ("Red Lanta"), which teamed him up with saxophonist Jan Garbarek; Rubisa Patrol's sound is more jazz-oriented. Very prominent throughout this set is trumpeter Mark Isham, who once occupied a chair in the San Francisco Symphony Orchestra and whose clear, vibratoless horn reminds me of Miles Davis in his pre-Fillmore days. The quartet's music is extremely lyrical and somewhat introspec-

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tive. Glenn Cronkhite's subtle percussion work and Bill Douglass' full-bodied, acoustic bass blend well with the leader's sensitive keyboard work, giving Isham a delicate foundation on which to build his improvisations. More Rubisa Patrol, please. C.A.

HUBERT LAWS: Romeo and Juliet. Hubert Laws (flutes); orchestra. Undecided; Forlane; Guatemala Connection; and three others. Co-LUMBIA PC 34330 \$6.98,
PCA 34330 \$7.98, © PCT 34330 \$7.98.

Performance: Lush and languid Recording: Very good

This is another Bob James production with strings, Gadd, Gale, McDonald, Faddis, a Brecker brother, and the obligatory voices in the background. Only the label has been changed: what we used to get on CTI we are now being served on Columbia. As regular readers of STEREO REVIEW may have noticed, I have great admiration for Hubert Laws, and I even liked some of this sort of thing from his past. But Bob James has become as repetitive and boring as Burt Bacharach was before he faded away. Now that Columbia has promised to unplug some of its performers and return to real music, let's hope they give us Hubert Laws without the tedious trimmings. While we're at it, let's also hope that they find a better kind of glue for their albums; both my copies of this one were undone upon arrival. C.A.

HERBIE MANN: Gagaku and Beyond. Herbie Mann (flute); Pat Rebillot (keyboards); Sam Brown (guitar); Tony Levin (bass); Steve Gadd (drums); Japanese vocal and instrumental accompaniment. Etenraku; Mauve Over Blues; Kurodabushi (Sake Drinking Song); and two others. FINNADAR SR 9014 \$6.98.

Performance: Cultural bland Recording: Very good

This album opens with four monks of the Shingon sect chanting the introduction to what soon becomes a highly rhythmic, subtle blend of ancient Japanese and recent Afro-American-based cultures-pleasant to listen to, but a somewhat meager meal for the mind. Pat Rebillot's Mauve Over Blues, which follows, is more to my liking; a very slow, brooding, low-register piece, it seems to have little to do with the Orient, but it has a lot to do with the sort of jazz-derived mood music Muzak way.

Side two is more characteristic of Herbie Mann, but "Gagaku and Beyond" is, on the whole, a fairly bland mish-mash of Far Eastern and not so far-out Western music, suggesting, perhaps, that gagaku is a music beyond which one should not go. CA

JACO PASTORIUS/PAT METHENY/BRUCE DITMAS/PAUL BLEY, Jaco Pastorius (electric bass); Paul Bley (electric piano); Pat Metheny (electric guitar); Bruce Ditmas (drums). Blood; Vampira; Donkey; and six others. IMPROVISING ARTISTS 373846 \$6.98 (from Improvising Artists Inc., 26 Jane Street, New York, N.Y. 10014).

Performance: Faceless Recording: Very good

Neither his own album ("Jaco Pastorius," Epic PE 33949) nor his work with Weather Report has revealed to me why Jaco Pastorius should be regarded with any special interest. Here he is again, leading a quartet on Paul Bley's excellent little label, and, quite frankly, I find his playing so undistinctive as to be just plain dull. It does not help that Gary Burton's equally ordinary guitarist, Pat Metheny, is on hand (also electrified, but never electrifying), and it's downright painful to find the excellent Mr. Bley drowning in this plugged-CA in morass

SOPRANO SUMMIT: Chalumeau Blue (see Best of the Month, page 93)

RECORDING OF SPECIAL MERIT PHIL WILSON: Wilson-That's All. Phil Wilson (trombone); Al Cohn (tenor saxophone); John Bunch (piano); Milt Hinton (bass); Mousey Alexander (drums). Outrageous Mother; Nostalgia; Sleepy Time Down South; and three others. FAMOUS DOOR HL-109 \$6.98 (\$7.50 postpaid from Harry Lim Productions, 40-08 155th Street, Flushing, N.Y. 11354).

Performance: Perfection-that's all Recording: Excellent

Trombonist Phil Wilson provided one of the highlights of Woody Herman's fortieth-anniversary reunion concert at Carnegie Hall last year. Listen to this album and you'll hear why. Possessing a remarkable technique and an extraordinary imagination, Wilson seeks his inspiration in the past (Teagarden and Dickenson), but his creativity is too great to

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Raul Julia as Mack the Knife

Weill's "Gree Penny Opera"

THE New York Shakespeare Festival production of Kurt Weill's *Three Penny Opera* at the Vivian Beaumont Theater in Lincoln Center was not just another *Three Penny*, for it featured a completely new translation (from the German of Berthold Brecht) by Ralph Manheim and John Willet instead of the wellknown Marc Blitzstein version. Since producer Joseph Papp has made quite a point of this, it should be examined for a moment.

Any translation is a difficult business, and the translation of poetry, even (particularly?) a mere opera libretto, is especially so because of the problem of meter-its preservation is desirable (though often not possible) in poetry and usually absolutely necessary in opera. Apart from that, there are two schools of translation: one follows the letter, the other the spirit. Blitzstein, a poet himself, was a spirit man, so his translation hewed more to the emotional content of the whole passage than to its individual words. This involved, among other adjustments, some bowdlerizing (in fairness, probably necessary for the American theater of the time) and even some outand-out rewriting. The result was brilliant of its kind.

Manheim and Willet, who are engaged in translating the complete works of Brecht, are men of the letter-or at least so they claim. They do not have Blitzstein's skill at writing effective, singable, vernacular English, but they have restored some of the bawdiness, bitterness, and rawness of the original. Their claims to greater faithfulness have in fact already been challenged-which probably proves only that Brecht's work has reached the status of sacred canon, a "classical" literature over which the scholars may now squabble. The real point about the translation is that it is inconsistent, rather ugly, full of an awkward, stilted sort of verbal gusto-and hard to sing.

Another unusual feature of the production was the choice of director. Richard Foreman was previously known as the creator of the Ontological-Hysterical Theater (Off-Off-Broadway with a vengeance) and as authordirector of three unusual music-theater collaborations with avant-garde composer (Elephant Steps, an opera) Stanley Silverman. Quite logically, Silverman is the musical director of this production, and since there can be men of the letter in musical matters as there can be in literary ones, he has done a remarkable job of going back to Weill's original orchestration: two trumpets, two saxes doubling on flute and clarinet, bassoon, trombone, percussion, piano, harmonium, celeste, accordion, cello, and bass-as well as guitar, banjo, and Hawaiian guitar (the last three played by Silverman himself). He has also gone back to the original high keys for their tension and bite, and they certainly have that here

There are no great singers as such in the cast-these are all singing actors-but the intensity of the performances more than makes up the difference (Brecht and Weill were not interested in beautiful singing and sometimes even preferred the naturalness and rawness of untutored voices). The voices are, as a matter of fact, much better served on the recording. than they were in the theater, where the poor acoustics and the use of body mikes-now, unfortunately, almost standard in big musical productions-have the effect of insulating the actors from the audience as well as blunting this work's sharp musical edges. Here the intensity, the irony, the bitterness, the ferocity, the grotesqueness-and the humanity-come through in a very immediate, close-up way. All this is reinforced by the tremendous dynamism of the musical direction. The orchestral quality is gripping we have never really heard Weill's orchestration before, and it is simply a tremendous sound. In addition, Silverman's tempos and phrasing are electrify-

. . . we have never really heard Weill's orchestration before . . .

ing. The whole is equal in musical impact to any version, whether in German or in English, I am familiar with.

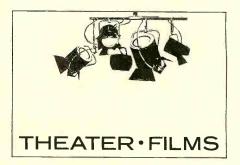
The album includes short articles on the production by Papp and Silverman, a synopsis of the story, and complete texts of the songs. The recording is technically uncomplicated, and therefore effective.

-Eric Salzman

WEILL: Three Penny Opera. Raul Julia, Macheath; Caroline Kava, Polly Peachum; Ellen Greene, Jenny Towler; Blair Brown, Lucy Brown; C. K. Alexander, Jonathan Peachum; David Sabin, Tiger Brown; Roy Brocksmith, Ballad Singer; chorus and instrumental ensemble, Stanley Silverman cond. COLUMBIA PS 34326 \$7.98, (B) KSA 34326 \$8.98.

allow him to dwell there. Put him together with fellow Herman veteran Al Cohn and a driving rhythm section, and the result is spectacular. Producer Harry Lim has been putting together winning combinations since the days of the old Keynote label, and, as his Famous Door releases evidence, he hasn't lost his touch. I hope he can do some more sessions with Phil Wilson before he is gobbled up and commercialized by one of the major labels.

C.A.



ALL THIS AND WORLD WAR II. Elton John: Lucy in the Sky with Diamonds. Rod Stewart: Get Back. The Bee Gees: Sun King. Leo Sayer: Let It Be; The Long and Winding Road. And twenty-two others. 20TH CENTU-RY 2T-522 two discs \$12.98, (B) 82522 \$12.98, (C) C2522 \$12.98.

Performance: The Endless Bummer Recording: All right

What's the dumbest thing you can think of? Barry White and his Love Unlimited Orchestra? The all-star Christmas version of Tommy? Well, Russ Regan and Lou Reizner, the men responsible for bringing you those monuments of aesthetic overkill, have come up with something even dumber, the soundtrack to an as yet unreleased film entitled All This and World War II. What they've done, you see, is make a documentary about the Big War featuring a wildly variable bunch of artists (Roy Wood? Frankie Laine?) singing Beatles tunes with lugubrious Wagnerian accompaniment by the London Symphony Orchestra, and I can't remember a more horrendous idea so brutally executed. Considering that symphony string sections sound pretty silly playing blues riffs, and that in all of recording history there have been perhaps three cover versions of Lennon/McCartney that even marginally succeeded (face it: the Beatles' art was record-making, not songwriting), this is hardly suprising.

At any rate, to be fair, there are a few interesting things here. Rod Stewart's Get Back is typically raunchy and a lot of fun; Bryan Ferry's almost straight She's Leaving Home is much less objectionable than you'd imagine; and Frankie Valli's Las Vegas runthrough of A Day in the Life is a surreal classic in the same league with "Kate Smith Sings Led Zeppelin with the Tijuana Brass." And I'd like to think that someone was making a point by having Helen Reddy do The Fool on the Hill. All in all, however, Regan and Reizner have done something I'd never believed possible; they've turned the memory of the Beatles into a bad joke, the punch line of which will be forthcoming in the Sgt. Pepper movie now filming with Peter Frampton as Billy Shears. I mean, like who said rock was dead? Really now, like who? S.S.



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

BARRAUD: Symphonie Concertante for Trumpet and Orchestra (see MILHAUD)

BERLIOZ: Requiem, Op. 5. Stuart Burrows (tenor); Chorus of Radio France; National Orchestra of France and Philharmonic Orchestra of Radio France, Leonard Bernstein cond. COLUMBIA M2 34202 two discs \$13.98, © MT 34202 \$7.98.

Performance: Melodramatic Recording: Good

BERLIOZ: Requiem, Op. 5. Robert Tear (tenor; City of Birmingham Chorus and Symphony Orchestra, Louis Frémaux cond. ANGEL □ SB 3814 two discs \$13.96.

Performance: Lyrical Recording: Very good

Leonard Bernstein made his Columbia recording in Les Invalides, site of the world première of Berlioz's noble masterwork, and Louis Frémaux's Angel recording is quadraphonic, but neither of these adds anything very substantial to a catalog that already contains recordings of the Requiem by Colin Davis, Charles Munch, and Maurice Abravanel. The two new versions are at opposite ends of the interpretive scale. Bernstein exceeds the melodrama of Munch's approach to a considerable degree, most irritatingly in the fluctuating tempos adopted in the celebrated Dies Irae, most effectively in the Quaerens me and the Lachrymosa. Frémaux's is a restrained, classically lyric reading in which the superbly

Explanation of symbols:

- \mathbb{R} = reel-to-reel stereo tape
- (8) = eight-track stereo cartridge
- C = stereo cassette
- 🔲 = quadraphonic disc
- **R** = reel-to-reel quadraphonic tape
- $\mathbf{B} = \mathbf{e}_{ight} + \mathbf{f}_{ack} \mathbf{q}_{uadraphonic} \mathbf{f}_{ape}$

Monophonic recordings are indicated by the symbol \mathbb{W}

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

trained City of Birmingham Choir contributes the best choral singing I have ever heard in this work. Bernstein's French choristers have a wonderful, characteristically Gallic timbre, but they are no match for their British counterparts in refinement of intonation and balance. Bernstein has the better of the two tenors for the difficult solo in the Sanctus: Burrows has to strain ever so slightly for his top notes; Robert Tear is just plain effortful in this department. But the best tenor is Robert Bressler in the Abravenel album.

As to recording, I recommend that quadraphony buffs lend an ear to Abravanel's Vanguard album, which offers both a good performance and really excellent four-channel sound in the famous episodes for the four brass bands and sixteen timpani in the Dies Irae. Whether Berlioz, given today's technology, would prefer the "surround" treatment of his brass choirs to a frontal position at the four corners of the main performing body is a matter for conjecture, but the surround is certainly well and effectively defined on Vanguard's SQ disc. Frémaux settles for the original Berlioz specifications, and the Angel four-channel sound is of the comfortably ambient type rather than overt surround. The very spacious acoustic of the Great Hall of Birmingham University adds to the effect and enhances the choral tone, while the tighter and harder sound of Les Invalides makes for somewhat greater clarity of orchestral detail in Bernstein's stereo performance. D.H.

BRAHMS: Violin Concerto in D Major, Op. 77. Gidon Kremer (violin); Berlin Philharmonic Orchestra, Herbert von Karajan cond. ANGEL □ S-37226 \$6.98.

Performance: Gorgeous fiddling, lacks momentum Recording: Good

BRAHMS: Violin Concerto in D Major, Op. 77. Nathan Milstein (violin); Philharmonia Orchestra, Anatole Fistoulari cond. SERAPHIM S-60265 \$3.98.

Performance: Fine solo playing Recording: Good

On the jacket of Gidon Kremer's debut rec-

ord Herbert von Karajan is quoted as declaring that the twenty-nine-year-old Soviet violinist-pupil of Oistrakh, winner of numerous major competitions-is "the greatest violinist in the world." Golly. Kremer is awfully good, possessed of an apparently flawless technique, a rich and vibrant tone, and some altogether noble ideas; he would seem to be too serious an artist to be saddled with such hyperbole. Karajan evidently means it, though, for he seems uncharacteristically deferential in this performance, holding his orchestra back to the point of merely "accompanying" rather frequently. What he accompanies is some exceptionally beautiful and occasionally exalted solo playing, but the partnership lacks both balance and momentum. All three movements-the first in particular-are taken more slowly than usual, and, regrettably, the tension and weight that might easily have sustained these broad tempos in this broadscaled work are simply lacking. It's possible that Karajan wanted Kremer to have the spotlight to himself, but that approach is hardly satisfactory in so symphonically conceived a work as this. The sound is good enough, though less impressive than Angel's current best. I do look forward to more interesting recordings from this important violinist.

Kremer plays the Kreisler cadenzas; Milstein plays his own, and his performance is more crisply paced and fiery but no less suave. This recording, from the early Sixties, also focuses on the highly virtuosic solo playing, and the orchestral support is, I'm afraid, rather undistinguished. R.F.

BRITTEN: Nocturnal, Op. 70; Songs from the Chinese, Op. 58. CASTELNUOVO-TEDES-CO: Six Songs, Op. 207; Sonata in D Major, Op. 77. Märta Schéle (soprano); Josef Holeček (guitar). B1s LP-31 \$7.98 (from HNH Distributors, P.O. Box 222, Evanston, Ill. 60204).

Performance: Expert

Recording: Excellent

There is a remarkably ingenious program here underneath all the surface simplicity. Both composers were drawn to the guitar through close friendship with master guitarists— Segovia in the case of Castelnuovo-Tedesco, Julian Bream in the case of Britten. Each is represented here by a song cycle with guitar accompaniment and an extended solo work for the guitar.

Stylistically, of course, the two composers have little in common. Castelnuovo-Tedesco was a classicist; his Six Songs from the Divan of Moses-ibn-Ezra are pleasant in a neoarchaic manner, with simple chordal accompaniments, and his Sonata in D is firmly based on the classic models. Neither work seems to attempt much beyond diversion. Britten's Songs from the Chinese, on the other hand, attempt to endow textual matter of minimal poetic interest with musical substance, but the results are elusive and unmemorable. His Nocturnal is related-in mood at least-to the celebrated Serenade for Tenor, Horn, and Strings, but it is not nearly as haunting and is likely to appeal mainly to guitar specialists.

Märta Schéle is a cultivated singer with a basically attractive voice. Her enunciàtion is not always clear, but the fault lies partially with the difficult texts. To the extent I am able to judge, Josef Holeček is a fine guitarist. The ultra-clear recording, normally a blessing, reveals more mechanical guitar sounds than I care to hear, but the sharpness of technical detail and immaculate disc surface deserve praise in any case. *G.J.*

RECORDING OF SPECIAL MERIT

BRUCKNER: Symphony No. 8, in C Minor. Berlin Philharmonic Orchestra, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON 2707 085 two discs \$16.96.

Performance: Formidable Recording: Good

Until Bernard Haitink and the Amsterdam Concertgebouw recorded the Bruckner Eighth in 1970, Herbert von Karajan's reading, done for Angel in 1958, had the field pretty much to itself for those who wanted a truly majestic stereo realization of this colossus among the Austrian master's symphonies. Karajan's new recording differs little in interpretive substance from his earlier one, which is to say that impressive architectural unity and awesome majesty of utterance are its major characteristics. Particularly notable in the new performance is the way it builds toward the finale, achieving the most convincing cumulative effect I have heard yet on discs. My only reservation about both the Karajan interpretations concerns a rather heavy-footed treatment of the scherzo, which always has struck me as a wind-swept, bell-obsessed affair; that effect is missed by Karajan but gloriously realized in the historic mono recordings of Furtwängler (on Unicorn) and Mravinsky (on MK).

In common with Karajan's other recent DG recordings with the Berlin Philharmonic, this one eschews the church acoustic typical of the 1960's tapings, favoring instead more detailed musical texture and closer orchestral presence. But upon spot-checking the 1966 Karajan recording of Bruckner's Ninth, I must say that I would have preferred that particular ambiance for *this* music. On its own terms, however, the new recording job is firstrate, and Brucknerians will be hard put to choose between this and Haitink's as the preferred stereo version. *D.H.*

BUXTEHUDE: Cantatas. Alles, was ihr tut; Mit Fried und Freud ich fahr dahin; Befiehl dem Engel, dass er komm. Johannes Kunzel (bass); Greifswald Cathedral Choir; Berlin Bach Orchestra, Hans Pflugbeil cond. STEF-FANI: Stabat Mater. Kurt Equiluz, Rudolf Resch (tenors); Nikolaus Simkowsky (bass); Vienna Boys' Choir; Chorus Viennensis; Concentus Musicus Vienna, Nikolaus Harnoncourt cond. CMS/ORYX 3C 303 \$6.98.

Performance: Intimate Recording: Fine

BUXTEHUDE: Cantatas. Wachet auf, ruft uns die Stimme; Jesu, meine Freude; Hertzlich lieb hab ich dich, o Herr. Herrad Wehrung, Gundula Bernát-Klein (sopranos); Frauke Haasemann (contralto); Friedreich Melzer (countertenor); Johannes Hoefflin (tenor); Wilhelm Pommerien (bass); Westphalian Choral Ensemble; Southwest German Chamber Orchestra, Wilhelm Ehmann cond. NoNEsUCH H-71332 \$3.98.

Performance: Forced Recording: Hard

We often read about how Buxtehude brought Italian warmth to the chilly atmosphere of Lübeck. Now we can actually hear it for ourselves in an unusual coupling of several of Buxtehude's cantatas with Agostino Steffani's *Stabat Mater*. The style of these two composers is amazingly similar; add the choral melodies to Steffani and you have Buxtehude, subtract the choral melodies from Buxtehude and you have Steffani. No matter what your arithmetical preference may be, the music of either is an exquisite example of intimate devotional church music that takes the composers above any doctrinal differences between Catholic and Protestant.

Besides juxtaposing an Italian and a North German, the Oryx disc also juxtaposes authentic early instruments in one work and modern instruments in the other. Both are performed in a chamber-music manner that is appropriate to the finely wrought textures of the music. Although the sound in the Steffani (played on old instruments) is "purer," that achieved by the modern instruments in the Buxtehude is equally effective, thus proving the point that basic musicianship depends on itself, not on the instruments used. The choral sound for both is small and clear, and it is well balanced with the instruments. Especially noteworthy in the Buxtehude is the light, springy, almost dance-like quality achieved by tempo and articulation.

The Nonesuch disc will be of special interest to the Bach lover for the Buxtehude treatment of two choral melodies, *Wachet auf* and *Jesu meine Freude*, that are so well known in the Bach settings. Although the performance is on modern instruments, great care has been taken to distinguish between the *concertino* and *tutti* sections, a practice not always indicated in the score but essential to the proper



David Bean: Awfully Impressive

D AVID BEAN is surely among the most under-appreciated pianists in the world today, something I can put down only to insufficient exposure of his artistry to the musical public. Certainly there is nothing in his playing that one can fault. He projects a musical personality of great virtuosity coupled with intellect, not the most immediately ingratiating combination, perhaps, but awfully impressive and in the respected tradition of Egon Petri and Edward Steuermann (with whom he studied). His recorded repertoire has been scanty thus far, but it includes a superlative coupling of Busoni and Villa-Lobos for RCA and an equally fine disc of Scriabin, Liszt, and Ginastera for Westminster.

Liszt's Années de Pèlerinage contain some of his very best music and, in the case of the three Sonetti del Petrarca from the Deuxième Année, possibly his finest music of all. Bean's performance of the three sonnets, as well as of the remainder of Italie, is consistently admirable, beautifully clean and reserved technically (he avoids flashiness), romantic in feeling but without prettiness, broad in dynamics, and noble in tone. He is aided by a particularly fine-sounding Steinway and an extraordinary job of recording by producer Marc Aubort.

WITH full knowledge of impending complete sets of the Années by both Gyorgy Czifira and Lazar Berman and also remembering well Wilhelm Kempff's marvelously poetic account of selected pieces (the mono recording currently on Turnabout, not the later DG), I still feel that anyone who hears David Bean's recording will not want to be without it. — James Goodfriend

LISZT: Années de Pèlerinage—Deuxième Année: Italie. Sposalizio; Il Pensieroso; Canzonetta del Salvator Rosa; Sonetti del Petrarca Nos. 47, 104, and 123; Après une Lecture de Dante. David Bean (piano). WESTMINSTER WGS 8339 \$3.49.



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and effective performance of this music. Unfortunately, the performance strives for a brilliance that is not inherent in the music, and the use of trumpets and an aggressive organ sound mar the balance between vocal and instrumental forces. Johannes Hoefflin's fine singing aside, the soloists seem to struggle, and not always too successfully at that. Whether it is the music or the performance, the Italianate quality of the Oryx disc is entirely lacking here. S.L.

CASTELNUOVO-TEDESCO: Six Songs, Op. 207; Sonata in D Major, Op. 77 (see BRIT-TEN)

RECORDING OF SPECIAL MERIT

DUKAS: La Peri. ROUSSEL: Symphony No. 3, in G Minor, Op. 42. New York Philharmonic, Pierre Boulez cond. Columbia
M 34201 \$6.98, © MT 34201 \$6.98.

Performance: Superb Recording: Spectacular

In their individually respective fashions, both Dukas' poème dansé, composed in 1912, and Roussel's Third Symphony, composed in 1930 for the fiftieth anniversary of the Boston Symphony Orchestra, are quintessentially Gallic. The earlier score reflects vividly the linear sensuosity of the art nouveau decorative style that flourished at the turn of the century, while the athletic polyphony of Roussel's score (tempered by an impassioned slow movement) is a counterpart to the sharply delineated, colorful murals of Fernand Léger.

In this recording Pierre Boulez accomplishes a feat comparable to his remarkable New York Philharmonic documentations for Columbia of Stravinsky's *Firebird* and Ravel's *Daphnis et Chloé*, which is to say that he imbues the music with the most extraordinary rhythmic vitality and color, thereby making us feel that we are hearing it for the very first time. It is an example of the conductor's recreative art at its very finest.

As with the Firebird and Daphnis recordings, Columbia's production team deserves a very large share of the credit for the simply gorgeous sonic results achieved on this disc. As heard in both four-channel and two-channel playback, the sounds of the two scores emerge in a grandiose panoramic ambiance, but with every musical detail intact and in proper perspective. I must say that I was afraid the Roussel might suffer from this 'wide-open'' treatment, but, on the contrary, the overall effect of the work was enhanced. and I was less aware than usual of the dryness of the opening movement. (As indicated on the record jacket. Columbia has now gone the route of Angel and has opted for "single inventory" merchandising of its quadraphonic product, noting where applicable that the disc is "Stereo/Quadraphonic compatible.") D.H.

FURTWÄNGLER: Symphony No. 2, in E Minor. Berlin Philharmonic Orchestra, Wilhelm Furtwängler cond. DEUTSCHE GRAMMOPHON 2707 086 two discs \$15.96.

Performance: Composer's own Recording: 1951 mono

Here's an oddity: a gigantic, ultra-Romantic symphony written in Germany during World War II by a world-famous conductor, recorded in 1951, and now, twenty-five years later, re-released by DG. The symphony is an hourand-twenty-minute work squarely in the Bruckner-Mahler tradition but without the divine simplicity and piety, of the former or the vision and vulgarity of the latter. Yet, forgetting the political and historical implications of the date of composition, one can appreciate the strength of the music. Furtwängler, like many conductors of his generation, was originally a composer, and the creator's point of view strengthened his conducting immensely. Certainly this dramatic symphony is as interesting and impressive as a great deal of the second-rate Romantic-revival rubbish that we're subjected to these days. The big-scale, old-fashioned performing style has an antique patina in the mono recording. E.S.

GERSHWIN: Blue Monday. Joyce Andrews (soprano), Vi; Patrick Mason (baritone), Mike; Walter Richardson (bass), Sam; Jeffrey Meyer (tenor), Tom; Thomas Bogdan (tenor), Joe; Gregg Smith Singers and Orchestra, Gregg Smith cond. The Jolly Tar and the Maid. Catherine Aks (soprano); Jeffrey Meyer (tenor). Sing of Spring. Gregg Smith Singers; Oresta Cybriwsky (piano). In the Mandarin's Orchid Garden; By Strauss. Rosalind Rees (soprano); Oresta Cybriwsky (piano). Let 'Em Eat Cake. Thomas Bogdan (tenor); Priscilla Magdamo (alto); Gregg Smith Singers and Orchestra, Gregg Smith cond. TURN-ABOUT TV-S 34638 \$3.98, © Vox CT 2103.63 \$4.98.

Performance: Good singing, bad acting Recording: Very good

Long before there was a Porgy and Bess, back in the year 1922 when he hadn't yet composed the Rhapsody in Blue, George Gershwin prepared his opera Blue Monday, also known as 135th Street, for the annual spectacular entertainment rite of Broadway known as the George White Scandals. Buddy De Sylva wrote the libretto, with its silly plot about a jealous woman who stabs her lover only to find the lady she thought he was about to run off with is his sister; Gershwin composed a rather ingratiating score in which can be heard strains of Porgy as well as some striking melodies, including one borrowed from the lullaby in his own early string quartet. The critics hated this experiment so much that it was dropped from the act after the Boston tryout, although Paul Whiteman later revived it in concert form in Carnegie Hall.

I have heard Blue Monday in a pirated disc made at a 1953 revival with uncredited black singers who fleshed out its thin action with glorious intensity. The Gregg Smith Singers, with Joyce Andrews as the jealous Vi and Thomas Bogdan as the gambler Joe, who gets it in the gut, sound pallid and perfunctory by contrast, although they do some lovely singing along the way. More in the line of this resourceful group are the two madrigals and art songs, welcome additions to the slim repertoire of Gershwin's serious efforts, but still not too serious-the madrigals being parodies of Gilbert and Sullivan whipped up for a movie called Damsels in Distress, and one of the art songs a clever parody of a Strauss waltz written for the musical The Show Is On. A scene from Let 'Em Eat Cake, with its choral variations on the ballad Mine, provides a perfect finale for a program of unhackneyed Gershwiniana. The recorded sound is very fine, and the cassette is as good as if not better than the disc. PK

GLAZOUNOV: Chant du Ménestrel, Op. 71 (see SHOSTAKOVICH)



ISAO TOMITA: a sci-fi trip to Holst's Planets

HAYDN: Mass No. 5, in B-flat Major (see MO-ZART)

HAYDN: Piano Sonata in F Major (Hob. XVI:23); Sonata in C Major (Hob. XVI:35); Sonata in A-flat Major (Hob. XVI:46); Sonata in D Major (Hob. XVI:51). Vasso Devetzi (piano). MONITOR MCS 2147 \$5.98.

Performance: Clipped Recording: Hard

RECORDING OF SPECIAL MERIT

HAYDN: Piano Sonata in D Major (Hob. XVI: 19); Sonata in G Minor (Hob. XVI:44); Sonata in D Major (Hob. XVI:37); Variations in F Minor (Hob. XVII:6). Gilbert Kalish (piano). NONESUCH H-71328 \$3.98.

Performance: Sensitive Recording: Clear

Pianists are finally turning to the long-neglected sonatas of Joseph Haydn and discovering their many beauties and jokes, their depth and freshness. This has become apparent to the record buyer from the many single records that are now available and from several series that will eventually bring us all these sonatas.

One of the most fascinating aspects of this revival is that performers are gradually beginning to realize that Haydn's keyboard music requires a style of its own if its unique quality is to be brought out. Until recent years, the few sonatas that were played were treated as miniatures, charming openers leading up to the meaty Romantic repertoire. This approach makes the sonatas seem silly, and they lose their breadth and scope. Other pianists, having been through the stylistic difficulties of Mozart, applied that approach to these works. While theoretically logical, such an approach denies the pithiness of Haydn's writing (for Mozart's treatment of the piano is completely different) and frustrates the use of the entire instrument in the rich and varied textures he wanted. Of the two recordings under scrutiny, Vasso Devetzi takes the jolly-miniature approach and Gilbert Kalish takes the music for what it is.

Ms. Devetzi commands a clean, crisp technique and produces a rather dry sound which is in no way alleviated by her sparse pedaling. Apparently afraid of any Romantic overtones, she rushes through cadences in a manner that upsets the clearly constructed phrases of Classical structure. When she does indulge in a ritard, she never returns to the original tempo. Thus a single movement lacks the most important cohesive element prevalent in the music. There are also several stylistic practices she should be more careful about. For example, her trills are usually taken from the wrong note, which is a small point in itself, but placing ornaments before the beat upsets the melodic line.

Mr. Kalish's readings of Haydn come off beautifully because he enters into the music without any preconceived notions and brings out what is there. He is especially successful in the grand dimensions of the first movement of the D Major Sonata (No. 19), in which his fluid approach to tempo and the ability to return to the original at points of structural importance bring out the breadth of the work. In the final movement we hear the romp that Havdn intended. Some of the fast movements lack brilliance because of too sensitive an approach, but the results of this style are breathtaking in the G Minor Sonata and the F Minor Variation. Of the many recordings of Haydn piano music I have heard lately, certainly Mr. Kalish's is the finest. S.L.

HOLST: The Planets. Women's Voices of the Mendelssohn Club of Philadelphia; Philadelphia Orchestra, Eugene Ormandy cond. RCA CRL1-1921 \$4.98.

Performance: **Bland** Recording: **Okay, but noisy surfaces**

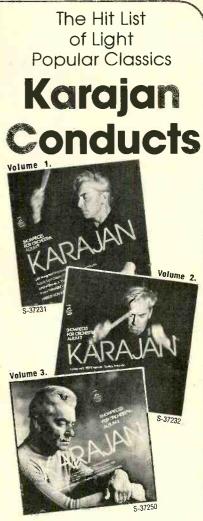
BEYOND THE SUN: An Electronic Portrait of Holst's "The Planets." Patrick Gleeson (Eu Polyphonic Synthesizer). MERCURY SR 180000 \$6.98.

Performance: Synthetic Recording: Very good

HOLST (arr. Tomita): *The Planets*. Isao Tomita (electronic synthesizer). RCA ARL1-1919 \$7.98.

Performance: **Too long a trip** Recording: **Spacious**

When Gustav Holst wrote his mammoth extraterrestrial suite The Planets, he had no idea (Continued on page 131)



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CIRCLE NO. 27 ON READER SERVICE CARD

it was going to be the work that would bring him world renown, and later he sometimes wished better attention had been paid to his more neglected efforts. But The Planets, now recorded by just about every major orchestra on the boards, continues to be one of the most spectacular pieces in the repertoire. The Philadelphia, that Rolls Royce of orchestras, would seem the perfect ensemble to offer a definitive performance of the suite in all its luxurious saturation of tonal color, yet this latest recording crosses no sound barriers. The barbaric rhythms of Mars, the Bringer of War, forecasting the coming brutalities of World War I, are not nearly warlike enough here, Mercury, the Winged Messenger pursues his errands about the sky too pertly, and the magic of Uranus is excessively suave. Only toward the end, in Neptune, as the sombre timbres of celesta, harp, and strings drown in a sea of women's voices, does this version of The Planets seem exceptional. The recorded sound is less than startling too, and the surfaces are rather less than silent.

What Patrick Gleeson has done to The Planets while tinkering with his Eu Polyphonic Synthesizer is something else again. I was reminded of a child who used to be brought downstairs to stand in front of a console phonograph, sway back and forth in his Dr. Dentons, and growl out Beethoven's Fifth while the record played to the embarrassed appreciation of adult guests. It was a remarkable accomplishment for an infant, but why subject the public to it? So with this. The Eu, which Gleeson prefers for his experiments over the Moog, is an electronic miracle that has enabled the arranger here (over endless hours, no doubt) to imitate the sound of the orchestra remarkably well in Mars. As the work goes on, though, Gleeson seems to become bored with this adherence to the composer's intent and begins to intrude himself in the sky of sound, adding the kind of twittering science-fiction noises that have become all too familiar in recent years along with effects of ocean waves and thunder he no doubt imagined could serve only to "improve" the austere majesty of Neptune. No matter how many overtime hours he puts in at his madscientist machines, Gleeson will never be a match for the Philadelphia Orchestra.

Tomita, whose earlier efforts, such as The Snowflakes Are Dancing, are among RCA's biggest sellers, offers another elaborate interpretation of the score on the synthesizer. In this one, more musicality is evident. There is a breathtaking spaciousness in the sound of the journey, and a more successful attempt to adhere to Holst's own tonal palette. Tomita's prelude, placing the work in the context of a real space voyage complete with countdown, is unobjectionable fun. But, like Gleeson, Tomita cannot keep himself out of the rest of the picture and succumbs too often to the temptation to embroider the music with all sorts of sci-fi effects, some of them rather heavyhanded. Moreover, the tempos he has chosen for the slower sections, Venus and Saturn, are so slow that the trip as a whole ends up seeming excessively long, even for the hundreds of millions of miles traversed.

The two synthesized versions of *The Planets* are reported in *Billboard* to be "in sales orbit" in this country, but having difficulty "soaring into markets elsewhere in the world. . . . "Holst's estate has protested the electronic interpretations, and the United Kingdom's Mechanical Copyright Society has sent letters to rights organizations demanding

that no recording licenses be issued for such albums, arguing that the score has not been recorded "substantially" as composed. The Holst estate may even try to get the albums withdrawn from the American market. A tragedy to the sales departments of Mercury and RCA, perhaps; a survivable loss for music.

P.K.

IVES: Songs. At the River; Elégie; Ann Street; A Christmas Carol; From the "Swimmers"; West London; A Farewell to Land; Abide with Me; Where the Eagle; Disclosure; The White Gulls; The Children's Hour; Two Little Flowers; Autunn; Tom Sails Away; Ich grolle nicht; Feldeinsamkeit; Weil' auf mir; In Flanders Fields. Dietrich Fischer-Dieskau (baritone); Michael Ponti (piano). DEUTSCHE GRAMMOPHON 2530 696 \$7.98.

Performance: Remarkable Recording: Excellent

In 1922, Charles Ives rummaged through his musical attic, collected 114 songs, and published them at his own expense. For years he would send a copy gratis to anyone who took the trouble to ask for one. And now here is a Deutsche Grammophon recording by Prince Dietrich—royal honors, just as if it were Schubert or Brahms or Wolf. Wouldn't old Mr. Ives have been pleased!

Deutsche Grammophon? Fischer-Dieskau and Charles Ives? Sounds like oil and water, an impossible mixture. But it is not as farfetched as one might think. Ives was, in fact, a great admirer of the great tradition. Not only did he not reject Europe, but more than a bit of Beethoven and Brahms went into the recipe for Ivesian stew. Even more surprisingly, he wrote a number of settings of French and German poetry, even audaciously resetting the texts of some very famous lieder, including Iche grolle nicht and Feldeinsamkeit.

Fischer-Dieskau has wisely chosen to record those Ives songs, primarily lyric, that come closest to European tradition or that split the difference between the American hymn-tune and a European kind of harmony. Certainly the baritone's English is at least as good as the German or French of many American singers, but there are a few places that give one pause. A touch of Central European accent and the lieder-like atmosphere sometimes jar with the ultratraditional American atmosphere of some of these tunes-at least for an American listener. The singing is not beautiful, but even so this is a remarkable performance and recording. Perhaps nothing demonstrates as well as this release the entry of Ives into the category of Grand International Old Master. E.S.

LISZT: Piano Concertos Nos. 1 and 2 (see Best of the Month, page 90)

LISZT: Sonetti del Petrarca, Nos. 47, 104, and 123 (see SCHUMANN)

RECORDING OF SPECIAL MERIT

MAHLER: Symphony No. 3, in D Minor. Marilyn Horne (mezzo-soprano); Women of the Chicago Symphony Chorus; Glen Ellyn Children's Chorus; Chicago Symphony Orchestra, James Levine cond. RCA ARL2-1757 two discs \$15.96, @ CRS2-1757 \$14.95.

Performance: **Opens windows** Recording: **Excellent**

The Mahler Third Symphony is among the

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longest, most sprawling, and, along with the Seventh, the least-known of the nine or ten. It is one of the most complex and, at the same time, one of the most appealing. And it is perhaps the most ambitiously programmatic, although, as usual, Mahler made the program heroic-philosophical, not narrative, and later played it down (it is, of course, gleefully quoted anyway by all analysts and annotators).

The symphony has six movements (originally it had seven, but the proposed finale ended up as the last movement of the Fourth) organized as a personal credo and hymn of praise to inanimate and animate creation. This conception inspired some of Mahler's most wonderful music; in spite of its length, the work is heart-felt, colorful, and tremendously appealing almost all the way through.

The Third Symphony has not been neglected on recordings; there are notable versions by Bernstein, Haitink, Solti, and Horenstein. But this one can stand with its predecessors in most respects. Mahler, more than any other composer (at least before the atonal moderns), labored mightily to write his interpretations directly into his scores. Essentially, Levine takes them at face value; he does not fuss. He is a tremendous craftsman, and he has a wonderful orchestra to work with, not to mention Marilyn Horne and a fine chorus of women's and children's voices. In a few places I miss a certain urgency. The conductor's tendency to sit back and let things take care of themselves is not ideal in the moments of greatest turmoil and passion. But the Third, Mahler's "Pastoral Symphony," is one of his least tormented and most outward-looking works. Levine succeeds in opening windows: he lets the fresh air blow in from this extraordinary panorama of forests, mountains, flowers, animals, and angels out of the landscape of Mahler's mind.

This RCA boxed set comes with a most unusual cover: a child-like visual fantasy by Maurice Sendak of an angel handing old Gustav a bouquet of wildflowers surrounded by animal musicians deep in a nocturnal fairytale forest. Absurd and wonderful. E.S.

MASSENET: Le Cid. Placido Domingo (tenor), Rodrigo; Grace Bumbry (mezzosoprano), Chimène; Paul Plishka (bass), Don Diego; Eleanor Bergquist (soprano), Infanta; Arnold Voketaitis (bass-baritone), Count de Gormas; Jake Gardner (baritone), King. Byrne Camp Chorale; Opera Orchestra of New York, Eve Queler cond. COLUMBIA M3 34211 three discs \$20.98.

Performance: Domingo steals it Recording: Excellent

In late nineteenth-century France there was a taste for a kind of exotic realism, sweet and sensual but fitted out in the guise of high-class and moral art. The painter Gérome is a good example; the writings of Loti are another. Bizet's *Carmen* is also an example, but the real master of the genre in music was Massenet. Vincent D'Indy expressed it perfectly when he referred to Massenet's ''discreet and semireligious eroticism.'' And that, not Spanish honor, is the real subject of Massenet's *Le Cid.*

"Le Cid"—El Seid, the Conqueror—was the nickname of Rodrigo Diaz de Bivar, the greatest legendary Christian hero of the medieval Spanish wars against the Moors. Of this epic subject, treated many times in literature, nothing much is left except the erotic es-*(Continued on page 135)*



CIRCLE NO. 51 ON BEADER SERVICE CARD



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sence. Rodrigo, sworn to avenge an insult to the honor of his old father, kills the father of his fiancée, forcing her to demand his death, so he goes off to meet a heroic end in hopeless battle against the Moors. This apparently solves the problem except for an unforeseen circumstance: he wins and comes back a hero. At the moment of truth, Rodrigo offers to kill himself. Of course the young lady cannot permit such a thing, and her protestations are assumed to signify forgiveness of our hero.

Around this material. Massenet has draped his lightly sensuous music-like certain fashions, designed to reveal as much it hides. The technique is the cliché. All the old operatic clichés are here: the stirring martial air, the air larmoyant, the jolly dancing peasants, the colorful religious ceremony, the chorus of townspeople, sword-play and oaths of vengeance, the celestial vision, the soldiers marching out to battle, and the victory celebrations. Massenet even manages to make the Wagnerian leitmotiv principle into a goldmine of clichés; he even invents them. How ironic that, amidst all this, it is the silly ballet music for dancing peasants that has survived the best

What really killed this kind of operatic sensuality-and-spectacle was Hollywood. It is hard for us to take anything but a camp attitude now toward ancient tales of Spanish honor with fairy-tale trimmings and loud singing (at least Rodrigo could have killed his girl friend's father over something serious---say, violating his sister). And, of course, the revival of French grand opera is never an easy task; the tradition simply expired half a century ago. And yet, here it is back again, not just *Le Cid*, but *Esclarmonde*, and *La Navarraise*, and *Thais*, and *Thérèse*, and Lord knows what's waiting in the wings.

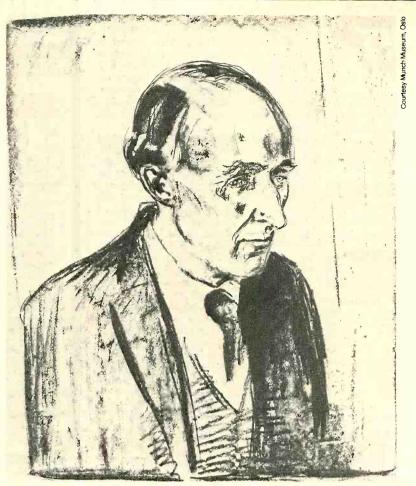
Eve Queler directed the Carnegie Hall performance in the spring of 1976 from which this recording derives. She has put together an orchestra that plays remarkably well and with real spirit and a good but quintessentially non-French cast. The focus in Massenet's opera is always the heroine, and, in spite of the title, the situation is no different here. Le Cid is titillating bourgeois entertainment of the most middle-brow sort, but a great Chimène can raise it up to an almost tragic-dramatic level. Grace Bumbry, although she touches a few musical heights, does not reach that kind of musico-dramatic level, and she is not helped by the fact that a major dramatic scene at the beginning of Act IV has been cut.

Placido Domingo, on the other hand, makes the most of a juicy tenor part. Rodrigo is your typical one-dimensional tenor role, but there are two big arias and some dramatic scenes, all of which Domingo delivers with a hearty, Italianate (not French), good-singing vigor that is wonderful to listen to and becomes virtually the whole point of the enterprise. Paul Plishka is an outstanding Don Diego; the other members of the supporting cast are basically good team players. The ensemble, choral, and orchestral work are very good, and, except for the sad necessity of keep-it-to-threediscs cuts, the production earns good marks. The notes are meager, but text and translation are included. The live recording is particularly successful. How, I would like to know, did they keep the audience from breaking things up with applause? Mercifully, there is not a whisper until the end. E.S.

(Continued on page 138)



CIRCLE NO. 14 ON READER SERVICE CARD



Frederick Delius in a 1920 lithograph by Edvard Munch

Frederick Delius' "Fennimore and Gerda"

THOUGH Angel surely does not expect that galloping droves of music lovers will be battering down record-store doors to obtain their copies of Frederick Delius' Fennimore and Gerda, the album is certain to delight the hearts of many opera lovers. With the release of this splendid recording, Angel now offers three of the Delius operas (Koanga and A Village Romeo and Juliet are the others) in superb performances.

Feinimore and Gerda was the composer's last opera, but when it was completed in 1910, the collection of "short, strong emotional impressions given in a series of terse scenes," as the composer himself described it, failed to enthrall Sir Thomas Beecham, still flushed with the success of his Covent Garden production of A Village Romeo and Juliet. The series of eleven stage "pictures" based on the Danish writer Jens Peter Jacobsen's novel Niels Lyhne apparently struck Sir Thomas as too realistic, and Fennimore and Gerda was not to receive its première performance until 1919 in Frankfurt.

Today, the work shimmers timelessly in its impressionistic setting with a formal strength that belies and transcends the evanescent subtlety of the score. The story of how the writer Niels Lyhne and his friend the painter Erik Refstrup vie for the love of the shallow, restless Fennimore is clothed in so much affecting music and framed by such exquisite interludes evoking the moods of nature that even the news of Erik's death, for example, is a perfunctory event compared to the atmospheric, wordless singing of the harvest hands at twilight.

The final episodes, in which the composer tampered with the novel's gloomy Nietz-schean dénouement to offer Niels the solace of a new love in the adolescent Gerda, may be bad theater, but they inspired the composer to some of his most memorable orchestral writing—all we have usually heard of this opera. There are, to be sure, some silly, stilted passages in the libretto of *Fennimore and Gerda*—almost every text Delius ever tackled seems to hover tremulously on the borderline of the ridiculous—yet the music makes even the most fatuous exchanges sound emotionally convincing.

LIUS succeeded in *Fennimore and Gerda* in proving that an opera could be based on the lives of ordinary people, on conflicts confined largely to conversation, and some day the operatic public may catch up with him. Meanwhile, this flawless production is superbly sung in Philip Heseltine's English version of the composer's own German libretto with Elisabeth Söderström as the bored, wistful Fennimore (she also doubles as the smitten young Gerda), Robert Tear as the writer who weds Fennimore, and Brian Rayner Cook as the painter who loves and loses her. The Danish Radio Chorus and Danish Radio Symphony Orchestra under Meredith Davies are responsive to every nuance in a work made up largely of nuances. In SQ quadraphonic the results are especially radiant. A complete text is supplied. —Paul Kresh

DELIUS: Fennimore and Gerda. Elisabeth Söderström, Fennimore, Gerda; Brian Rayner Cook, Niels Lyhne; Robert Tear, Erik Refstrup; Birger Brandt, Consul Claudi; Hedvig Rummel, Mrs. Claudi; Anthony Rolfe Johnson, a Voice Across the Water; Kirsten Buhl-Moller, Lady Visitor, Marit; Mogens Berg, Sportsman; Peter Fog, Town Councillor, Distiller; Michael W. Hansen, Tutor; Hans Christian Hansen, Councillor Skinnerup; Bodil Kongsted, Ingrid; Ingeborg Junghans, Lila; Eva Tamulenas, Maidservant. Danish Radio Chorus and Symphony Orchestra, Meredith Davies cond. ANGEL □ SBLX-3835 two discs \$15.96.

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ALFONS AND ALOYS KONTARSKY: invariably brilliant and insightful

MILHAUD: Saudades do Brasil. BARRAUD: Symphonie Concertante for Trumpet and Orchestra. Roger Delmotte (trumpet, in Barraud); Orchestre National de l'ORTF, Manuel Rosenthal cond. INÉDITS 995 034 \$7.98 (from HNH Distributors, P.O. Box 222, Evanston, Ill. 60204).

Performance: Alive Recording: Very good

In the mid-Fifties, when Capitol released a recording of the Saudades do Brasil conducted by Milhaud himself, the composer wrote: "Although you don't expect from a composer the technique of professionals of the baton, I think it is worth while to have the composer's tempi and interpretation." His own tempo for the Overture was markedly different from Rosenthal's here-much more deliberate and heavily accented, with a more insinuating effect. That point aside, Rosenthal, a still under-acknowledged master among "professionals of the baton," does bring the music to life with an abundance of sparkle, panache, and overall evocativeness. The performance is sheer delight, and no matter that the title is misspelled on the jacket. The Symphonie Concertante composed by Henry Barraud (whom some of us tend to confuse with Henri Rabaud) in 1965, at age sixty-five, is one of the more substantial works of its kind to come from French composers in the last few decades, and certainly an accessible one. In the two outer movements the trumpet declaims in quasi-recitative style while all sorts of colorful events take place in the large orchestra; the slow movement is a mysterious, nocturnal Aria cantabile. This too is given a most sympathetic and polished performance, and it stands up well in repeated hearings. Very good sound, quiet surfaces. R.F

MOZART: Sonata in D Major for Two Pianos (K. 448); Fugue in C Minor for Two Pianos (K. 426); Sonata in C Major for Piano Duet (K. 521). Alfons Kontarsky, Aloys Kontarsky (pianos). CMS/ORYX 3C-322 \$6.98.

Performance: Very good Recording: Good enough

The brothers Kontarsky are superb musicians, invariably brilliant and insightful, either solo or paired, whether playing avantgarde works, Debussy and Ravel, or what appears to be their first phonographic venture in the realm of the Viennese classics. The performances here, though, while more than satisfying in their own right (and a good deal more appealing than those of Christoph Eschenbach and Justus Frantz on Deutsche Grammophon 2530.285), do not breathe with quite the degree of Mozartian spontaneity and charm found in those of Jörg Demus and Paul Badura-Skoda in their far more brightly recorded set of all of Mozart's works for two pianists (Musical Heritage Society MHS 1293/1296). And both teams are surpassed by Alfred Brendel and Walter Klien in the twopiano works on Turnabout. The sound of the Turnabout disc is beginning to show its age, but it is still more than competitive with that of the Oryx (dated 1972). R.F.

RECORDING OF SPECIAL MERIT

MOZART: Trinitas Mass (K. 167). HAYDN: Mass No. 5, in B-flat Major ("Little Organ"). Elly Ameling (soprano); Peter Planyavsky (organ); Vienna State Opera Chorus; Vienna Philharmonic, Karl Münchinger cond. LON-DON OS 26443 \$6.98.

Performance: Festive Recording: Resonant

Although the Trinitas Mass lacks the elaborate operatic solo writing we have come to expect in Mozart's religious music, the chorus in it, when not used for massive declamation and fugal writing, indulges itself in many march- and minuet-like passages that add great charm to this festive work. The Haydn Mass, in contrast, is a miniature written in a chamber style. Despite its brevity, the music commands our attention through its simplicity and direct language.

Münchinger employs a large battery of orchestral and choral resources, but the performance is a model of clarity. The choral sound is sumptuous in the chordally conceived declamatory passages, while in the fugal sections the individual parts take on a lucidity that enables us to follow Mozart's youthful contrapuntal skills. Münchinger also helps keep the fugal sections clear by carefully marking the entries of the various thematic subjects employed. Besides these two contrasting styles, there is a third one of lightness and grace that brings out the composer's irrepressible joy and good spirit. Especially fine is the balance between orchestra and chorus. The busy string parts, so often lost in a kind of mush in many performances, are right there, creating a sparkling aura around the chorus

The Haydn work is treated more in the style of chamber music, which is certainly appro-

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priate to this little charmer. Again clarity is the password. Elly Ameling's lovely singing of the Benedictus makes one wish that both composers had written more for her sort of voice. This record is superb in every respect. S L

RECORDING OF SPECIAL MERIT

NIELSEN: Symphony No. 1, in G Minor, Op. 7; Symphony No. 2, Op. 16 ("The Four Temperaments"); Symphony No. 3, Op. 27 (Sinfonia Espansiva); Helios Overture, Op. 17; Andante Lamentoso; Bohemian-Danish Folk Melody. Kirsten Schultz (soprano, in Symphony No. 3); Peter Rasmussen (baritone, in Symphony No. 3); Danish Radio Symphony Orchestra, Herbert Blomstedt cond. SERAPHIM \Box SIC-6097 three discs \$11.98.

Performance: **Distinguished** Recording: **Quite good**

Shortly after a group of Danish sponsors enabled the Danish conductor Ole Schmidt to record all the Nielsen symphonies with the London Symphony Orchestra for Unicorn (RHS 324/30), EMI went back to Copenhagen to tape all of Nielsen's orchestral works with the Danish Radio Symphony Orchestra-the orchestra that had first introduced this music to us in the early 1950's-under its current Swedish conductor Herbert Blomstedt. As issued in England in 1975, the Blomstedt set runs to eight records and includes the three concertos and seven shorter works in addition to the six symphonies; the first segment to reach us is a three-disc set comprising the first three symphonies and three shorter works, an especially attractive proposition at the Seraphim price. The sound, in two-channel or four-channel playback, more than holds its own with Unicorn's, and so do the performances, which are fervent of spirit and musically quite distinguished.

It happens that the only recordings of the First Symphony available now are those in the two "integral" sets. Schmidt's is probably the least successful component of his cycle, disfigured by excessive gear-shifting and occasional quirkiness in phrasing, while Blomstedt is superbly unfussy, conveying a grand sense of cumulative power. His reading is more compelling than the excellent Previn version deleted by RCA a few years ago, and stands comparison with that of the authoritative Thomas Jensen, whose old London/Decca recording has remained definitive all these years.

In the Second Symphony Schmidt shows greater flexibility in the first two movements; giving him a slight edge over Blomstedt's relative rigidity in the first and what some will consider overdeliberate pacing for the 'phlegmatic'' second. The two are about equally persuasive in the slow movement, and Blomstedt pulls ahead magnificently in the finale. Blomstedt may be a shade less effective than Schmidt and some other conductors in evoking the atmosphere of enchantment in the Espansiva's pastoral movement (with the two vocal soloists), but, again, his forceful handling of the outer movements is just the way one wants this music to go, and in his hands the finale is a thoroughly convincing climax to the work.

Since there is no other recording of *Helios* available now, that work's appearance in the Seraphim set is a further incentive to investment; Blomstedt is splendid here and in the less consequential fillers for string orchestra as well. If the remainder of his series is as fine as this set, the whole will represent not only the most convenient and economical, but simply the *best* way for anyone to acquire Nielsen's orchestral works. *R.F.*

ORFF: Carmina Burana. Celestina Casapietra (soprano); Horst Hiestermann (tenor); Karl-Heinz Stryczek (baritone); Leipzig Radio Chorus; Dresden Boys' Choir; Leipzig Radio Symphony Orchestra, Herbert Kegel cond. PHILIPS 9500 040 \$7.98, © 7300 444 \$7.98.

Performance: Forceful, lively Recording: Good

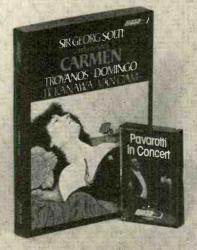
ORFF: Veni Creator Spiritus; Der Gute Mensch; Concento di Voci; Nänie und Dithyrambe; Vom Frühjahr, Öftank und vom Fliegen. Czech Philharmonic Chorus; instrumental ensemble, Václav Smetáček cond. SU-PRAPHON I 12 1137 \$6.98.

Performance: Well-drilled Recording: Okay

Orff is much performed in Eastern Europe, undoubtedly because of the populist qualities of his ultra-simple style. This is at least the second recording released here of the *Carmina Burana* by Herbert Kegel and the Chorus and Orchestra of Radio Leipzig in East Germany, and, from the vivid style of the singing and playing here, it is obvious they are enjoying themselves. The solo singing is fair to middling; otherwise, though, this is a spirited and engaging performance.

I am not an Orff fan, and I always thought

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the Carmina Burana something of a kitschy mish-mash. Having changed (I like to say "evolved") my musical ideas over the years, I approached these recordings with an open mind, ready perhaps to re-evaluate Orff. Well, Carmina is still a kitschy mish-mash by any standards, but, if your defenses are down, it's a lot of good Bavarian fun. Unfortunately, the same is not true of Orff's choral music as represented on a Supraphon disc from Prague. Orff developed a famous teaching method for children based on singing and playing percussion instruments, and his own music for this combination should be of more than passing interest. Most of the music here is pre-Carmina: the two cantatas on texts of Werfel and three settings of wonderful, ironic poetry of Brecht are from the early 1930's; in between are recent settings of Catullus and Schiller. Simplistic phrases in endless repetition, disregard for the essentials or the subtleties of the texts (which are both fragmented and run-on), and a tremendously limited tonal palette make for boredom. I didn't detect much enthusiasm on the part of the performers either. The germs of the Carmina style are here, and there are even connections with later movements towards simplicity, Orientalism, minimalism, and so forth. But this is after-the-fact historical hindsight and it makes the music not one whit more listenable. E.S.

RACHMANINOFF: The Bells, Op. 35; Vocalise, Op. 34, No. 14. Robert Tear (tenor); Sheila Armstrong (soprano); John Shirley-Quirk (baritone); London Symphony Chorus and Orchestra, André Previn cond. ANGEL □ S-37169 \$6.98.

Performance: Good Recording: Excellent

RACHMANINOFF: The Isle of the Dead, Op. 29; Symphonic Dances, Op. 45. London Symphony Orchestra, André Previn cond. ANGEL

Performance: Variable Recording: Mostly good

Of the three major works recorded here, The Bells fares best, mainly because of the fine work of the vocal soloists; John Shirley-Quirk, in particular, makes a most moving experience of the final and funereal "Iron Bells" movement. But the London Symphony Chorus, while very fine in its projection of Poe-Balmont-Rachmaninoff, does not match the shattering power brought to bear by the Russian forces in Kyril Kondrashin's 1966 recording issued by Melodiya/Angel. Despite the less than elegant solo singers, that is the version to own. If Previn had chosen to do the work in English, though, this performance would have rated a special recommendation on that score, since in my book it is definitely better than the Ormandy effort on all points. Exceptionally lovely is Previn's way with the much-played Vocalise, in which he handles the inner counterpoint with tender loving care. But I don't see why this wasn't added to side two of the orchestral disc rather than being tacked onto the end of The Bells, where it becomes a meaningless anticlimax.

The orchestral record is less successful. There is some uncomfortable overbalancing of horns midway through the exposition of *The Isle of the Dead*, and the opening bars of the Symphonic Dances seem slightly indecisive, as though the tempo were being worked into rather than firmly stated. In fact, there are somewhat unconvincing tempos and tem-



JOSÉ CARRERAS AND MONTSERRAT CABALLÉ: a confident Leicester, a regal Elisabetta

po fluctuations in several places in both performances. Rachmaninoff's own historic recording of *The Isle of the Dead*, with the Philadelphia Orchestra, is still available, and I strongly recommend the recent RCA reissue of the 1958 Fritz Reiner/Chicago Symphony performance—a great reading with still excellent sound. By the same token, I recommend above all others the Goossens/London Symphony version of the Symphonic Dances in the Everest issue (if you can find a good pressing).

Except for the problem with horn balance, the recording work—pleasingly ambient, quadraphony and all—is excellent throughout all four sides of the Previn recordings, but their superiority in this department is not enough to override my interpretive objections to them. D.H.

ROMAN: Drottningholm Music; Sinfonia in D Major; Sinfonia in E Minor. Drottningholm Chamber Orchestra, Stig Westerberg cond. SWEDISH SOCIETY DISCOFIL SLT 33140 \$7.98 (from HNH Distributors, P.O. Box 222, Evanston, Ill. 60204).

Performance: Energetic Recording: Could be better

Johan Helmich Roman, considered "The Father of Swedish Music," speaks the language of the high Baroque with a heavy Handelian accent. Considering that he studied in England with that master, this is not at all odd or bad. Actually, he is akin to William Boyce but lacks his English lit. Regardless of his national and stylistic origins, this is good, solid music well worth acquiring.

The performance is as solid as the music, and Stig Westerberg chooses convincing tempos and inspires his ensemble to a fine rhythmic verve. At times the sound is a bit scruffy, and there are a few ragged edges here and there, but certainly not enough of them to keep the listener from enjoying Roman's vibrant message. S.L.

RECORDING OF SPECIAL MERIT

ROSSINI: Elisabetta, Regina d'Inghilterra. Montserrat Caballé (soprano), Elisabetta; José Carreras (tenor), Leicester; Valerie Masterson (soprano), Matilde; Rosanne Creffield (mezzo-soprano), Enrico; Ugo Benelli (tenor), Norfolk; Neil Jenkins (tenor), Guglielmo. Ambrosian Singers; London Symphony Orchestra, Gianfranco Masini cond. PHILIPS 6703 067 three discs \$23.94.

Performance: Very good Recording: Excellent

For more than a century, Elisabetta, Regina d'Inghilterra was known merely as the opera whose overture Rossini conveniently borrowed when he was too lazy to write a new one for his Il Barbiere di Siviglia. (Actually, the original source was an even earlier opera, Aureliano in Palmira, so this is a twice-borrowed overture.) Now that we can hear all of Elisabetta, we can discover that the overture's crescendo section is used quite effectively in the opera's first-act finale. Those familiar with the music of The Barber will be amused to discover several precedents in this earlier score, among them the Queen's entrance aria, on which Rossini drew generously for Rosina's "Una voce poco fa."

Elisabetta was Rossini's first opera for Naples; its success there proved auspicious for the composer's spiraling career. He was only twenty-three at the time (1815), but he was no longer a beginner. No less than thirteen operas had come from his facile pen during the preceding five years, including La Cambiale di Matrimonio, Il Signor Bruschino, Tancredi, L'Italiana in Algeri, and Il Turco in Italia. It should surprise no one, therefore, that this newly discovered work is skillful, theatrical, and full of happy melodic invention. What is perhaps a bit disconcerting is the way Rossini's familiar buffo style is adapted to the needs of a "serious" opera. For example, the scene in which the evil Norfolk plans his nefarious action to destroy his rival Leicester is set to music very similar to that used in The Barber's highly comic ensemble where Figaro reassures the police that everything is normal in the Bartolo household.

Elisabetta is not a violent opera on the order of the Donizetti "English" tragedies. In its historically dubious plot, Queen Elizabeth (Continued on page 142)



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is infatuated with Leicester, but follows her noble instincts and allows him to return to his wife, Matilde. The music is free of bombast and quite Mozartian in its texture, and it is given an elegant performance by the London Symphony under Masini's direction.

Without access to the score I cannot youch for the faithfulness with which the singers follow Rossini's vocal writing, but the embellishments we do hear-and they are plentifulare executed very capably by the uniformly good cast. Montserrat Caballé is a somewhat aloof-sounding Elisabetta, but then a queen is entitled to sound distant from her subjects. and, in any case, she is in sumptuous form vocally. Valerie Masterson (formerly one of the main ornaments of the D'Oyly Carte Opera Company) is a pure-toned, altogether admirable Matilde. José Carreras sings the role of Leicester with confidence, elegance, and refulgent top notes, while Ugo Benelli brings an exceptionally fluent florid technique as well as a freely produced light tenor to the role of Norfolk. All things considered, Elisabetta may not be topflight Rossini, but it is an important and highly enjoyable discovery

By way of a footnote I might add that Leicester's triumphant return from the Scottish wars bears a strong resemblence to the way the King and Amneris receive Radames in Aida. And such salient phrases in both librettos as "giovan'eroe" and "Quanto mi costi" suggest that Verdi and librettist Ghislanzoni may have been familiar with this opera. G.J.

ROUSSEL: Symphony No. 3, in G Minor, Op. 42 (see DUKAS)

SCHUMANN: Symphonic Etudes, Op. 13. LISZT: Sonetti del Petrarca, Nos. 123, 104, and 47. Alexis Weissenberg (piano). CON-NOISSEUR SOCIETY CS-2109 \$6.98.

Performance: Stimulating Recording: Very good

Weissenberg's Schumann has almost always been stimulating, and so it is here. Like Sviatoslav Richter and Claudio Arrau in their recordings of the Symphonic Etudes, he gives us the five posthumously published variations as well as the standard set of twelve. Richter played these five "extra" variations after Var. V of the standard sequence; Weissenberg plays them after Var. IX; Arrau did not lump them together, but scattered them at various points in the work. This is worth mentioning, I think, because it seems to reflect a somewhat more thoughtful approach on Arrau's part, one which makes his Philips recording (6500.130) the most satisfying of all. Weissenberg's performance is, in its own right, an extremely fine and persuasive one, with great dramatic sweep and yet a fine sense of organization. There is some conspicuous pre-echo at the start of side two, which bothers me less than the occasionally hard tone Weissenberg seems to favor. Arrau's warmer tone and more expansive approach, in my admittedly personal view, suit this music particularly well. His fill-up is a masterly account of Schumann's Abegg Variations, Op. 1; Liszt's Petrarch Sonnets may be more interesting musically, though, and Weissenberg presents them with a good deal of poetry. The encyclopedically oriented and/or duplication-conscious collector, however, may be more attracted to the equally distinguished performances available within the context of the Années de Pèlerinage—by Arrau, Brendel, Kempff, or Jerome Rose. R.F.

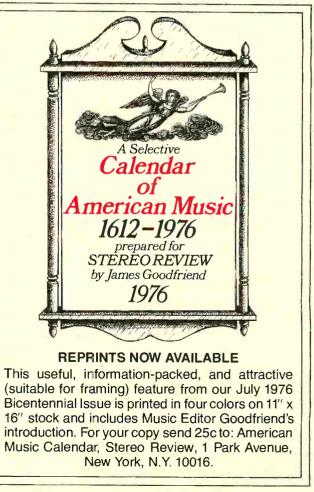
RECORDING OF SPECIAL MERIT

SHOSTAKOVICH: Concerto for Cello and Orchestra No. 2, Op. 126. GLAZOUNOV: Chant du Ménestrel, Op. 71. Mstislav Rostropovich (cello); Boston Symphony Orchestra, Seiji Ozawa cond. DEUTSCHE GRAMMO-PHON 2530 653 \$7.98, © 3300 653 \$7.98.

Performance: Eloquent Recording: Excellent

Shostakovich's oddly haunting, yet wryly humorous Second Cello Concerto is the real business of this recording, Glazounov's rather innocuous four-minute Chant du Ménestrel serving as an incongruous prelude. Composed for Mstislav Rostropovich and first performed by him in Moscow, September 25, 1966, on the occasion of Shostakovich's sixtieth birthday, the Second Concerto is a considerably more somber piece than the essentially ebullient First Cello Concerto (1959), also dedicated to Rostropovich. The work strikes me as a kind of expanded chamber music, bearing the familiar hallmarks of Shostakovich's musical palette: broodingly lyrical discourse combined with jocular commentary, woven together in a two-part contrapuntal fabric, and dotted with arresting brass, woodwind, and percussion punctuation. In common with much of Shostakovich's late work, the concerto makes reference-mostly indirect-to his earlier work and the music of others.

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Some critics find this music dour. I do not. For me, the Second Cello Concerto ranks high in the canon of the composer's creative accomplishments, not only in terms of its fascinating combination and recombination of seemingly disparate ideas, but in the superbly resourceful scoring and brilliant writing for the solo instrument.

As for this recorded performance, I can hardly imagine a finer one. One must hark back to the achievements of Casals for an adequate comparison with the eloquence displayed here by Rostropovich. Ozawa and the Boston Symphony players clearly give their all and are accorded topnotch recorded sound by DG's production staff. D.H.

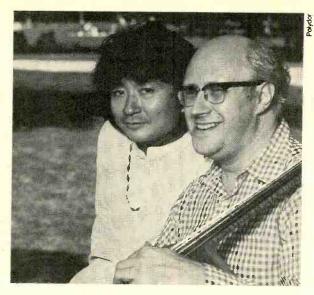
SOUSA: Semper Fidelis; The Bells of Chicago; The Crusader; The Diplomat; The Beau Ideal; On Parade; The Stars and Stripes Forever; The Bride-Elect; The Directorate; The Gladiator; The Guide Right; The National Fencibles; The Occidental. Eastman Wind Ensemble, Donald Hunsberger cond. PHILIPS 9500 151 \$7.98.

Performance: Powerful Recording: Excellent

SOUSA: The Bride Elect; The Summer Girl; Mother Hubbard; La Reine de la Mer; The Charlatan; Nymphalin; The Red Man; Coquette; The Triumph of Time. Antonín Kubalek (piano). ANTILLES AN-7015 \$4.98.

Performance: Pretty Recording: Very good

Parade lovers who can never get their fill of the works of John Philip Sousa, the "March King," are bound to have a high old time with



Philips' "Strike Up the Band," a brand-new collection containing a dozen spruce selections from the 140 marches Sousa left on paper at his death in 1932. In his liner notes, W. A. Chislett obligingly clears up the rumor that the March King hailed from Europe; his father was born in Spain (of Portuguese parents) and his mother was Bavarian, but John Philip's birthplace was our own nation's capital. For years he was director of music for the U.S. Marines, but he started his own band in 1892 and was never at a loss to supply it with a new item for the repertoire, from The Beau

SEIJI OZAWA AND MSTISLAV ROSTROPOVICH: an eloquent performance of Shostakovich's Second Cello Concerto

Ideal of 1893 to The Diplomat of 1904, a march dedicated officially to the Secretary of State at the time but secretly composed in gratitude to a cook who had served a tenderloin steak Sousa thought was the best one he had ever tasted

Although it's sometimes an effort of will, despite such stories, to distinguish one bristling Sousa march from another, such stirring examples of the genre as Semper Fidelis and The Stars and Stripes Forever have more than earned their status as musical symbols of (Continued on page 145)

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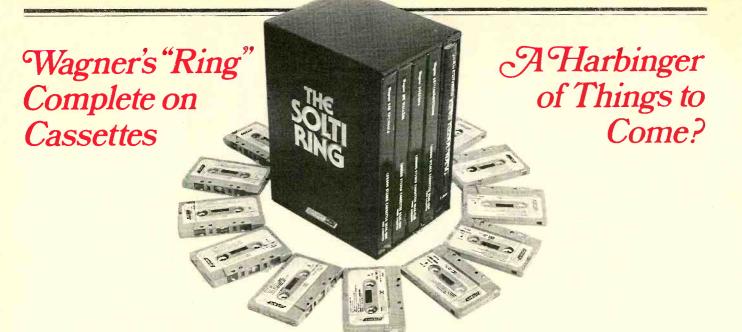
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HERE was a year, in college, when I heard the final scene from the Solti recording of Wagner's Das Rheingold at least once a month. I was co-proprietor of the loudest (although certainly not the best) stereo system on campus, and the tremendous din it was capable of making drew Wagnerites from all directions. The first Nibelung-haunted petitioner appeared like a specter one Sunday afternoon bearing records. He begged five minutes with the "SYSTEM," got his Donner call, hammer smash, and thunder machine, and left with a grin of ecstasy on his face. So did the many others who followed him.

I don't mean to make light of Wagner, Wagner recordings, or Wagner enthusiasts like my sonophile visitor. On the contrary, that first glimpse of Rheingold traumatized my roommate and me with some of the most impressive things we had ever heard from a phonograph record. Under normal circumstances, we would certainly have bought the album. Luckily, with so many copies walking in the door, we never had to.

Comparing the newly released London cassettes of the Solti Ring with the original disc version has brought back those memories vividly. It also brought the perspective of John Culshaw's book, Ring Resounding, which comes packaged with the cassettes when you buy the Ring cycle. Culshaw, who was the producer of this entire effort, documents at some length the troubles, the triumphs, and the techniques used in bringing his personal vision of the Ring to the home listener, and he does so with great enthusiasm and specificity (I'd recommend the book even if I couldn't recommend the cassettes-which I can)

According to Culshaw, the Solti Ring is meant to be the ideal (within technology's limits) sonic representation of Wagner's stagecraft. In other words, the vocal, orchestral, and special effects are supposed to resemble the sound you'd hear if a resurrected Wagner were able to mount a no-compromise production of his work today. What this amounts to in aural terms is a cast and orchestra of which no member seems ever to be more than ten paces away from your ear, except when he is dissolving into the mist, the gloom, or the plumbless depths of Nibelheim. Stereo, which was brand new at the time of Rheingold (1958) and somewhat more mature when Walküre was completed (1965), is used with purpose, consistency, and considerable understanding. Tonal and reverberant qualities are monitored and shaped, from moment to moment, with manifest taste. The outcome is a recording that sounds-on a good or even moderately good sound system-richer, more vivid, more glamorous, and above all bigger than almost anything else I could name on records. True, it comes about as close to a live opera-house experience as a Cinerama production comes to a stage play viewed from the second tier. But evidently that was the whole idea.

So much for my general reaction; but how did the cassettes compare in individual details with the distinguished disc originals? Brilliantly! In fact, if it weren't for my persistent pickiness, I'd be inclined to say there are no significant differences between the cassettes and the discs. But of course there are, even though they are minor. Dynamic-range compression has been used judiciously on the cassettes; when listening to them you'd hardly expect that the discs could get any louder, but then you make the switchover and, sure enough, they do. Also, the cassettes are a trifle hissier, but the Ring was, after all, a pre-Dolby recording, and the dominant hiss you hear from cassettes and discs is from the master tape. I did note some equalization differences, but these have no meaning in terms of recording quality. At one point in Rheingold, right after a side change, the differences reversed themselves, with the disc suddenly be-

... a package hardly heavier and no bulkier than a basketball . . .

coming slightly brighter than the cassette instead of the other way around.

I compared disc-cassette versions of Rheingold and Das Walküre, and had I thought of it in time I would have requested also a disc copy of Götterdämmerung, which has a multitude of cymbal crashes of the sort that was the nemesis of other cassettes. As it was, I had to sample the final scene on cassette with no standard for comparison. The cymbals did not provide quite the bright blast of treble energy that is becoming common on the most modern recordings, but they were more than potent enough to make their point.

So, cassettes continue to stride along smartly, and perhaps their special advantages show up best in large-scale works such as these. This Ring (twelve cassettes plus the book) comes in a package hardly heavier and certainly no bulkier (51/4 inches wide, 91/2 inches high, 65% inches deep) than a basketball: contrast this with the alternative towering stack of nineteen discs that anyone with even a slight back problem would hesitate to lift. One cassette is roughly the equivalent of two discs, and when you open the handsome package and view an entire Walküre on a mere three cassettes the opera actually seems short-a fiendish deception.

DID miss the helpful analysis of Rheingold leitmotifs that the cut-down cassette libretto omits; perhaps London feels nobody cares any more. And, of course, with cassettes it's harder to locate those anvil crashes that all the hi-fi freaks want to hear. But, quibbles aside, if you like Wagner and you like cassettes, buy these. You'll like both even more. -Ralph Hodges

WAGNER: Der Ring des Nibelungen. Birgit Nilsson (soprano); Kirsten Flagstad (soprano); Régine Crespin (soprano); Christa Ludwig (mezzo-soprano); Set Svanholm (tenor); Wolfgang Windgassen (tenor); George London (baritone); Hans Hotter (baritone); Dietrich Fischer-Dieskau (baritone); Gottlob Frick (bass); other soloists. Vienna Philhar-monic Orchestra, Sir Georg Solti cond. Lon-DON © RING S 5-1 twelve cassettes \$135.

American power over the decades, and they are all given exceptionally rousing, spirited treatment here, in the tradition set by Frederick Fennell, by the Eastman Wind Ensemble under Donald Hunsberger.

In addition to his marches, Sousa also managed to jot down the scores of ten operettas, fifteen concert suites, seventy songs, twenty dances, and four overtures. This is the sort of material Antonín Kubalek plays on the piano, in his own transcriptions, on the Antilles record called "Other Sides of Sousa." Some of the pieces, like The Bride Elect and The Charlatan, are also marches but smack more of the ballroom than the parade ground. Devotees of Sousa's style may find more charm than did this listener in such relatively gentle period pieces as The Summer Girl, Nymphalin, Coquette, and a suite of rather starchy waltzes called La Reine de la Mer. Everything is sparklingly played, however, and it's almost a relief to know that the March King had these other sides to his musical nature. P.K.

STEFFANI: Stabat Mater (see BUXTEHUDE)

JOHANN STRAUSS: Die Fledermaus. Hermann Prey (baritone), Eisenstein; Julia Varady (soprano), Rosalinde; Benno Kusche (bass), Frank; René Kollo (tenor), Alfred; Bernd Weikl (baritone), Falke; Lucia Popp (soprano), Adele; Ivan Rebroff (?), Prince Orlofsky; Ferry Gruber (tenor), Dr. Blind; Franz Muxeneder (speaker), Frosch. Bavarian State Opera Chorus and Orchestra, Carlos Kleiber cond. DEUTSCHE GRAMMOPHON 2707 088 two discs \$15.96.

Performance: Very good, with one serious flaw Recording: Excellent

There are many admirable things in this new *Fledermaus*. Carlos Kleiber conducts it with an irresistible bounce and elicits an orchestral performance that is elegant in tone, light in texture, and transparent in detail, with tempos that may not always sound "traditional" but are invariably effective. He works well with the singers, too, securing precise ensembles and insisting on a lightness of touch to match his own mercurial approach.

Hermann Prey has fun with the role of Eisenstein and communicates his enjoyment effectively. The part lies much too high for a baritone, but Prey has less trouble with the tessitura than most of his colleagues. Bernd Weikl is a strong and amusing Falke, René Kollo an expert if not particularly seductivesounding Alfred. Benno Kusche, entertaining but no longer in prime voice, rounds out the male contingent.

Both ladies are excellent. Julia Varady—a soprano with a distinguished string of stage appearances to her credit but relatively new on records—has not yet grafted a personal profile on Rosalinde, but vocally she is a delight, and so is Lucia Popp as Adele.

Unfortunately, the role of Orlofsky was given to Ivan Rebroff, the well-known performer endowed with a phenomenal extension. He could have done the part using the sepulchral low range of his compass and brought it off amusingly. Instead, he chose to do it as a female impersonator with results that are vulgar, hopelessly unfunny, and downright unpleasant to listen to. There are always people who find such gimmicks entertaining (otherwise, how could they find their way into a production?), but for me the effect is lethal. More Bavarian than Viennese in character, the performance observes the traditional cuts in the dialogues, and the role of Frosch is radically reduced (though ably performed by Franz Muxeneder). The recorded sound is excellent. *G.J.*

RECORDING OF SPECIAL MERIT

VAUGHAN WILLIAMS: Fantasia on a Theme by Thomas Tallis; Concerto Grosso; Partita for Double String Orchestra. London Symphony Orchestra, Sir Adrian Boult cond. ANGEL S-37211 \$6.98.

Performance: **Definitive** Recording: **Rich**

This is at least the fifth recording of the Tallis

Fantasia by Sir Adrian Boult, whose authority as an interpreter of Vaughan Williams' music remains unique and yet, in this work especially, continues to deepen. There is nothing to be said about the performance except that it is possibly even more exalted and assuredly more richly recorded than its four predecessors. The two companion works, also for strings alone, are a good deal slighter but quite attractive in their own right. The Concerto Grosso, which is not otherwise recorded, proves to be of greater substance than one might expect for a work written for the Rural Music Schools Association's variously skilled string players in 1950. In the partita Sir Adrian's tempo for the opening movement is somewhat brisker here than in his earlier re-(Continued on page 148)

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MISCELLANEOUS

WINEMAKERS. Free illustrated catalog of yeasts, equipment. Semplex, Box 12276Q, Minneapolis, Minn. 55412. cording, and quite agreeably so; Angel's creamy sonic frame, however, tends to be a bit "homogenizing," leaving little of the immediacy that gave the third and fourth movements in particular such lively impact in the 1959 recording. In all, though, this is a most distinguished release, surely as close as we shall come to a definitive statement of these works. R.F.

WAGNER: Die Meistersinger von Nürnberg (see Best of the Month, page 89)

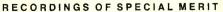
WEILL: Three Penny Opera (see Popular Reviews, page 124)

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Performance: Consciously natural Recording: Blurred

Sweden is entering the early music scene more and more with Baroque music from Drottningholm and medieval and Renaissance music emanating from the castle at Wik. The Joculatores Upsalienses is basically a fine group with promise, as can be heard from this fine disc which dwells largely on the German repertoire with a smattering of other nationalities. The instrumental performances come off best, and the full ensemble of ancient instruments makes a splendid showing in such works as the Battle Pavanne from the Phalèse collection of 1572. A novel and intriguing sound is offered by the use of a jew'sharp in the English Estampie. The vocalists, however, have not only pursued the current trend of using a natural voice production (as opposed to the bel canto approach of earlier groups) but have carried it to such an extreme that it comes out sounding like a parody of early music making. Although the performances are lively, there is an overall lack of rhythmic thrust caused by fuzzy articulation and perhaps aggravated by the accoustics of Wik Castle. Still, this group should be watched. Time will, I believe, iron out some of these sticky problems, which all ensembles of ancient instruments face at one time or another. And anyway, the cover picture of medieval laundry drying on lines outside the S.L. castle is a joy.



INSTRUMENTS OF THE MIDDLE AGES AND RENAISSANCE: Sixty-one Compositions by Machaut, Dufay, Jacopa da Bologna, and Others. Early Music Consort of London, David Munrow cond. ANGEL SBZ-3810 two discs \$14.96.

Performance: Stunning Recording: Excellent

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Performance: Excellent Recording: Good

THE PLEASURES OF THE ROYAL COURTS: Music of Trouvères and from the Burgundian Court of Philip the Good, the Court of Emperor Maximilian I, the Medici Court, and the Spanish Courts in the Early Sixteenth Century. James Bowman (countertenor); Early Music Consort of London, David Munrow cond. NONESUCH H-71326 \$3.98.

Performance: Elegant Recording: Clear

The sudden death of David Munrow last May dealt a bitter blow to the world of early music. Admittedly, this world still has some excellent performers, ensembles, and scholars left, but this young Englishman combined in one miraculous person the finest qualities of scholar and musician. Perhaps his most amazing talent was his ability to take any wind instrument into his hands and perform flawlessly upon it. His artistry is certainly borne out by this cache of records in which his playing is not only technically perfect but also imbued with a compelling sense of rhythm, lucid articulation, and, above all, an imaginative flair for ornamentation that lends life and breath to the simplest melody.

Of the three albums listed here, the tworecord "Instruments of the Middle Ages and Renaissance" is a monumental achievement and will undoubtedly become the bible of organologists interested in actual sound and performance. Demonstrating some ninety instruments in over sixty pieces, the set is divided into two basic sections, the Middle Ages and the Renaissance, each with subdivisions of woodwinds, keyboard, brass, and strings. There is no separate section devoted to percussion instruments, but their sparkling sound is scattered throughout the album. Just about every obsolete and exotic music-making machine imaginable is represented here in various combinations, and each minute band contains an exquisite performance of a perfectly chosen work. Thanks to the cooperation of the Oxford University Press, the album includes a stunning book of about a hundred pages by Mr. Munrow, which is geared to the album in such a way that one can follow the musical examples with it and simultaneously see and hear the instruments involved. This album, then, is an absolute must for anyone with a taste for early music no matter what his level or approach.

The Oryx album, "The Mediaeval Sound," is a more modest affair (probably a forerunner of the above) devoted exclusively to medieval woodwinds. The repertoire is different, well worth having, and, as usual, exquisitely performed. The first side includes Mr. Munrow's commentary on each instrument and will probably become something of a collector's item.

"The Pleasures of the Royal Courts" is a more traditional type of grouping which makes a brief but delightful survey of aristocratic music-making in France, Germany, Italy, and Spain. The tone of the record is intimate, and the credit really belongs to James Bowman. Singing almost entirely at *sotto voce*, he blends his fine countertenor sound beautifully with the old instruments. Certainly his interpretation of Dufay's Vergine Bella is one of the most moving I've ever heard, and in general his diction is so clear that the words are easily understood.

These three sets, a fine tribute to the memory of David Munrow, give rise to the hope that he left *more* tapes, and that they will be released so we can continue profiting from and enjoying his remarkable contribution to the world of music. S.L.

MARTA SCHÉLE: Song Recital. Hällnas: Three Songs. Werle: Nocturnal Chase. Lidholm: Six Songs. Nystroem: Three Songs. Debussy: Trois Chansons de Bilitis. Milhaud: Catalogue de Fleurs. Ravel: Cinq Mélodies Populaires Grecques. Märta Schéle (soprano); Elsif Lundén-Bergfelt (piano). Bis LP-34 \$7.98 (from HNH Distributors Ltd., P.O. Box 222, Evanston, Ill. 60204).

Performance: Good or better Recording: Very good

Bored by Brahms? Sated with Schumann? Weary of Wolf? Try a song recital that mixes the French and Swedish repertoires and offers Debussy's *Trois Chansons de Bilitis* as its most "popular" entry. Based on such a casual impression, the songs of neo-Romantic Gösta Nystroem (1890-1966) do not seem too far removed from those by two much younger composers, Hilding Hallnäs and Ingvar Lidholm. A lyrical impulse—and perhaps the Grieg influence—pervades them all. All three composers favor clarity and brevity; the songs of Lidholm are almost folk-like. (One of them is a setting of the original Lope de

VLADIMIR ASHKENAZY AND BARRY TUCKWELL: downright irresistible music for horn and piano

Vega Cradle Song of the Virgin, the source of one of Brahms' Viola Songs.) Lars Johan Werle (b. 1926) is modern and experimental. His Nocturnal Chase makes little sense to me, but it is brief and quite enjoyable in a puzzling sort of way. The whole "Swedish" side is a refreshing experience, and the songs are sung with lovely tone and great sensitivity.

Neither the Debussy nor the Ravel songs can be said to be over-recorded these days; the Milhaud—a witty and terse setting of poetry masquerading as an unpoetic trade catalog—is agreeable nonsense. Miss Schéle's limpid tones are just as enjoyable in the French repertoire as in the Swedish, but her renditions of the Debussy and Ravel cannot match the stylistic rightness of such predecessors as Jennie Tourel or Régine Crespin. The piano accompaniments are first-rate, disc surfaces are amazingly silent, and texts are supplied—a pleasing little package, all told, and I recommend it. *G.J.*

RECORDING OF SPECIAL MERIT

BARRY TUCKWELL AND VLADIMIR ASH-KENAZY: Music for Horn and Piano. Beethoven: Sonata in F Major, Op. 17. Schumann: Adagio and Allegro in A-flat Major, Op. 70. Danzi: Sonata in E-flat Major, Op. 28. Saint-Saëns: Romance, Op. 67. Barry Tuckwell (horn); Vladimir Ashkenazy (piano). LONDON CS-6938 \$6.98.

Performance: Superb Recording: Excellent

All the works on this record exist in alternative versions for cello, the Saint-Saëns being the composer's adaptation of a movement from a suite for that instrument published as Op. 16. All but the Danzi have been recorded before in one form or another, and I have especially enjoyed the performance of the Beethoven by Hermann Baumann and Stanley Hoogland, but it is doubtful that any of this music has ever sounded so downright irresistible as it all does here. Without knowing the circumstances behind the recording, I would be willing to bet that Tuckwell and Ashkenazy did not just get together in the studio and start playing, but must have played these works together many times for their own pleasure; in any event, that is the impression these technically superb and warmheartedly expressive performances convey-that and a sunny sense of discovery in the case of the Danzi sonata, a work of considerable substance and charm in the Classical mold which more than holds its own in the company of the more familiar Beethoven and Schumann pieces. The recording itself is excellent, though close-focused. R.F.





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Introducing the Staff . . .

When a personal opinion, particularly a publicly expressed one, grates on our nerves, one of the commoner responses is to ask, either under or at the top of our voices, just who that soand-so thinks he or she is. The question is asked of STEREO REVIEW with respect to our regular contributors and staff many times each month, and in this column we endeavor to supply the answers. —Ed.



Contributing Editor

Craig Stark

HAT do you get when you cross a father whose electrical know-how just suffices to change a light bulb with a mother who cannot abide the tension of unresolvable debate? Answer: an electronics technical writer who has spent much of his professional life teaching undergraduate philosophy. As I see it, somewhere in the Universal Circuit Diagram there must be a short-circuit to have gotten me here at all.

I grew up during World War II, in Sioux Falls, South Dakota, where my father was Dean of the Episcopal Cathedral. His enormous collection of 78's was the starting point for my very early and abiding love of classical music (I'm told I could tell Mozart from Haydn before I could read), and some of my fondest memories are of Sunday night pancake suppers, followed by music sessions long past my bednearby training base.

By my junior high school years, Epiphany Church called us to Washington, D.C., where I developed a strong interest in chemistry and, much to the consternation of parents and churchwardens, proceeded to manufacture small quantities of nearly

every non-nuclear explosive used in the war. Ministers' kids ("sacristy brats") often tend to be hellions, and, with another such, I first became interested in radio by tuning up a transmitter and receiver to the police frequencies, where we had to keep our rather salty conversations short enough to escape being located by triangulation. From this rather disreputable beginning sprang my love of electronics, and shortly after moving to Montclair, New Jersey (where Dad became Bishop of the Diocese of Newark), I became a legal "ham" radio operator, K2HGM ("King 2, His Gracious Majesty"), a call I held for many years thereafter.

In high school, my passions for music and electronics came together, for "high fidelity" was then in its early heyday. In those days, if you wanted good frequency response and low (under 3 per cent!) distortion, you had to be willing to do your own tinkering around with the amplifier's negative-feedback loop. My habit of going over the circuit diagram and getting the covers off to be ready to make modifications before even plugging in a new piece of equipment has subsequently proved almost impossible to break.

Two other loves came into my life in high school. One was for the philosopher Plato, and the second was for Linda Borden. The former I studied and the latter I courted throughout my college years at Harvard. When Linda graduated from Wellesley in 1961, we were married, and I commenced my graduate studies at Princeton, where I wrote my doctoral dissertation on "The Idea of God in the Late Dialogues of Plato." Since then I have taught philosophy at several colleges, and the Stark family has been blessed with two marvelous children, a daughter, Dorothy, and a son, Craig. At present, the technical side of my nature coming to the fore, I earn my bread and cheese as a one-man business, Starksonic Studio, evaluating products in my audio laboratory, doing technical and commercial writing, and making free-lance recordings.

FELL in with STEREO REVIEW more than a decade ago, when Technical Editor Larry Klein was kind enough to break his standing rule about replying at length to readers' letters. In short order we got to know each other, my home system was featured as an "Installation of the Month," and he began, from time to time, to forward some of his reader inquiries (on topics where I had done some work) to me. Having seen the carbon copies of my replies, Larry invited me to write an article for the magazine (on the subject of our initial correspondence), and "The Dynamic Range of Music" appeared in the June 1968 issue.

Even in those early days, while my interest in high fidelity covered all the components that affect music reproduction, tape was something of a particular specialty with me. So, when the "Tape Horizons" column became open in 1969, I landed on the STEREO REVIEW masthead, where, of all the publications for which I have written, I most enjoy being.

-Craig Stark

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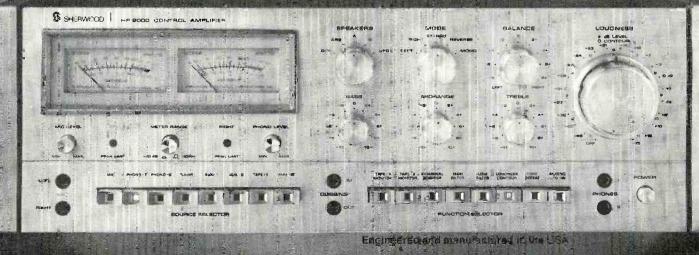
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