ANDRÉ PREVIN'S SEVERAL SIDES * LAB TESTS ON FORTY BRANDS OF CASSETTE TAPE PLUS MALFUNCTION ANALYSIS
a button and move across the FM dial, electronically, silently. Lift up your finger and stop in the exact center of a channel. What could be easier than that?

Remote control is easier.
Remote control isn't new, either. It's available with either the Fisher 500-TX or the Fisher 450-T stereo receivers. But the remote control on those receivers isn't wireless. There's a wire that leads from the receiver to the control unit you hold in your hand.

Tuning a stereo receiver by wireless remote control is new.
Now Fisher is introducing the 401, which ultrasonically extends the push buttons that operate the AutoScan, doing away with the need for wires. We feel that with this innovation we have given the audiophile the best of all possible tuning methods. But of course there's more to a receiver than its tuning conveniences.

The rest of the tuner section.
The tuner section of the 401 is extremely sensitive, thanks to some sophisticated circuitry that uses IC's and FET's to good advantage. And we didn't neglect the AM section. It's capable of making AM sound so close to FM mono that there'll be times when your ears won't be able to tell which band you're listening to.

4-channel compatibility.
The Fisher 401 was designed with the idea that 4-channel stereo is rapidly coming into its own. So we made it easy to adapt to the 4-channel stereo broadcasts we expect will become more and more common in the next year or so. The entire FM multiplex section is complete on a plug-in circuit board, which will be easy to replace with an FM 4-channel adapter, when one of the systems for 4-channel FM transmission now being considered is adopted as an industry standard.

Power.
Fisher receivers have always been known to deliver a lot of power for their price class, and the 401 is no exception. It has 150 watts of clean, undistorted power, which will drive both a main and a remote pair of speakers (four speakers in all) at concert volume without distorting the music.

Controls.
As you would expect of the world's first receiver with wireless remote-control tuning, the other controls are also quite sophisticated.
Bass and treble controls are of the Baxandall type, allowing you to boost or cut back the extremes of the frequency spectrum without affecting the midrange.
Even the volume control is special. Instead of turning, it slides, like the kind you'd expect to find in a broadcast or recording studio.
There's also a loudness contour switch, an FM muting switch, a high filter, a balance control and a speaker selector switch.
One convenience feature that you don't often find in a stereo receiver is a front-panel tape-recorder output jack, which lets you hook up a recorder without having to turn the receiver around to get at the back.

The cabinet.
Since the 401 is probably the most luxurious receiver Fisher makes, it stands to reason it would have a beautiful cabinet. It does. The cabinet, which is included in the $449.95 price, has an attractive wood-grain finish.

We feel that you should be able to have as attractive a cabinet when you listen to stereo as when you watch TV.

Other receivers with remote control.
The Fisher 401 costs $449.95. But you can buy a Fisher receiver with remote control for even less money than that, if you don't insist on its being wireless. We're talking about the 180-watt Fisher 450-T, at $399.95. (We're not the only ones who are talking about it. It has received the kind of reviews from High Fidelity, Stereo Review and Audio magazine that we like to quote in an ad.)

If you want a little more power than the 401 can give you, you want the Fisher 500-TX. It has 200 watts of power, provides four methods of tuning: manual, AutoScan, remote control (not the wireless kind), and Tune-O-Matic® push-button electronic tuning that remembers your four favorite stations so you can tune them by pressing a button. The price, $499.95.
Introducing the world's first stereo receiver with electronic tuning by wireless remote control.

In the past, it has been the makers of television sets who have placed the greatest emphasis on convenience features like wireless remote control. The hi-fi manufacturers have concentrated their efforts, by and large, on reproducing sound with top fidelity.

But at Fisher we feel that making a product a pleasure to use is almost as important as making it a pleasure to hear. Which is why we created the 401.

A word about automatic push-button electronic tuning.

Electronic tuning is not new. Fisher has been using it for some time now on several Fisher receivers. But though AutoScan® (our name for automatic push-button electronic tuning with no moving parts) is convenient, convenience was not the reason for including it in a receiver.

The real reason for Autoscan was (and is) that you can tune more accurately with it than you could tune manually, even if you used a meter or a scope. We quote Audio magazine: "AutoScan is probably more accurate in tuning to center of desired channel than can be accomplished manually... Station lock-in is flawless. That is, when the AutoScan stops on a station, it stops on the exact "center" of that channel."

But the AutoScan, besides being more precise than any other tuning method, is also more convenient. Press

Introducing the Fisher 390, $349.95.

Now there's a receiver for less than $350 that has push-button electronic tuning with no moving parts.

The Fisher 390 has the same FM sensitivity and almost as much power as the 401 (the 390 has 140 watts; the 401 has 150 watts).

And it has Tune-O-Matic push-button tuning which makes it possible for you to pre-select five of your favorite stations, and tune to them instantly, electronically. (Of course the 390 also has the smooth flywheel tuning featured in all Fisher stereo receivers.)

Only 25¢! $2 value! Send for your copy of The Fisher Handbook, a fact-filled 80-page guide to high fidelity. This full-color reference book also includes complete information on all Fisher stereo components. Enclose 25¢ for handling and postage.*

Fisher Radio, Dept. SR-9, P.O. Box 1367
Long Island City, N.Y. 11101

Name
Address
City
State
Zip

*Please glue or tape coin on picture of handbook above.
Fisher believes you should be just as comfortable when you listen to FM as when you watch TV.
This is the most advanced record-playing unit available today. The name Zero 100 stands for Zero Tracking Error —up to 160 times less than with any conventional tone arm. The diagram below shows how the tone arm articulates, keeping the stylus always perpendicularly tangent to the groove as it moves across the record. This exciting development obsoletes the arm geometry on every other automatic turntable! With its articulating tone arm and other major features (see illustration), this imaginative, revolutionary Garrard unit, priced at $189.50, sets a new standard of performance for all record playback equipment. The Zero 100 was introduced less than three months ago. Test reports by two of the industry's most respected reviewers have already appeared, expressing their enthusiasm. Let us send you their comments, with a full and detailed explanation.
THE MUSIC

HIS FATHER'S SON: HANK WILLIAMS, JR.
Henry Pleasants

THE BASIC REPERTOIRE
Ravel's Piano Concerto in G
Martin Bookspan

ANDRÉ PREVIN: "WHO WANTS ME IN MAY 1978?"
From MGM Wunderkind to conductor of the LSO
Robert Windele

DOUG KERSHAW—THE BAYOU PAGANINI
Another in a series of interviews with recording artists
Mike Jahn

AMERICAN COMPOSER GEORGE CRUMB: TWO NEW DISCS
Nonesuch and Louisville each release an important piece from his catalog
Eric Salzman

THURSTON DART (1922-1971)
A harpsichordist's tribute to a many-sided colleague
Igor Kipnis

THE ROYAL BALLET'S PETER RABBIT
A soundtrack delight for children of all ages
Paul Kresh

THE EQUIPMENT

NEW PRODUCTS
A roundup of the latest high-fidelity equipment

AUDIO QUESTIONS AND ANSWERS
Advice on readers' technical problems
Larry Klein

AUDIO BASICS
Power Struggle
Ralph Hodges

TECHNICAL TALK
Testing Cassette Tapes; Hirsch-Houck Laboratory tests of the Audiotex series of test tapes, the
Panasonic SP-10 turntable, and the Ampex AX-300 tape recorder
Julian D. Hirsch

HIRSCH-HOUCk LABORATORY TESTS OF CASSETTE TAPES
Full specifications on forty standard brands
Julian D. Hirsch

CASSETTE PACKAGING
Still somewhat less than a triumph
Igor Kipnis

WHAT CAUSES CASSETTE MALFUNCTION?
A word-and-picture analysis of the most frequent vexations
Ralph Hodges

INSTALLATION OF THE MONTH
Roll-About Stereo
Paulette Weiss

TAPE HORIZONS
Equalization, Low and High
Craig Stark

THE REVIEWS

BEST RECORDINGS OF THE MONTH
Classical
Entertainment
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COVER: ANDRÉ PREVIN, A MUSICAL JANUS; ILLUSTRATION BY JACK H. BRESLOW
THE ETHICS OF TAPING

If I ever had any doubts that the proper study of mankind is comic opera, they were permanently dispelled recently when I read of a group of tape pirates who had formed an association and appointed representatives to carry their "story" to a legislative committee in the very halls of Congress. It seems they consider themselves "small businessmen" (though the "business" of tape piracy in the aggregate is very large indeed, perhaps as large as the legitimate market), and they were seeking legislative help to relieve them of what they claim is legal "harassment" by the "monopolistic giants" whose recordings they regularly steal. It was not recorded just what the legislators' reaction to this bare-faced impudence was, but I hope, for the sake of the opera, that they were able to preserve a suitable Savoyard gravity. I have been unable to maintain mine, however, in the wake of offering my candid opinion (in the July-issue letters column) that much of the private tape recording that goes on in this country is just as parasitical as that of the tape pirates, and that many a tape recorder can therefore be considered in the category of burglar's tools. The letters I have since received from outraged tapesters make it abundantly and often comically clear that at least some tape recorder owners are even more confused ethically than the tape pirates (who, I am relatively certain, must find it difficult to address Congress with their tongues so far into their cheeks).

The substance of many of the letters that aimed to "set me straight" might best be couched in the adjustable frame of a popular aphorism: "If God didn't want us to tape recordings, he wouldn't have given us tape recorders." Others tried to explain to me how buying a recorder and raw tape somehow pays for the time, effort, and expenses of recording by soloists, orchestras, and record companies. One reader went so far as to query the program directors of local FM stations; these splendidly impartial observers opined that tapefying off the air was perfectly proper. But why weren't RCA, Columbia, Leonard Bernstein, or Leontyne Price asked? Another correspondent confessed that he tapes because record prices are so high he can't afford them. The letter's tone was an odd mixture of Jean Valjean and 'vengeance is mine,' leaving me with the feeling that the same ethical view might easily extend to such desirables as Cadillacs, mink coats, and Florida vacations.

The subject of ethics has been a vexed question ever since Eden, when Adam tried to put the blame on Eve, and most people since have proved to be no better at it than he was. The sue-the-insurance-company syndrome and hotel-towel and restaurant-ashtray "souvenir hunting" are most certainly ethical no-no's (in the Judeo-Christian tradition, at least), but on this level the common man has solved the riddle of universal guilt: if everybody does it, it must be all right. From there on up, the ethical questions become tougher and tougher, and few people can stay the full course. My own feeling is that the ethical sense is a talent as rare as any other. It can be developed if you have it; you will remain a bumbling amateur if you haven't. And like all true talents, those who possess it at the level of genius are extremely rare—which accounts for the shortage of saints. Nonetheless, as with the other arts, it is possible even for less gifted amateurs to reach a modest competence in ethics with proper training and practice—which is not to say that it should be made a constant study; there can be no more time-consuming occupation in this wicked world, and nothing will make you a certified bore quicker.

The question of ethics and tape recording does, however, seem to be begging for some kind of answer. Not being an expert in the area myself, I have asked our resident demon tapester Dr. Craig Stark to attack the problem for a subsequent issue. Quite aside from his audio avocation, he teaches ethics (among other things) in the Department of Philosophy at Sarah Lawrence College. Help is therefore on the way, and until it arrives I can only recommend the solace of the Golden Rule. It is not always effective, probably because it requires the exercise of considerable ethical imagination. But try it this way: "Do unto Angel as you would have Angel do unto you."
From Rock to Bach in 0.25 Seconds

Sony can't stop those little family arguments. But we can make them more worth winning. And a flip of Sony's unique, knob-and-lever dual-selector switch gets the winner into the music of his choice just a little quicker than an ordinary, single-knob selector. Because until your fingertips unleash the STR-6065 receiver's performance, it might as well not be there.

So we didn't just engineer our circuits and our switches. We human-engineered them. For instance, in normal FM-stereo operation, all the 6065's levers make a neat row, and all its knob indexes point straight up; any control that's out of place shows up immediately.

You, who have no doubt adjusted to the crotchets of your current equipment (and perhaps even love them), may not think this much. Julian Hirsch, who must re-adjust to every new component that he tests, commended it: "Most receivers and amplifiers are surprisingly deficient in ease of use. Sony is to be congratulated."

With performance this accessible, the 6065 had better perform. And it does: 2.2 uV IHF sensitivity ("1.9 uV," says Julian Hirsh) gets you the weak FM signals; an FET front end prevents overload from strong ones. And our high selectivity makes tuning easier. If you find those stations easier to listen to, you might also credit our direct-coupled amplifier circuitry. It's supplied with both positive and negative voltages (not just positive and ground), so we don't have to put a coupling capacitor between the speakers and the amplifier.

And, so that we can maintain full power (255 watts IHF, 160 watts RMS into 4 ohms; 220 watts IHF, 140 watts RMS at 8 ohms) or all the way down to 20 Hz at 50 watts RMS per channel.

Which brings up another way we made the 6065's performance more accessible to you: the price. And if $399.50* isn't accessible enough, we also make the 6055 for $299.50*. Its power is a little less (145 watts rather than 255 watts) as is its rated sensitivity (2.6 uV instead of 2.2). But it's otherwise almost identical.

So perhaps we can solve those family squabbles after all: a 6065 for yourself, and a 6055 for your son.

Sony Corp. of America, 47-47 Van Dam St., Long Island City, N.Y.

*Suggested retail price, subject to Fair Trade where applicable.
In 1968 almost every stereo enthusiast knew:

1. You couldn't reproduce bass notes through small speakers.

2. All the sound should come from the front of the speaker and none should be directed rearward toward the wall.

3. A speaker should never have associated electronics such as an active equalizer.

4. All good speakers should have crossovers, woofers and tweeters.

5. All speakers should be designed to give flat frequency response on axis.

By 1971 almost every stereo enthusiast has heard the BOSE 901.

A speaker which violates every one of the concepts above. Born out of 12 years of university research,* the 901 has become the most highly reviewed speaker, regardless of size or price.

Today we have a theoretical basis that explains why these concepts limit the performance of conventional speakers. But no theory can tell you how much better a new design will sound. To appreciate this, ask your dealer for an A-B comparison of the BOSE 901 with the largest and most expensive speakers he carries.

*For those interested in the 12 years of research that led to the design of the 901, copies of the Audio Engineering Society paper "ON THE DESIGN, MEASUREMENT AND EVALUATION OF LOUDSPEAKERS," by Dr. A. G. Bose, are available from BOSE Corporation for fifty cents.

You can hear the difference now.

BOSE®
Natick, Mass. 01760
Ask your franchised dealer* to A-B the BOSE 501 with any speaker he carries that uses woofers, tweeters and crossovers.

There is an important reason why we ask you to make this test. There are inherent limitations of performance in the use of a woofer, a tweeter and a crossover—limitations covered in detail in earlier issues. The bypassing of these limitations played a large part in the advances which have made the BOSE 901 the most highly reviewed speaker, regardless of size or price.

We set out to design a lower priced speaker which would preserve as much as possible of the performance of the 901. Most important, we were able to design into the 501 much of the 901's great advance in spatial properties. The BOSE 501 is the second DIRECT/REFLECTING® speaker system.

But it became evident that there was no way to keep the advantages of multiple small full-range drivers and equalization. The cost problem was too great. We were forced to accept the woofer-tweeter-crossover combination as the only feasible compromise and set out to achieve the fullest possible realization of this design approach.

Our engineers designed a unique woofer with an unusually long voice coil which provides tight control of bass transients. They developed a new and different approach to crossing over the outputs of the woofer and the two tweeters. In the process they became convinced that $125 is about the limiting price for improving the performance of a speaker containing woofers, tweeters and crossovers.

The design goal of the 501 was to outperform any other woofer-tweeter-crossover speaker. You be the judge. If we have succeeded, the results will be obvious to you when you make the comparison.

*Literature sent in answer to your request will include a list of franchised BOSE dealers in your area who are capable of demonstrating BOSE speakers to their full performance.

BOSE 501 DIRECT/REFLECTING® Speaker System $124.80 ea. Patents applied for.

You can hear the difference now.
Military Music

- As a military musician (oboeist) I enjoyed reading Aram Bakhšian's "History of Military Music" (July). I have a large collection of recordings of bands representing different countries and periods of history and would like to add one to those mentioned in the article: "Military Music of Four Centuries" on Fiesta FLPS 1367.

One correction: the serpent is not a "brass-reed" instrument but is made of wood, and combines the fingeholes of a woodwind instrument with the sound-generating cup mouthpiece of the brass winds. It is a poor combination at best, requiring good lip control to keep the intonation approximate. The instrument takes its name from its shape, which brings the finger holes within reach of the player. For a good taste of what a serpent sounds like, the Williamsburg Band of Musick's performance of Rule Britannia features a rather comical serpent obbligato. This band performs early American music on authentic reproductions of eighteenth-century band instruments. They perform regular concerts for visitors to restored Colonial Williamsburg, Virginia, and a recording of them and the Williamsburg Fife and Drum Corps is available through the visitor's information center.

William M. Fetcher
Pearl Harbor, Hawaii

Discovering Classical Music

- I hope my comments don't belabor the extended polemic on the "classical crisis," but I feel the necessity of expressing a minority report on certain aspects of the proffered "cures" for the crisis. Specifically, I would like to respond to several points made in Fred Pov y's article in the July issue ("Discovering Classical Music"). Frankly, I am dismayed by increasing dependence on better marketing of the "product" (are we really talking about music?), the "selling" of the performer or conductor, and those thalidomide creations of the mass marketing industry arrogantly termed "Greatest Hits." The decline in the overall quality of current record packages and the dismal selections offered on the record shelves can be, I believe, traced back to these marketing "cures" for the crisis. Record albums should be a cohesive unit of music, performer, cover, and the liner notes. If we are to see the composed piece as an organic product of a specific life (the composer's) and specific times (the composer's environment) framed in some form of individual world-view, what greater perversion than to diffuse all this into current market hype? Does Gershwin's An American in Paris really need a mockery of a Frenchman gesturing at off-color postcards? Does Beethoven's Ninth really need the come-on, "You've heard the hit single, now hear the album?"

But what about the people who actually make the music? The conductor or performer is, to some degree, a moderating prism to "custom blend" (how's that for selling the product?) a contemporary psyche into the larger elixir of the composed piece. But that is all. To sell the buying public on the interperetees of the music is to seriously injure the integrity of the piece itself.

It is painfully evident that the "classical crisis" will not succumb to hasty or poorly conceived cures. And indeed, judging from the effects of current thought on the "cures," the crisis may well take on new and awesome effects of current thought on the "cures," the crisis will not succumb to hasty or poorly conceived cures. But that is all.

Noah A. Trudeau
Peekskill, N. Y.

Follies Furor

- Arlene Croce's review of Follies is the sorriest, shoddiest article I've ever had the misfortune to read in STEREO REVIEW. The problems were twofold; first, Miss Croce couldn't seem to decide whether she was reviewing the play or the album; secondly, she ended up doing neither. She has twisted around both the theme and the concept behind Follies and then proceeds to cut it down from this mistaken premise. No, Miss Croce, the show does not display "a fear and hatred of growing old" and "crisis" may well take on new and awesome directions.

Noah A. Trudeau
Peekskill, N. Y.
We designed a receiver that gives you more control over Beethoven's Fifth than Beethoven had.

We call it our SEA. What it stands for is sound effect amplifier. What it does is nothing short of amazing.

It lets you tailor sound to your own taste. So if you're crazy about a certain singer but not so crazy about the band that's playing with him, you can bring up the voice and push the music into the background.

And since there's not much point in having a perfect receiver with imperfect acoustics, the SEA lets you compensate for the shape of your room and the furniture in it.

But the nicest thing about the SEA system is its ability to create entirely new sounds by mixing and altering other recorded sounds.

This SEA receiver also has a linear dial scale, dual tuning meters, 2 microphone inputs with separate volume control, the capacity to handle up to 3 pairs of speakers and a 1.6 microvolts FM sensitivity.

The suggested retail price of this 220 watt FM/AM stereo receiver is $399.95. This unit also provides facilities for the enjoyment of future 4-channel programming.

JVC also puts out 4 other SEA models ranging from 200 watts to 40 watts with suggested retail prices from $499.95 to $199.95.

We like to think it's the kind of equipment Beethoven would have been happy to pay a lot more for.

JVC
JVC America, Inc.,
50-35 56th Road, Maspeth, New York 11378
morrow's newspaper. Sondheim's period numbers in Follies are especially notable because they perfectly capture the style of the Twenties and Thirties without ever sounding tired or condescending. I defy anyone to find one bar of hackneyed music in the entire Loveland sequence. Some of the songs sound like they sprang from the pens of George Gershwin, Cole Porter, Rodgers and Hart, and even Victor Herbert. More important, they are not relics of yesterday; these are songs that those great song-writers could easily have written today if we had the good fortune to have them still with us.

THOMAS B. LYNN

Miss Croce replies: "The very terms in which Mr. Lynch praises Follies reveal the confusion into which the show's intellectual pretensions have plunged its admirers. Mr. Lynch believes that Mr. Sondheim's period pastiches perfectly capture the style of the Twenties and Thirties. Yet in this same style, as rendered by Sondheim, he finds evidence of tinSEL and glitter, of all glamour and no heart, and of messed-up values. If Mr. Lynch had no respect for Gershwin, Porter, Rodgers, et al., I could understand his point (though I wouldn't sympathize with it); but he does respect them, and at the same time buys the show's theme that the Twenties and Thirties were somehow morally reprehensible, a gaudy dream from which we of the Seventies must awaken. In this he mistakes the intention of Sondheim, insofar as Sondheim can be said to pursue any single intention. Surely hackneyed music is the whole point of the Loveland sequence; surely a song like You're Gonna Love Tomorrow is a deliberate banality. (This to my mind makes it worse than—not as good as—the thing it's trying to imitate.) But Follies wants to be a big commercial hit as well as a bitter-edged moral play—to revel in the past and condemn it at the same time. No wonder its admirers are confused.

Edgard Varèse

I cannot thank STEREO REVIEW enough for exposing me to Edgard Varèse (June). I read the article by Frank Zappa first and he immediately interested me in Mr. Varèse. Not having quite enough funds and also doubting that any of the "Top 40"-carrying department stores would have any knowledge of this composer, I went to my local library. There, under electronic and percussive music, I found two Columbia albums, one devoted entirely to electronic music and the other (MS 6146) of which I later found mentioned in the article by Eric Salzman. I took the latter album home and loved every moment of it. I think the other members of my household were at least mildly annoyed by it, but what do they know? The pieces that I particularly liked were Ionisation, Hyperprism, and Poème électronique. Again, thank you, Mr. Zappa, Mr. Salzman, and STEREO REVIEW for broadening my musical scope and for a fantastic June number.

MORRIS V. JOHNSON, JR.
Cleveland, Ohio

Report Defects Revisited

I am in no position to comment upon specific technical and mechanical aspects of producing a record, but as one of the four per cent who purchase classical discs ("Report Defects," June), my hackles have risen. I think that the record industry is fortunate indeed that only four per cent of their customers listen to its products, otherwise they might hear from the other ninety-six per cent. I am pleased to learn that someone at Mercury still knows how classical records are made, though I recall they made some good ones the old way. Before the new wave of making a recording arrived, I marvel how it was possible for American companies to turn out the high level of product they somehow managed to market for so long. Many of the four per cent paid $7.50 for "short" records to get state-of-the-art over a decade ago. I still have one such disc and wish that some of today's products were as good. Instead of complaining about competition, the Mighty could try spending more on the physical product and see if we are willing to pay for what we want; they can't lose much more than they claim to be losing now.

For readers who wish to take Mr. Bendotti's advice, copies of Martin Bookspan's latest "Updatings and Second Thoughts" on his Basic Repertoire choices are available for 25c from Deane Manning, c/o Stereo Review, 1 Park Avenue, New York, N. Y. 10016.

Alfonso the Learned

In his review of the Cantigas de Santa Maria (June), Igor Kipnis says that Alfonso X died in 1294. The correct date is actually 1284. The correct date is actually 1284. Moreover, I was surprised that mention was not made of the language of the Cantigas, which is Galician, a dialect at that time more akin to Portuguese than to Spanish. As Mr. Kipnis states, I was puzzled that Alfonso the Learned (a better epithet than "The Wise") wrote in French himself. Even his share in the Cantigas, which seems to be his most personal work, has been questioned.

LEONARD BLOOM
Bridgeport, Conn.

Salzman and Invective

It is a shame that a musician like Eric Salzman's stature feels it necessary to substitute snide observation and personal invective for reasoned criticism as he did in his review in the June issue. It is surely possible to point out the weaknesses in Shostakovich's Twelfth Symphony without being sarcastic ("The last move...")
For $279 we give you engineering. For an extra $20 we throw in some furniture.

To call the Rectilinear III a piece of engineering is a rather vigorous understatement.

The equipment reviewers of leading hi-fi and other technical publications have gone on record that there's nothing better than this $279 floor-standing speaker system, regardless of type, size or price. (Reprints on request.)

But engineering is all you should expect when you buy this original version of the Rectilinear III. Its cabinet is 35” by 18” by 12” deep, handsome but utterly simple. For $279, you get quality and taste but no frills.

However, if you’re the last of the big-time spenders, you can now escape this austerity for an extra $20. Because, for $299, there’s the stunning new lowboy version of the Rectilinear III, 28” by 22” by 12¼” deep, with a magnificent fretwork grille.

Mind you, the actual internal volume of the enclosure is the same in both versions. So are the drivers and the crossover network. Only the cabinet styles and the dimensions are different. In the dark, you can’t tell which Rectilinear III is which. They sound identical.

That’s engineering.

(For more information, including detailed literature, see your audio dealer or write to Rectilinear Research Corp., 107 Bruckner Blvd., Bronx, N.Y. 10454. Canada: H. Roy Gray Co. Ltd., Markham, Ont. Overseas: Royal Sound Co., 409 N. Main St., Freeport, N.Y. 11520.)

Rectilinear III
ment has a remarkable feature: an attractive and imaginative theme."

Likewise, one can analyze Barbirolli's interpretation of Ein Heldenleben without an emotionally colored sociological analysis of the Third Reich, which is not only musically irrelevant but is also an exercise in self-aggrandizement, having no place in music criticism.

As for the "American pre-eminence" in chamber and wind performance, Mr. Salzman casually assumes in his review of the Samuel Baron recital: there are fine artists on both sides of the Atlantic, and it serves neither them nor music to assert such questionable and highly chauvinistic claims.

Your magazine has a responsibility to set standards of excellence in criticism, one which you normally fulfill quite well. I hope Mr. Salzman's style will not set a trend for your future reviews.

ROBERT D. MILLER
Durham, N. C.

Mr. Salzman replies: "Mr. Miller and I evidently have some major differences concerning music and music criticism. Once and for all: there is no such thing as 'objective' criticism. Good criticism is always personal—but it should be based on facts and on some larger viewpoint. I have often stated my views on Shostakovich, I reserve the right to be just as vehement and polemical toward him as he is— in his music—toward me! For me, music is not something one can set apart from the rest of life, but is an integral part of the society and culture that produced it. One of the critic's main jobs is to try to understand and illuminate this relationship. Ein Heldenleben is what it is because it expresses certain fundamental attitudes toward life, society, and art (Strauss would have been the first to agree with this). Mr. Miller's third point is pretty much a question of fact. Of course there are fine wind players in many countries, but speaking of 'American pre-eminence' in wind playing is no more chauvinistic than speaking of Russian pre-eminence in string playing would be Russophile."

The Goldman Band Lives!

Mr. Kresh's review of the Goldman Band's tape "Golden March Favorites" in the June issue was disturbing on a number of counts. Although one agrees with Mr. Kresh's approval of the musical performances, I feel it necessary to criticize his other comments. He leaves the distinct impression that the Goldman Band under the outstanding direction of Richard Francisco Goldman no longer performs. This is not the case. The band performs on Thursday and Sunday nights on the Mall in New York's Central Park, on Wednesday and Friday nights in Damrosch Park at Lincoln Center, and in the band shell in Prospect Park on Saturday nights during the summer. Contrary to what Mr. Kresh says, it is quite safe to go to these outstanding concerts, and thousands of New Yorkers attend them every summer.

JOSEPH C. SMITH
Jersey City, N. J.

Mr. Kresh replies: "Mr. Smith seems to have taken rather too seriously a bit of tongue-in-cheek nostalgia. I never meant to imply that the Goldman Band isn't still going oom-pah-oom-pah in the parks of New York City. I was only looking back over a wistful shoulder at the concert atmosphere of a more serene age, when it felt safer just to be alive."
They sound a lot like our speakers.

KLH? In the headphone business? That probably comes as a surprise to you. But ask yourself this question: what could be more logical than for a major loudspeaker company to also have headphones? That's the question we asked ourselves. And we think you'll love our answer.

The KLH Model Eighty Professional Headphones. We call them "professional" because you can actually plug them into a 600 ohm studio line, as well as use them with practically any home music system. Also, you can wear them for hours without any strain because they are much lighter and sleeker than conventional headphones.

But what really makes our Model Eighty Professional Headphones so unique is their sound. If you can imagine headphones that sound more musical than electronic, you've got a pretty good idea of what ours are all about. Stated simply, they sound like our loudspeakers. And that has got to make them the most unique headphones you've ever heard.

The Model Eighty Professional Headphones cost $49.95.† They're at your KLH dealer now. Hear them soon. We think you'll be as excited about them as we are.

For more technical information on the Model Eighty, write to KLH Research and Development, 30 Cross St., Cambridge, Mass. 02139. Or visit your KLH dealer.

†Suggested retail price
© Trademark of The Singer Company
AMPEX has developed a unique six-element tape head for use in its new line of automatic-reversing stereo cassette equipment. The single head contains six individual gaps—dual-track erase, and separate left and right record-play for both directions of tape motion—that perform all the record and playback functions of the deck. The head is centrally located on the transport so that all its elements engage the cassette's pressure pad. The new decks of the Micro series are dual-capstan designs, with the right capstan operating in forward and the left in reverse. The Micro 155 (below) has pushbutton transport controls and separate slider recording-level controls for two channels of line and microphone inputs. Cassettes can be programmed for continuous play or one back-and-forth cycle, and tape direction can be changed at any time. An automatic-shutoff feature is provided, as well as a mono/stereo switch, switchable automatic recording-level control, and a noise filter that rolls off high-frequency response above 6,000 Hz. The deck's characteristics can be set for standard or chromium-dioxide tapes. Specifications include a frequency response of 40 to 12,000 Hz ±3 dB with chromium-dioxide tape, 0.2 percent (unweighted) wow and flutter, and a signal-to-noise ratio better than 45 dB. Dimensions of the Micro 155, with its walnut cabinet, are 17 1/4 x 5 3/4 x 9 1/2 inches. Suggested list price: $299.95.

The Micro 335 (above) is a cassette changer with similar control features; its specifications are identical to those of the Micro 155. Twelve cassettes are accommodated in a removable plastic tray that moves from left to right over the transport's loading slot. Cassettes are played (side one and then side two) in the order of their sequence in the tray, with the deck shutting off automatically at the end of the last one. Additional trays are available for $4.95 each. The Micro 335 has dimensions of 18 1/2 x 9 x 10 1/4 inches and a suggested list price of $349.95.

AUDIO IMPORT CORPORATION is importing the British-made New Classic record-storage unit for 12-inch LP's. Records are placed vertically, on edge, in the hand-rubbed mahogany unit. Several upper-right partitions are supplied which can be installed in various locations within the unit to serve as dividers for record stacks of differing widths. Attached to one of these, and to one of the end pieces, are spring-loaded panels designed to exert a gentle, controlled side pressure on the stacks, thereby inhibiting disc warpage. The New Classic unit accommodates up to one hundred LP's. The condition of discs that have suffered cold-flow warpage can be improved if they are placed between closely spaced panels and left for a sufficient amount of time. The size of the New Classic storage unit is 15 3/4 x 13 1/4 x 13 3/4 inches. It is available from the importer by mail order only for $19.95, postpaid.

LAFAYETTE has brought out a four-channel-stereo integrated amplifier, the LA-44, consisting of four separate amplifier channels (25 watts continuous output per channel into 4-ohm loads with all four channels driven), a control section, and two separate stereo phono preamplifiers. The amplifier will therefore accept all four-channel program sources, discrete or matrixed, as well as any combination of two two-channel stereo sources. All front-channel controls are duplicated for the rear channels. These include ganged volume controls for independent level setting of all four channels and adjusting front-to-rear and left-to-right balance, bass and treble controls, and pushbuttons for tape monitor, mono/stereo mode, loudness compensation, high-cut filter, and main or remote speakers (eight speakers in all). Pushbuttons also select the inputs, which are tuner, phono, and two auxiliaries. There are separate stereo headphone jacks for the front and rear channels, as well as front and rear tape-output jacks on the front panel for convenient dubbing.

At rated output the LA-44 has 0.8 percent harmonic distortion and signal-to-noise ratios of 63 (phono inputs) and 78 (high-level inputs) dB. Power bandwidth is 15 to 30,000 Hz, and frequency response is 20 to 20,000 Hz ±1.5 dB. A rotary switch on the front panel determines the amplifier's mode of operation. Its positions include four-channel stereo, reverse four-channel stereo, front and rear channels mixed, and two-channel operation of front or rear channels. In addition, two special positions are provided. One of these, labelled REVERB, permits signals in the front channels to be routed out of the amplifier to an external processor such as a four-channel decoder or reverbation device, and then returned to the rear-channel section of the amplifier to drive the rear speakers. The second position feeds two-channel stereo material in the front channels to a built-in circuit.
For the music lover whose critical ear dictates the best in home stereo, KENWOOD presents a 'sound solution' to balance discriminating taste with a reasonable cost: THE KENWOOD KA-4002 STEREO AMPLIFIER AND THE KT-2001 STEREO TUNER.

The KA-4002 Stereo Amplifier features plenty of power to drive two sets of stereo speakers... and incorporates all the amenities for a big stereo system, including inputs for tuner, two record players, two auxiliaries, and terminals for a tape deck. The incomparable KT-2001 Stereo Tuner delivers crisp, clear broadcast reception in AM, FM and FM Multplex.

For complete information and specifications visit your Authorized KENWOOD Dealer or write for color brochure...
Teac’s Three Dolby Noise-Reduction Units

- TEAC has introduced three tape noise-reduction units incorporating the Dolby B-Type circuitry which works by applying a level-dependent high-frequency boost to the program before recording and a complementary cut during playback. The top-of-the-line model, the AN-180, has separate record and playback circuit modules for each channel—four modules in all—that permit off-the-tape monitoring of the fully processed signal while a recording is being made. Low-impedance microphone preamplifiers are built in, accessible through front-panel jacks, and there are two large meters for calibrating the device and indicating levels during recording and playback. As is the case with other Dolby accessories, the Model AN-180 takes over level-setting and switching operations from the tape machine itself when properly connected into the record-playback chain. Microphone and line inputs have separate recording-level controls, so that input mixing is possible. A built-in 400-Hz oscillator is used to record a Dolby-level tone on the tape. Other features of the AN-180 are a switchable multiplex filter (−35 dB at 19,000 Hz) and concentrically mounted output-level controls for the two channels. Specifications for the AN-180 include a frequency response of 20 to 15,000 Hz ±0.5 dB and 0.3 per cent harmonic distortion or less, with stereo separation at least 55 dB. Overall signal-to-noise ratio is 65 dB or better, with a subjective improvement of up to 10 dB provided by the Dolby circuits.

The Model AN-80, the second of the Teac Dolby units, has two Dolby modules switchable from record to playback function and a single calibration meter switchable between the two channels. A RECORDING-CHECK pushbutton permits listening to the tape as it is being recorded but before it has been processed for playback by the Dolby circuits. The AN-80 also has a 400-Hz oscillator, a multiplex filter, and separate recording-level controls for each channel. Microphone preamplifiers are lacking, however. The AN-80’s frequency response is 20 to 15,000 Hz ±1.5 dB. Its other specifications are identical to those of the AN-180. The approximate dimensions of the two units are, respectively, 16⅛ x 5⅛ x 12¼ inches and 16 x 3¾ x 10¼ inches. Prices: AN-180, $289.50; AN-80, $129.50. The third Teac Dolby, the AN-50 (not shown), is a more compact but less flexible version of the AN-80 intended for use with cassette equipment. Price: $49.50.

Circle 149 on reader service card

Eico “Soundlite” Audio Color Organs

- Eico’s growing line of “Soundlite” audio color organs has been augmented by four new models available assembled or in kit form. The Model 3420 (assembled, $39.95; kit, $29.95) is a single-channel amplitude-sensitive device with diamond-shaped light patterns in red, blue, yellow, and green visible behind its translucent diffusing screen. The unit can also be operated without an audio amplifier, in which case a random light sequence is displayed. Enclosed in walnut, it is 24 x 12 x 10 inches in size and weighs 11 pounds. The Model 3425 is a “wireless” version. A built-in microphone synchronizes the lights to music and other sounds. Price: $44.95 assembled, $34.95 kit. Two new multi-channel models are also offered: the three-channel Model 3430 ($49.95 assembled, $34.95 kit) and the four-channel Model 3449 ($69.95 assembled, $49.95 kit). They contain frequency-dividing networks so that the lights—red, blue, and green in the Model 3430 and red, blue, green, and yellow in the 3449—are independently under the control of different bands of the audio spectrum. Dimensions of the units in the order of their listing: 24 x 12 x 10 inches and 30 x 15 x 11 inches. All the Eico color organs are equipped with sensitivity controls; the multi-channel units have separate controls for each channel.

Circle 150 on reader service card

FM Station Atlas

- An FM Station Atlas showing the locations of transmitting stations and broadcast frequencies for nearly three thousand FM stations in the United States and Canada has been prepared by Dr. Bruce F. Elving, assistant professor of mass comm.unication at the University of Wisconsin-Milwaukee. The Atlas is up-to-date through April 1971 and lists both currently licensed broadcasters and stations for which construction permits have been awarded. Within a silhouette of each state are shown the locations of towns and cities having FM facilities, with the station frequencies listed below. The atlas is thirty-two pages in length and measures 8½ x 5½ inches—slightly larger than a standard paperback book. It is available at $2 per copy from: Bruce F. Elving, WUWM Radio, University of Wisconsin, Milwaukee, Wisconsin 53201. The price includes postage and handling.

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An infinite choice of speeds.

The variable control Lenco manual turntables offer an infinite selection of speed—a continuous sweep from 30 to 86 rpm. At the standard 16-2/3, 33-1/3, 45 or 78.26 rpm, there are click stops that can be precisely set or adjusted at any time.

With this, you can slow down a complex rush of notes, the better to appreciate the inner voices when you listen next at normal speeds. You can tune a recorded orchestra to match the instrument you play, and join in. Your tuning is not restricted to a paltry fraction of a note, either. You can exercise your urge to conduct, choosing whatever tempo suits you. And you can use it to extend your knowledge of the dance or language, or to accompany your slide or movie shows.

And at every one of these speeds, Swiss precision takes over. For example, the Lenco L-75’s sleekly polished transcription tonearm shares many design concepts (such as gravity-controlled anti-skating, hydraulic cueing, and precision, knife-edge bearings) with arms costing more alone than the entire L-75 arm and turntable unit. And the dynamically balanced 8.8 lb. turntable reduces rumble, wow and flutter to inaudibility.

The L-75 complete with handsome walnut base at $99.50 offers professional quality and versatility but at far less than studio-equipment prices. The B55 (lighter platter and an arm of almost equal specification) is only $85.00 with base. Both are available now at your Benjamin/Lenco dealer. Benjamin Electronic Sound Corporation, Farmingdale, N.Y. 11735, a division of Instrument Systems Corporation.

Lenco turntables from Benjamin

CIRCLE NO. 11 ON READER SERVICE CARD

(audioreviewıntext)
What's music to some people's ears just doesn't make it for others.

If you prefer Beethoven or the Beatles to birds, live and let live with Koss Stereophones.

You'll hear your favorite music the way it was meant to be heard. Uncolored, full-range sound. Minus the room reflections that plague even the finest speaker systems. And minus the natural sounds of your environment, whatever it may be.

Koss makes a stereophone just right for you. The best that money can buy is the ESP-9 Electrostatic Stereophone. It surpasses the range of the best loud speaker systems. Delivers incredibly smooth, distortion-free sound over the entire audible spectrum of ten octaves.

Rated "superb" by High Fidelity Magazine is the PRO-4AA Professional Dynamic Stereophone. With an uncolored response two full octaves beyond the range of ordinary dynamics. And an extended linear bass response below audibility.

For the complete story on these and other Koss Stereophones, write for our free full-color catalog, c/o Virginia Lamm, Dept. SR-5.

In the meantime your Stereo Dealer or Department Store can let you hear the Sound of Koss...from $19.95 to $150.

KOSS STEREOPHONES

Koss Corporation, 4129 N. Port Washington Ave., Milwaukee, Wis. 53212
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CIRCLE NO. 34 ON READER SERVICE CARD

Live and let live
Introducing Memorex Chromium Dioxide Tape.

New Memorex Chromium Dioxide Tape has a totally different composition from conventional cassette tapes. It extends frequency response and delivers a clarity and brilliance of sound never before possible on cassette. Chromium Dioxide is so drastically different, you’ll need a specially designed cassette recorder to use it. You’ve probably read about conventional cassette tapes that claim to be so improved it’s not necessary to switch to special Chromium Dioxide equipment. Let us simply say this: Equipment manufacturers recognized the Chromium Dioxide breakthrough, and designed cassette recorders to take advantage of it.

Listen to a Memorex Chromium Dioxide
The tape that will change your whole opinion of cassettes.

Cassette on the new specially designed equipment. Compare it to any cassette that claims equal performance on standard equipment. You'll find there's no comparison.

MEMOREX Recording Tape
Reproduction so true it can shatter glass.
our headsets are the most comfortable

Consumers surveyed state "Clark /Stereophones are the most comfortable"—you lose yourself in a halo of sound.

For the ultimate in comfort and pleasure, buy Clark/Stereophones.

You have a choice of four models. Send for descriptive literature and specifications.

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We put a little more feature into each feature.

MIRACORD 50H
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A Papst hysteresis synchronous motor with outer rotor for unvarying speed accuracy. ■ Precise stylus overhang adjustment with built-in gauge—no shifting, no guesswork, no templates. ■ Silicone-damped cueing in both automatic and manual play. ■ And, those exclusive light touch pushbuttons to make it easy to enjoy all those other wonderful 50H features $175.00 at your hi-fi dealer. Benjamin Electronic Sound Corp., Farmingdale, N.Y. 11735, a division of Instrument Systems Corp.

Available in Canada.
If the loud in your stereo gives her a pain in the head get a Marantz.

It's not that she's got super-duper sensitive hearing (like that spotted beagle two doors down), it's because most women hear better than men, so when she screams turn down the sound what she really means is turn down the damn distortion because the distortion is driving her bananas.

Not so with Marantz stereo. Take the new Marantz 2270 stereo AM/FM receiver for $499. It delivers a wallop[ing 140 watts RMS power at less than 0.3% distortion...which means virtually NO DISTORTION. And because Marantz measures distortion at continuous full power through the whole listening range—it won't bring tears to her eyes or a pain to her head. NO MATTER HOW LOUD. Other companies measure power and distortion only in middle listening range. So they quote their highest power and lowest distortion only in the middle. But on the low and high sides their power is down and their distortion is up. So if you pay for 140 watts be sure you get 140 watts at both ends and in the middle.

With Marantz you get exactly what you pay for. If all you need is 30 watts, take our model 2215 for $199. Want twice as much power? Our model 2230 gives you 60 watts RMS for $299. And our model 2245 at $399 delivers 90 watts RMS. ALL CONTINUOUS POWER throughout the entire listening range.

No matter which model you choose, remember this: You're getting Marantz quality. The same quality that goes into the magnificent model 19 FM stereo receiver (shown) that costs $1000. YES. A cool grand. But it is the absolute, ultimate, very best there is.

Visit your Marantz dealer. And take your wife along. (Or that spotted beagle two doors down.)

We sound better.
POWER STRUGGLE

If a prize were to be awarded for the most confusing issue on this decade's high-fidelity scene, amplifier power output would take it on the first ballot. The questions "How much do I need?" and "How much does receiver X really give me?" have drawn such contradictory replies that the question seems more a matter for philosophical speculation than scientific exploration. When an otherwise ordinary $300 receiver is claimed to be capable of delivering as much—and perhaps more—power to a pair of speakers as a $600 basic power amplifier, what can a stereo shopper believe but the worst?

There are quite a few inflationary "test" procedures in use, all intended to make amplifiers appear—on paper—more powerful than the competition. STEREO REVIEW endorses the continuous-power (also called "r.m.s.") rating system, which is easily described. The manufacturer connects his amplifier (or receiver) to a pair of heavy-duty 8-ohm resistors to simulate a speaker load. He then feeds the amplifier a 1,000-Hz sine-wave test signal and drives it harder and harder until the distortion in its output begins to approach what he considers an unacceptable level—usually slightly below 1 per cent. At this point he measures the amount of power the amplifier is delivering to the load resistors. (He drives both channels at the same time to reflect actual use conditions, but he measures only one.) He is then entitled to rate his product as having "X watts per channel continuous power output, with Y per cent distortion, both channels driven into 8 ohms." Note the italicized words. To be meaningful as a basis of comparison, such a power specification must tell you that both channels were driven simultaneously, that the load impedance was 8 ohms (4-ohm loads tend to give a higher power rating, 16-ohms lower), that the distortion was such-and-such (X watts is of no use to you if available only at 10 per cent distortion), and that the measurement was made under continuous-drive conditions. ("X/X watts" is sometimes used interchangeably with "X watts per channel, both driven.") Note that this power rating is true only for a 1,000-Hz signal. Many amplifiers—particularly those built into receivers—are unable to sustain full power with low distortion at frequencies below about 50 or 60 Hz. A complete power/distortion rating should specify the range of frequencies over which the figures are valid.

Other rating methods (referred to as music-power or dynamic-power) differ from the continuous-power system in that they test an amplifier's power capability for brief bursts only. Their validity, which is controversial, can await discussion at a later date, if they are then still in existence. Recently the Federal Trade Commission concluded hearings on amplifier power ratings as they appear in advertising and descriptive literature. The proposal it is considering prescribes that manufacturers who choose to give the power output of their equipment display most prominently the continuous-power rating at a specified distortion level and over the full band of frequencies the device is intended to reproduce. Through the good offices of the FTC, life may yet be made just a bit easier for the beleaguered audiophile.
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Here's an easy and convenient way for you to get additional information about products advertised or mentioned editorially in this issue. Just follow the directions below ...and the literature will be sent to you promptly and free of charge.

Tear out one of the perforated postage-free cards. Please print or type your name and address where indicated.

Circle the number on the card that corresponds to the key number at the bottom of the advertisement or editorial mention that interests you. (Key numbers for advertised products also appear in the Advertisers' Index.)

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This address is for our "Free Information Service" only. All other inquiries are to be directed to, Stereo Review, One Park Ave., New York, N.Y. 10016.
Announcing the NEW STANDARD in Stereo Testing!

The All-New Model

SR12 STEREO TEST RECORD

Whether you're an avid audiophile, a casual listener or a professional technician... the new MODEL SR12 will be the most important disc in your entire collection. MODEL SR12 has been produced by Stereo Review Magazine for music lovers who want immediate answers to questions about the performance of their stereo systems and how to get the best possible sound reproduction. It is the most complete test record of its kind—containing the widest range of checks ever included on one test disc.

Make these important stereo checks BY EAR... (no test instruments required)

- Frequency response—a direct warble-tone check of nineteen sections of the frequency spectrum, from 20 to 20,840 Hz, which will pinpoint any frequency response defects in your system.
- Separation—an ingenious test which indicates whether you have adequate separation for good stereo.
- Cartridge tracking—the most sophisticated tests ever devised for checking the performance of your cartridge, stylus and tone arm.
- Channel balance—two broad-band, random-noise signals which permit you to eliminate any imbalances originating in cartridge, amplifier, speakers or room acoustics.
- Hum and rumble—foolproof tests that help you evaluate the actual audible levels of rumble and hum in your system.
- Flutter—a sensitive "musical" test to check whether your turntable's flutter is low, moderate, or high.

PLUS! Cartridge and Speaker Phasing • Anti-Skating Adjustment • "Gun Shot Test" for Stereo Spread • Multi-purpose Musician's "A" Equal-Tempered Chromatic Octave • Guitar-tuning Tones.

Attention Professinals . . . . . Model SR12 is also designed to be used as a highly efficient design and measurement tool. Tests below have been controlled to laboratory tolerances—allowing accurate numerical evaluation when used with oscilloscope, chart recorder, output meter, intermodulation-distortion meter and flutter meter.

- 1,000-Hz square waves to test transient and high-frequency response of phono pickups.
- 1,000 to 20,000 Hz frequency-response sweep.
- Sine-wave tone-bursts to test transient response of pickup.
- Intermodulation test using simultaneous 400-Hz and 4,000-Hz signals.
- Intermodulation sweep to show distortion caused by excessive resonances in tone arm and cartridge.
- 1,000-Hz reference tones to determine groove velocity.
- 3,000-Hz tone for flutter and speed tests.

Sample waveforms—illustrating both accurate and faulty responses are provided in the Instruction Manual for comparison with the patterns appearing on your own oscilloscope screen.

FREE Instruction Manual Includes Detailed Instructions, Charts, Tables and Diagrams

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Here's all you have to do—circle #138 on the Information Service Card to the left. The record will be mailed to you along with an invoice for the regular price of only $5.98, postpaid.

SR12 STEREO TEST RECORD—Circle #138
The Concord Mark IX cassette deck starts with an extremely low signal-to-noise ratio — better than 50 dB down. The Dolby Noise Reduction system reduces hiss by another 10 dB, and that's just the beginning. The deluxe Concord Mark IX has switch selected bias for standard and chromium dioxide tape cassettes. The narrow head gap and better than 100 kHz bias frequency provide extended frequency response from 30 to 15,000 Hz.

The Mark IX looks like a studio console and performs like one too. With pop-up VU meters, studio type linear sliders for individual control of input and output levels, third mike input for mixing in a center channel microphone, a 3-digit tape counter and a stereo/mono switch for more effective mono record and playback. And this brilliant panel lights up for power on, record and for Dolby.

And when the cassette is finished, Endmatic, a Concord exclusive, disengages tape and transport and returns the pushbuttons to off. And best of all, it's now available at your Concord dealer at a fair price for all of this quality, $249.79.

If you already have a cassette, open-reel or 8-track deck, the Concord DBA-10 Dolby tape adaptor can reduce hiss and improve performance. It will also improve your receiver's performance in playing back Dolbyized FM programs, $99.79.

Your Concord dealer also has a complete line of 8-track and open-reel decks, stereo receivers and cassette portables. Concord Electronics Corporation, 1935 Armacost Avenue, Los Angeles, California 90025. A subsid / Ehrenreich Photo-Optical Industries, Inc.
New "Scotch" Brand High Energy could make ordinary cassettes obsolete.

Today, a new "Scotch" Brand cassette, High Energy, makes ordinary cassettes sound as old-fashioned as 78 rpm records. For good reason. Its new, cobalt-energized tape is a major breakthrough in magnetic sound technology. Not just a little better. A lot. With 3 to 5 decibels improved signal to noise, 50% more output than today's high density cassette tapes.

Best of all, High Energy gives you unsurpassed sound quality right now on your present cassette system. With none of the compatibility problems other new cassettes may create. There's no need to buy new equipment. No adjustments to make on your recorder. And when you change cassette tapes, there's no extra switch to set. Or forget.

"Scotch" High Energy cassettes make only one thing out-dated: the sound you heard from yesterday's cassettes.

But not your cassette recorder.
TESTING CASSETTE TAPES: Testing the cassette tapes for the report in this issue (page 58) posed some special problems. The key aspects of magnetic tape from the user's standpoint are frequency response, distortion, and signal-to-noise ratio. Unfortunately, these qualities are difficult to separate from the electrical characteristics of the cassette recorder on which the tests are made. By adjustment of the bias, recording, and playback equalizations it is possible to "trade off" among characteristics. In other words, it is possible to enhance the frequency response at the expense of noise or distortion, and vice versa. In addition, the design of the recorder's heads and transport mechanism can have a considerable effect on the test results.

How, then, could we make valid comparative measurements of some forty tapes, using commercially available recorders, and without expending an inordinate amount of time? To minimize the effect of the recorder on the results, we chose a deck that typifies the present "state of the art" in that field—the new Advent 201. Although there is at present no universally accepted cassette standard recording level (no "0-VU" so to speak), the most logical choice seemed to be the 200-nWb/m (nanowebers per meter) level corresponding to "0 dB" on a Dolby-equipped machine. The Advent 201 meter (and that of any other Dolby-ized recorder) is so calibrated. (Of course, we did not use the Dolby circuits during our tests.)

Although frequency-response measurements on most recorders are made at a level of -20 dB to avoid saturating the tape at high frequencies, Advent recommends using -30 dB with the 201, and we did so. For distortion and signal-to-noise measurements, we recorded a 1,000-Hz signal at 0 dB. The distortion was measured at the playback output; the curves drawn by our automatic chart recorder not only indicated the frequency response of the various tapes, but their relative output (from our constant input signal) as well. Signal-to-noise ratios were measured in the audio band, excluding frequencies above 22,000 Hz. The noise for each tape was measured under two conditions: first, after the tape had been bulk erased (virgin noise); then, after it had been exposed to the recorder's erase field (bias noise). Both levels were expressed in decibels (dB) below the 1,000-Hz, 0-dB output reference derived earlier.

One of the most important aspects of cassette design is maintaining close mechanical tolerances so that the tape-to-head contact and tape motion are uniform. Very small shifts of tape position on the head can cause large variations in output level, particularly at high frequencies. Tape "dropouts"—momentary losses or signal caused by uneven magnetic coating—have a similar effect. We evaluated the amplitude stability of each tape's output (the combined effect of the magnetic coating and the cassette design) by recording a 10,000-Hz signal at a level of -30 dB for a period of three minutes. The playback signal was fed to our chart recorder, which was set for a three-minute scan time. The ideal "curve" would be a straight line across the chart; small amounts of noise or "jitter" in the output thicken the line. Irregular tape-to-head contact causes an occasional sharp increase or decrease in level. With a few tapes, the upper portion of the curve was relatively smooth, with all the changes occurring in a downward direction. We assume that these were caused by actual tape-coating dropouts. Some tapes, relatively free of dropouts, showed a regular "cogging" effect due to periodic drag of the supply hub.

When we analyzed the frequency-response curves in eighty-odd recorder charts containing the fruits of our efforts, it became apparent that all of the tapes fell into one of several classifications. (Our classification of any individual cassette, incidentally, does not necessarily agree with that of the tape manufacturer.) Most tapes produced a relatively "flat" frequency re-
sponse; we called them "normal." Another group of tapes had a rising high-frequency output, and we listed them as "extended-range" (even though the actual upper frequency limit varied little from tape to tape, and was clearly a property of the recorder). A few tapes showed a falling output above 1,000 or 2,000 Hz. For want of a better term, we called them "limited-range." Finally, there were several chromium dioxide (CrO₂) tapes in the group, which we listed separately. When testing the CrO₂ tapes, we set the tape switch of the Advent 201 to "CrO₂." This changes the bias, recording level, and playback equalization for optimum results with these tapes.

To see how representative tapes would perform on a different machine, we chose a typical tape in each category and repeated the tests on a Sony TC-160 cassette deck. It is worth mentioning that the Sony machine changes the recording equalization (and presumably bias) but not the playback equalization when its CrO₂ switch is activated. As a result, the signal-to-noise ratio with CrO₂ was actually slightly worse than with iron-oxide tapes (on the Advent machine it was markedly better with CrO₂)—but the high-frequency response of the Sony extended to an astounding 17,000 Hz! We will go into these differences in performance more fully in future reports on these cassette machines.

Through careful study of our test results, it should be possible for a reader to estimate with good accuracy how a given tape will sound on his machine, relative to any other tape with which he is familiar. And that, in essence, was the goal of our study.

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**EQUIPMENT TEST REPORTS**

By Hirsch-Houck Laboratories

**Audiotex Series of Test Tapes**

- Many of the measurements made on tape machines require the use of specially calibrated test tapes, just as special test records are used for phonograph-cartridge and turntable measurements. The professional standard tapes in use in this country are principally those made by Ampex. Since they are individually produced at standard recording speeds (as opposed to the high-speed duplication used for ordinary prerecorded tapes) and to demanding specifications, they are quite expensive (more than $20 a reel), and therefore not widely used by hobbyists.

- GC Electronics, manufacturers of a broad line of audio accessories under the Audiotex label, has issued a series of test tapes designed for the serious tape amateur. They include the 30-212 (a cassette), the 30-213 (an eight-track cartridge), and the 30-214 (a 7½-ips open-reel tape). Their contents are roughly similar, with some minor variations.

- The 30-212 cassette has a 7,500-Hz test-tone section for head alignment. The purpose of the test is to permit the user to adjust the vertical azimuth of the playback head for maximum output from this tone, and the instructions suggest using a flashlight bulb across the speaker outputs to monitor levels if a meter is not available. The head alignment tone is followed by a series of ten-second tones, ranging in frequency from 70 to 8,000 Hz, with voice identification of the frequencies. These are for checking the playback frequency response of the system. Next, there is a sweep tone over the same frequency range, which is intended to reveal any serious peaks or dips in the system response that might have been skipped over by the discrete frequencies. The next test is a two-tone intermodulation-distortion test signal, using frequencies of 100 and 7,500 Hz in a 4-to-1 amplitude ratio. (Although severe IM distortion could possibly be detected by ear as a "buzz" added to the two tones, an IM analyzer would be required for really useful interpretation of this test.) Finally, there are tones on one channel at a time for checking separation and identifying the left and right channels.

- In the eight-track cartridge tape (30-213) the same tests are included, except that the spot frequencies are from 40 to 10,000 Hz, and the sweep is from 8,000 to 40 Hz. The head-azimuth alignment section uses a 7,500-Hz tone. In addition, there is a head vertical-alignment section, with a 1,000-Hz tone that should be heard only on channels 1 and 3. If it is heard on channels 2 and 4, the head should be vertically raised or lowered. The instructions suggest having a serviceman do this, since cartridge players do not come with adequate user-service information.

- The open-reel tape (30-214) has a 10,000-Hz azimuth-alignment tone, spot frequencies from 50 to 15,000 Hz, and a sweep band from 15,000 to 30 Hz. An IM test is provided, as in the other two tapes. Next is a 3,000-Hz tone for flutter testing. Actual measurement requires a flutter meter, but since the ear is most sensitive to flutter at 3,000 Hz, a reasonably valid listening judgment of relative flutter can be made without instruments. The next section has a ticking metronome, recorded in mono, for channel balance. When the channels are balanced, the ticks appear to come from a point midway between the speakers.

(Continued on page 34)
New from Klipsch

Paul Klipsch thinks so much of this new speaker he has named it for his wife. The design has proved itself since 1965 in music halls and auditoriums as LA SCALA theater speaker. Several thousand are in use today. Radio City Music Hall alone has recently installed nineteen. Westbury Music Theater in Long Island N. Y. has eight.

Now we're making it in a handsome hardwood finish with proportions to fit the home.

Like the KLIPSCHORN the BELLE KLIPSCH has horn loading throughout its entire output spectrum, leaving it virtually free of distortion. Laboratory tests demonstrate that what little distortion it has is less than one tenth that of "acoustic suspension" speakers of comparable size and equal output. This holds true whether operated at whispering low levels or thundering high levels. In either case, tonal integrity is preserved. Ask your dealer to introduce you to this newest member of the Klipsch family.

Belle Klipsch® loudspeaker

KLIPSCH & ASSOCIATES, INC., Box 260, Hope, Arkansas 71801
ly, two piano chords are recorded, with long, undamped decays. Although these are suggested as a test of system distortion, they would seem to be a better indication of flutter, which can be heard in very small amounts on this type of material.

The prices of the Audiotex test tapes are: 30-212 (cassette) $5.60; 30-213 (eight-track cartridge), $7.95; 30-214 (open-reel), $6.80.

- Laboratory Measurements. To check the 30-214 open-reel test tape, we used a high-quality home recorder and made the same response and flutter measurements with the appropriate Ampex professional tapes as a standard for comparison. The Audiotex tape is claimed by the manufacturer to be within ±4 dB of the standard NAB equalization characteristic. Except for overall recorded level (which was generally slightly lower than that of the Ampex tape), it was within ±2 dB of the response curve derived from the Ampex tape from 70 to 15,000 Hz. At lower frequencies, it showed a rising characteristic, reaching +5.5 dB at 50 Hz relative to the Ampex tape.

The flutter-test section of the Audiotex tape indicated rather unacceptable amounts of flutter when played on the test recorder—0.2 per cent wow and 0.3 per cent flutter. The recorder was actually much better than that since with the Ampex flutter tape we measured 0.01 per cent wow and 0.05 per cent flutter. Obviously, the Audiotex flutter-test measurement was of no value, whether from a flaw in recording or owing to some property of the tape itself. On the taped piano chords there was no audible flutter.

We made no measurements on the rest of the tape, which seemed to have the appropriate test material on it, and which should serve perfectly well for its intended purpose (except, as noted, the IM-distortion section, which cannot be used effectively without an IM analyzer).

With the 30-212 test cassette, we used a high-quality cassette deck. We compared the Audiotex cassette with a BASF standard alignment tape that we have used on many cassette machines. (The BASF test cassette agrees closely, except at the lowest frequencies, with the Teac standard tape used by many Japanese manufacturers). The Audiotex cassette showed a smooth drop-off above 500 Hz, being down about 8 dB at 8,000 Hz compared with the BASF test tape. Below 100 Hz the Audiotex showed a falling output that was down about 8 dB at 40 Hz relative to the BASF tape. From the evidence, we judged the Audiotex test cassettes not usable for frequency-response measurements. Since we have no way of knowing whether the recording is consistent from one Audiotex test cassette to another, we would not suggest that anyone attempt to apply a correction curve based on the above data. The remainder of the cassette was found to be as specified.

In the case of the eight-track cartridge tape (30-213) we had no frequency-response standard tape to compare it with. We therefore merely measured the response of a moderate-price tape player that happened to be on hand and found it to be a very reasonable ±1 dB from 100 to 8,000 Hz, and down about 5 dB at 40 Hz.

- Comment. Although the Audiotex test tapes could be useful to the tape hobbyist, especially in view of their moderate prices, we would not agree that they are of professional quality, as is suggested on their instruction and specification sheets. For one thing, we found serious discrepancies between the printed specifications and the content of the tapes—and, indeed, between the content and the instructions on the reverse side of the specifications. On the 30-213 cartridge the frequency-response section is stated as going as high as 8,000 Hz. Actually, however, there is a 10,000 Hz band. The sweep tone is stated as going from 15,000 to 30 Hz; actually, it covers 8,000 to 40 Hz.

The open-reel tape, 30-214, is labeled a four-track stereo recording (which format it does conform to), but only tracks 1 and 3 are recorded. This is useful in some of the tests, but it should be stated more clearly. The azimuth-alignment section is stated to be a 7,500-Hz tone, but is really 10,000 Hz. The spot-frequency section is said to have a 30-Hz tone, but the sequence actually starts at 50 Hz, and the order of two tones is transposed in the listing. The instructions repeat these errors, and give one of the IM frequencies as 10,000 instead of the correct 7,500 Hz.

For more information, circle 156 on reader service card.

Panasonic SP-10 Turntable

- For several years, Panasonic has exhibited experimental versions of a revolutionary (no pun intended) new turntable at trade shows. This unique "direct-drive" turntable is now on the market as the Panasonic Model SP-10. As the description "direct-drive" implies, the SP-10's 5% pound motor has nothing in common with any other type of turntable motor in use today and apparently was specifically designed for the SP-10.

The Panasonic SP-10 motorboard is 14 inches square and requires a 4-inch mounting depth. The net weight of the turntable is an impressive 20 pounds. Its performance ratings include rumble below -60 dB (measurement method not specified) and less than 0.05 per cent wow and flutter (rms, weighted). Under the platter there are two concentric rings of stroboscope markings for each speed. The rings used for speed adjustment will depend on the power-line frequency—60 Hz (U.S.) or 50 Hz (European). A sliding plate under the platter exposes the appropriate pair of markings to be viewed in a mirror through a window in the motorboard. The markings are illuminated by a built-in neon lamp. For each speed there is ±2 per cent vernier adjustment.

Our test unit was supplied on an optional base—a handsome walnut unit with ample room for any standard tone arm. (Panasonic supplied our test sample with a Shure V-15.)

(Continued on page 36)
Which of these two new Wollensak stereo cassette decks is worthy of your sound system? 
One is Dolby. One is not.
The one on the left is the Wollensak 4760 cassette deck featuring the new Dolby System® of noise suppression. It reduces the level of background tape hiss by 10 db at 4,000 Hz or above, while greatly increasing dynamic range. To enhance fidelity, bias for both standard and high performance tapes can be selected by a tape selection switch. Frequency response of the Model 4760 is 35-15,000 Hz plus or minus 2 db. This deck is equal to the best and most expensive open reel recorders.
For the man who wants many of the same high qualities of the 4760 without the attributes of the Dolby System, we have also invented the Wollensak 4755 cassette deck. Both of these unique decks feature a massive, counter-balanced bi-peripheral drive responsible for one of the lowest wow and flutter characteristics you'll find anywhere. The precise heavy-duty tape transport mechanism is considered the finest by many audio experts. This mechanism includes the only full-size flywheel and capstan available to assure constant tape speeds. Fast-forward and rewind speeds are about twice as fast as any other. Interlocked controls allow you to go from one function to another without first going through a stop or neutral mode. End-of-tape sensing stops the cassette, disengages the mechanism and prevents unnecessary wear. The “Cassette Guardian” automatically rejects a stalled cassette in play or record position.
Either the Wollensak 4760 or the 4755 can complement your present component system with cassette advantages. Hear them both at your nearby dealer. Then answer the question: Dolby or not Dolby?

Either way...it's worth it
Ampex AX-300 Tape Recorder

A single control simultaneously selects tape speed (1/4, 3/4, or 3/8 ips) and the appropriate recording and playback equalization. Four slider controls adjust recording levels, with microphone/line mixing capability. The playback levels are fixed. One pair of high-level line inputs can be combined with microphone inputs or with a second high-level stereo source controlled by the microphones' slider adjustments. Two illuminated VU meters indicate source or tape-output levels. The recording-mode switch (which Ampex calls the "Function Programmer") can be set for stereo or mono recording (on either track individually) or to transfer one track to the other together with added material for sound-on-sound recording. It is also possible to make sound-with-sound recordings, playing back one channel and simultaneously recording on the other, or to add echo while making stereo or mono recordings. All operating modes are selected by front-panel controls, and no external patch cables are required. Lever switches on the front panel select source or tape-playback signals for the line outputs, record the auto-reversing signal on a tape, select single-play auto-reverse or continuous repeat operation, and control the power to the recorder.

Tape direction can be reversed manually with a switch or automatically if a 20-Hz tone has been prerecorded on the tape. The tone can be added at any time by pressing the appropriate front-panel lever while the machine is in the record mode. (The reversing signal is already present on all open-reel prerecorded tapes produced by Ampex during the past several years.) Tape editing is simplified by a fast-acting pause control and cueing/editing marks on each track.
WHY AREN'T YOU LISTENING TO THE 2 EXTRA CHANNELS IN YOUR STEREO RECORDS, TAPES, AND FM BROADCASTS?

There is four channel material already present on your stereo records, tapes and FM broadcasts but you are only listening to two of them. Add the Lafayette 4-Channel Adapter to your present stereo receiver or amplifier (such as the Lafayette LR-1500TA or LA-125TA) and two additional speakers and you will experience the dramatic difference of four channel sound NOW!

During a stereo recording session, the microphone picks up two types of sounds: direct and reflected, both of which are always included on a stereo recording. When playing back stereo records, tapes, and FM broadcasts in a conventional 2-channel stereo system, the reflected sounds are masked by the louder direct sounds coming from each of the two front speakers. The great importance is that reflected sounds create the depth and spatial breadth one associates with a performance given in a concert hall rather than in the downstairs closet! The Lafayette 4-Channel Adapter recovers and separates a substantial amount of this reflected sound from the direct sound. This is not produced artificially as in the case of reverberation units, and synthesizers. The result is a dramatic new sound dimension to all existing stereo program sources without the need for any additional amplifiers!

So... why listen to only two channels when you can hear music the way it was meant to be heard with FOUR CHANNEL STEREO by LAFAYETTE? PRICE $29.95!

THE RENOWNED LR-1500TA IDEAL MATCH FOR NEW 4-CHANNEL SOUND!

The perfect matchmate for the Lafayette Dynaquad Adapter. Widely acclaimed by critics and consumers alike, the Lafayette LR-1500TA 240 watt AM/FM stereo receiver combines excellence in design, performance and operating convenience with the latest advances in solid-state circuitry. Four Integrated Circuits and five Field Effect Transistors in the FM front end assure you of pulling in the weak stations as well as the strong with noise-free clarity and tonal purity. “Acritune,” our precision tuning circuit, activates a light on the front panel when your station is perfectly tuned, and Computor-Matic®, our exclusive overload protection circuit, insures against amplifier damage. In addition, the LR-1500TA features a complete set of automatic and manual controls such as automatic FM stereo/mono switching, interstation muting circuit to silence the receiver when you're tuning between stations, an illuminated D’Arsonval signal strength meter, front and rear panel tape output jacks, direct tape monitor switch, and a dual system speaker switch which permits you to enjoy stereo in one or two rooms separately or simultaneously. Price $299.95!

LAFAYETTE

SEND ME FREE 1972 CATALOG 72D

NAME ___________________________ ADDRESS ___________________________

CITY ___________________________ STATE __________ Zip ___________

SEPTEMBER 1971

CIRCLE NO. 39 ON READER SERVICE CARD
of the six heads. The head cover lifts off readily, permitting the tape to be marked accurately at the correct editing point without difficulty.

A novel feature of the Ampex AX-300 is its active filter—a 12-dB-per-octave high-frequency filter in the playback-amplifier outputs. Its cut-off frequency can be varied continuously from under 3,000 Hz to over 16,000 Hz, thereby limiting the system's upper frequency response to that needed for the desired program material. This effectively removes tape hiss, "birdies" from FM stereo broadcasts, and other unwanted noises.

The microphone inputs and a headphone jack (it will take low-impedance phones) are on the front panel; all other input and output jacks are in the rear. Recessed into the left side are four individual bias adjustments—for the two channels and both directions of tape motion. These permit the recorder to be properly adjusted for any desired tape formulation. On the right side of the unit are two VU-meter calibration adjustments. The operating manual gives complete instructions on how and when to use all these controls. The AX-300 comes adjusted for use with BASF LP-35-LH (or the equivalent) tape.

The manufacturer's specifications for the Ampex AX-300 are quite detailed. At 7½ ips, wow and flutter are rated at less than 0.09 per cent with the overall frequency response 40 to 16,000 Hz ±3 dB. At 3½ ips the wow and flutter are less than 0.15 per cent, and the frequency response is within ±4 dB from 80 to 12,000 Hz. Signal-to-noise ratio is greater than 35 dB, referred to a recording level that produces 3 per cent distortion. The AX-300 is supplied in a walnut case, 16½ x 15½ x 8½ inches, and weighs 45 pounds. It can be operated horizontally or vertically. The price of the Ampex AX-300 is $599.95. The optical RC-204 remote-control unit is less than $40.

**Laboratory Measurements.** With BASF LP-35-LH tape, the AX-300's record-playback frequency response was ±2 dB from 33 to 18,500 Hz at 7½ ips, ±2 dB from 40 to 11,500 Hz at 3½ ips, and ±2 dB from 38 to 6,000 Hz at 1⅛ ips. Performance, we were gratified to find, was identical in both directions of tape motion. The filter had ideal 12-dB-per-octave slopes, with a sharp "knee." The cut-off action began at 2 kHz (2,000 Hz) with the MIN setting of the control, and the calibration marks at 3, 6, 10, and 16 kHz were accurate. Although there is an OFF position on the control, we found no difference in response between it and the 16-kHz setting.

The playback frequency response, with an Ampex full-track test tape supplied with the machine, was ±1 dB from 150 to 15,000 Hz at 7½ ips, rising to +3.5 dB at 50 Hz. Some of this rise resulted from the normal "fringing" effect that occurs when playing a full-track tape with quarter-track heads. With our quarter-track test tape we measured a 4-dB rise at 50 Hz. At 3½ ips, the full-track tape response was quite flat to 7,500 Hz, and it rose to slightly over +3 dB at 50 Hz. Ampex's view is that, given the characteristics of today's prerecorded tapes, this is the preferred equalization response.

A "0-VU" recording level required 98 millivolts at the line inputs and 0.82 millivolt at the microphone inputs. Approximately twice as much input was required when using a mono recording mode. The playback output level from 0 VU was 0.83 volt. Distortion was only 1 per cent at 0 VU, and 1.6 per cent at +3 VU (full-scale meter deflection). A +6-VU level (far off-scale on the meters) was required to reach the reference 3 per cent distortion level. The signal-to-noise ratio was 55 dB referred to 0 VU, or 61 dB referred to the standard distortion level input, making this one of the quietest recorders we have tested. The signal-to-noise ratio was the same through both line and microphone inputs. Erasure by the AX-300 of a +6-VU recorded test signal was essentially perfect. After erasure, the test signal was lost in the inherent residual noise level of the tape.

Wow was approximately the residual of our Ampex test tapes—between 0.01 and 0.02 per cent. Flutter in the forward direction was 0.08 per cent at 7½ ips, 0.09 per cent at 3½ ips, and 0.175 per cent at 1⅛ ips. Slightly higher figures were measured in the reverse direction. The tape speeds were exact, as indicated by a stroboscope wheel. In fast forward, 1,800 feet of tape was handled in 73 seconds, while 68 seconds was required in reverse.

**Comment.** The transport controls of the Ampex AX-300 were truly a delight to use. Try as we might, we could not defeat their built-in safeguards. The "piano key" levers operated with a feather touch and required less than ⅛-inch of movement. The AX-300 was quiet and smooth in all modes, and everything worked exactly as intended. One could hardly ask for more!

At 7½ ips, a minute change in the extreme high frequencies (wire brushes and other percussive sounds) could be detected on a source-vs.-tape comparison. It sounded like a very slight accentuation of extreme highs, which did not, for some reason, show up in our test curves (speakers with above-average high-frequency performance are needed in order to hear the effect). Hiss was noticeably dulled at 3% of the test signal was lost in the inherent residual noise level of the tape.

The variable high-frequency filter in the AX-300 is so good that we would prefer to have it in an amplifier, where it could be used with other program sources. The AX-300 hardly needs any filter, let alone one as refined and flexible as this.

Obviously, a great deal of intelligent planning went into the conception and design of the Ampex AX-300, and the results amply justify the effort. It offers a rare combination of flexibility, foolproof operating conveniences, and excellent sound.

*For more information, circle 158 on reader service card*
We were finally found out! Hirsch-Houck Laboratories, in a published report, said, "The trackability score for the Shure V-15 Type II Improved is by a comfortable margin the best we have measured to date." They also said, "Shure had, without fanfare, made a few other improvements." I suppose we'd better 'fess up. It's true. We'll be pleased to send you the Hirsch-Houck report covering such things as improved separation; perfect tone bursts; the first visually perfect sine wave; freedom from "shattering;" neutral sound; and how to convert your present V-15 Type II for only $27.00!

Shure Brothers Inc.,
222 Hartrey Ave., Evanston, Ill. 60204

CIRCLE NO. 56 ON READER SERVICE CARD
A curious question to put to Hank Williams Jr. is whether being his father's son is a help or a hindrance in his own career as a country musician.

"Well," he replied over drinks (of which he didn't touch a drop) at the London Hilton, "it's certainly not a problem. I'm MGM's No. 1 country artist. Five of my songs have been No. 1 in the country charts. I've made the sound tracks for six moving pictures including Kelly's Heroes. I've got my own talent agency in Nashville, and we're doing nicely with Hank Williams Jr. Barbecue Pits."

Not bad, one concedes, for a young man who will be twenty-two on May 26. But he can't escape the legend of his father, who, more than any other individual, made American country music a national, even international, rather than a merely regional phenomenon. And he doesn't try to.

He was in London as one of the stars of a formidable contingent from Nashville for the recent Third International Festival of Country Music, which played two nights to some twenty thousand fans at the Empire Pool, Wembley. And he played them well. I've got my own talent agency in Nashville, and we're doing nicely with Hank Williams Jr. Barbecue Pits."

In his set at Wembley he offered a shrewd mixture of his own and his father's songs. How well the latter have endured and how affectionately they are remembered was evident in the applause that greeted the first note of each of them: Your Cheatin' Heart, Take These Chains, Cold, Cold Heart, Kaw-Liga, and You Win Again!"

The nostalgia was enriched, if that's the word for it, by the fact that young Hank (who was three-and-a-half when his father died on New Year's Day, 1953, aged twenty-nine) is accompanied in these songs by the three surviving members of his father's backing group, the Drifting Cowboys: Jerry Rivers, fiddle; Sammy Pruett, guitar; and Don Helm, steel guitar.

In an instant the singer on every record, his father, had become a member of the audience. One of the performers later said: "We could have played them all in a single medley at the Empire Pool. And he played them well."

He made his first public appearance at the age of eight. He was doing one hundred shows a year when he was fourteen.

A few years later it was 230, and it's now about 150, assisted by a private bus and two private airplanes. He has never cared about school, and he still doesn't. He can't read music—few Nashville musicians can—and he doesn't intend to learn.

"When I was doing the sound track for Your Cheatin' Heart, the picture about Daddy's life," he told me, "we had the Drifting Cowboys and some other Nashville sidemen on the set. The studio had engaged an arranger and conductor. He came into the studio and got up on the podium and started off: 'A-one and a-two and a'—and the boys just burst out laughing. So they got rid of the conductor-arranger, and we did the songs."

Hank Williams, Jr. wasn't the only family act at Wembley. Tommy Cash was there, too, Johnny's kid brother, sounding less like his brother than some of the other younger singers, notably Lee Conway and Waylon Jennings. Tommy is smaller than Johnny and less severe, but he has Johnny's easy assurance and his totally disarming smile.

And then there were Hank Snow and Roy Acuff. They are not family acts, but they've been around so long that to country music fans they seem like family. They can do no wrong just as long as they do the old songs.

"To paraphrase what a Continental music critic once said of the English," he replied, "to win the favor of country music fans is not easy; to lose it, impossible."
THE SANSUI QUADPHONIC SYNTHESIZER®

SANSUI QS-I

4-CHANNEL SOUND FROM ANY 2-CHANNEL SOURCE

Senses and recovers the ambient information hidden in your stereo discs, tapes and broadcasts

After having discovered that the ambient components of the original total sound field are already contained in hidden form, in conventional stereo records, tapes and broadcasts, Sansui engineers developed a method for sensing and recovering them. These subtle shifts and modulations, if re-introduced, breathtakingly recreate the total of the original sound as it existed in the recording or broadcast studio.

The heart of the Sansui Quadphonic Synthesizer® is a combination of a unique reproducing matrix and a phase modulator. The matrix analyzes the 2-channel information to obtain separate direct and indirect components, then redistributes these signals into a sound field consisting of four distinct sources.

This type of phase modulation of the indirect components, applied to the additional speakers, adds another important element. It sets up a complex phase interference fringe in the listening room that duplicates the multiple indirect-wave effects of the original field. The result is parallel to what would be obtained by using an infinite number of microphones in the studio (M₁ through Mₙ in the accompanying illustration) and reproducing them through a corresponding number of channels and speakers.

The startling, multidimensional effect goes beyond the four discrete sources used in conventional 4-channel stereo, actually enhancing the sense of spatial distribution and dramatically expanding the dynamic range. Also, the effect is evident anywhere in the listening area, not just in a limited area at the center. And that is exactly the effect obtained with live music! This phenomenon is one of the true tests of the Quadphonic system.

The Sansui Quadphonic Synthesizer QS-1 has been the talk of the recent high-fidelity shows at which it has been demonstrated throughout the country. You have to hear it yourself to believe it. And you can do that now at your Sansui dealer. Discover that you can hear four channels plus, today, with your present records and present stereo broadcasts. $199.95.

*Patents Pending
The new 1218.

Single-play spindle rotates with platter to prevent enlargement of center hole and to maintain concentricity.

Elastically-damped counterbalance has vernier-adjust plus click-stops for convenience in changing cartridges.

Tracking force applied at pivot, maintaining perfect dynamic balance. No tracking problem even if chassis not level.

Twin-ring gyroscopic gimbal suspension centers and balances tonearm within both axes of movement. Tonearm pivots horizontally and vertically on identical low-friction precision bearings.

Anti-skating separately calibrated for elliptical and conical styli. (Each type skates differently.)

Feathertouch cue-control is silicone-damped in both directions for gentle descent and ascent.

Tracking Angle Selector provides perfect vertical tracking in single play and at center of stack in multiple play. (Cartridge pivots at stylus tip to maintain correct stylus overhang in each mode.)

One-piece cast platter weighs 4 lbs., provides maximum flywheel effect.

Pitch-control "tunes" records to live instruments, compensates for off-pitch records.
It will probably become the most popular turntable Dual has ever made.

The Dual 1219 has been the most widely acclaimed turntable we have ever produced. As measured by the published results of the independent test labs. And the many high fidelity professionals who use it in their personal systems. As well as by the thousands of music lovers who have made the 1219 the best selling quality turntable of all time.

All in all, the total performance of the 1219 makes it a tough act to top. But the new 1218 might well do it.

The 1218 offers most of the features that have earned such high acclaim for the 1219. For example, the twin-ring gimbal suspension of the tonearm that lets it pivot like a gyroscope. And perfect 15° tracking in single play. All contribute importantly to performance, convenience and versatility.

Actually, unless you saw the 1218 and the 1219 side by side, you might not tell them apart. (The 1219 at $175 with its full-size 12" platter and 8½" tonearm remains the ultimate.)

But there is one difference that you may consider important: the 1218 is priced at $139.50.

And when you consider that not one of the 1218’s precision features is shared by any other turntable at its price, we believe it will not take long for our prediction to come true.
The Scott Innovators have done it again with 18 exciting new models for 1971-72.

4 channel stereo Quadrant® components
443 AM-FM 4 or 2 channel receiver 4 x 18 or 2 x 35 watts* 319.90
444 AM-FM 4 or 2 channel receiver 4 x 25 or 2 x 50 watts 449.90
495 4 or 2 channel amplifier 4 x 25 or 2 x 50 watts 349.90
499 4 channel amplifier 4 x 40 watts 459.90

AM-FM stereo receivers
357 AM-FM stereo receiver 2 x 25 watts 199.90
367 AM-FM stereo receiver 2 x 32 watts 259.90
377 AM-FM stereo receiver 2 x 40 watts 319.90
387 AM-FM stereo receiver 2 x 55 watts 359.90
477 AM-FM stereo receiver 2 x 70 watts 399.90

AM-FM stereo tuners and amplifiers
431 AM-FM stereo broadcast monitor 219.90
433 FM stereo digital frequency synthesizer tuner 549.90
490 stereo amplifier 2 x 35 watts 299.90

Controlled impedance full range speaker systems
S-41 two-way speaker system, 8" woofer 69.90
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S-11C three-way speaker, 10" woofer 99.90

AM -FM stereo receivers
357 AM-FM stereo receiver 2 x 25 watts 199.90
367 AM-FM stereo receiver 2 x 32 watts 259.90
377 AM-FM stereo receiver 2 x 40 watts 319.90
387 AM-FM stereo receiver 2 x 55 watts 359.90
477 AM-FM stereo receiver 2 x 70 watts 399.90

AM-FM stereo tuners and amplifiers
431 AM-FM stereo broadcast monitor 219.90
433 FM stereo digital frequency synthesizer tuner 549.90
490 stereo amplifier 2 x 35 watts 299.90

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Salem AM-FM stereo console 140 watts IHF 749.90
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The distinguished French critic Emile Vuillermoz, writing after the concerto’s premiere, neatly summed up its special qualities:

It is written in the brilliant and transparent style of a Saint-Saëns or a Mozart. The composer wished to write a work exclusively intended to bring out the value of the piano. There is in it neither a search for thematic novelty nor introspective or sentimental intentions. It is piano—gay, brilliant and witty piano. The first movement borrows, not from the technique but from the ideal of jazz, some of its happiest effects. A communicative gaiety reigns in these dazzling, imaginative pages. The Adagio is conceived in the Bach ideal, with an intentionally scholastic accompaniment. It has admirable proportions and a length of phrase of singular solidity. And the Finale in the form of a rondo sparkles with wit and gaiety in a dizzy tempo in which the piano indulges in the most amusing acrobatics.

Shortly after the Paris premiere, Ravel and Long recorded the concerto. Their saucy, brash performance was reissued not long ago in Seraphim’s three-disc set called “Age of the Great Instrumentalists” (IC 6043). In spite of its age, the sound of the recording is remarkably good, with particularly clear delineation of the details of the instrumental texture.

Among the fifteen or so recorded performances of the score currently available, there is not one dud. In general, the pianists and conductors seem to opt for one of two not very dissimilar approaches: the rhapsodic-lyrical and demonic-lyrical. Perhaps the outstanding example of the first way is the performance, now nearly fifteen years old, by Arturo Benedetti Michelangeli with Ettore Gracis conducting the Philharmonia Orchestra (Angel S 35567). Though the abandon and sparkle of the two outer movements is by no means slighted, Michelangeli is especially responsive to the tender grace and reverence of the slow movement. The recorded sound is a bit recessive by prevailing 1971 standards, but balances between piano and orchestra are quite good.

The Michelangeli performance has a more up-to-date counterpart, as far as sound is concerned, in the recording by Werner Haas with Alceo Galliera conducting the Monte Carlo Opera Orchestra (Philips 839755). But Haas cannot summon quite the spontaneity that Michelangeli does.

Most of the remaining recorded performances emphasize the propulsive and kinetic qualities in the score—a legitimate approach, certainly. Outstanding among them, in my opinion, are those by Martha Argerich (Deutsche Grammophon 139349), Leonard Bernstein (Columbia MS 6043), and Julius Katchen (London CS 6487). The most recent recording is one by Alexis Weissenberg, with Seiji Ozawa conducting the Orchestre de Paris (Angel S 36785).

Weissenberg possesses a virtuoso technique of awe-some power, though he has often been criticized for superficial music-making. In the Ravel concerto, however, he has found a congenial work; the recording is a headlong romp.

Reel-to-reel tape fanciers have available the Argerich and Katchen recordings. Both are satisfying accounts in the demonic-lyrical mold, but the Argerich reel (DGG C 9349) has marginally cleaner sound.
Andre Previn

"Who wants me in May 1978?"

By ROBERT WINDELER
In 1946, at the age of seventeen and just out of Beverly Hills High, André Previn faced his first orchestra as a conductor. It was at Metro-Goldwyn-Mayer, and the veteran musicians at what was then the world's most important movie studio were out to get the kid. Previn asked for an A; the oboe player gave him an A-flat. The fledgling conductor let the rest of the orchestra tune to that, and then raised his baton. Just before the downbeat, the musicians looked at one another as if to say, "We've got him." But Previn said, "Okay, everybody transpose a half tone up." There was general laughter, a round of applause, and Previn hasn't had that much trouble with an orchestra since, despite the fact that he has conducted every major symphony in the world. In fact, says Stuart Knussen, first bass and chairman of the board of directors of the London Symphony Orchestra, Previn's current group, "Previn is one step ahead of the orchestra all the time—even when you think you've caught him out."

Previn remembers the A-flat incident with embarrassment, and deplores the impulse that led him to demonstrate his perfect pitch: "Pitch has absolutely nothing to do with talent; a plumber can have perfect pitch." But he doesn't remember what the MGM orchestra was playing, though "it was the period when Esther Williams never got to dry off; I'm sure it was some underwater ballet." Nonetheless, it was the start of a career in Hollywood that lasted another seventeen years full time, as composer, conductor, adapter, arranger, and piano player.

Lots of kids go to Hollywood to make music, a lot of them even with classical backgrounds, but few of them come with Previn's determination and ability to compress so much learning and so many experiences into a short space of time. He was born Ludwig Andreas Priwin, the son of Jacob Priwin, a criminal lawyer and judge, in Berlin in 1929. When he was a little baby he sat under the grand piano in the Priwin parlor in Berlin, and as soon as he could talk he was able to announce when his father or anyone else played an A. The family, including André's mother, a brother, and a sister, left Germany in 1938 for the usual reasons people left Germany in 1938, came to America, and settled in Los Angeles. Cousins Charlie and Stanley Previn had preceded them and had already changed the name to its present spelling. Ludwig was judged an unsuitable name for an American boy (in the pre-World War II years, at least), and so it too was changed, to André George, when he went to school.

The young Previn had studied piano at the Berlin and Paris conservatories (though he was in Paris only about a month, he managed to study under Pierre Monteux, himself once a conductor of the London Symphony Orchestra), but his real education began at the movies. He started, while still in high school, improvising scores for silent films that were revived at the now defunct Rhapsody Theater in Hollywood. At the piano, and usually never having seen the film before, Previn would play snippets of whatever he deemed appropriate to the action on screen. One day, during Intolerance, D. W. Griffith's great silent epic starring Lillian Gish, he was fired for the first time from a music job. The story of Intolerance unfolds trickily in flashbacks from an active present to somber Biblical times. Onto the screen came a frantic dance, and Previn broke into the Tiger Rag. "I thought that was good for at least three minutes," says Previn, "but a few seconds later I noticed the manager of the theater steaming down the center aisle in a fury. I was summarily dismissed on the spot. I looked up at the screen and there was the Crucifixion."

At MGM he was given opportunity and responsibility early. Johnny Green did a great deal to see that Previn's genius was recognized, and put him on the podium directing his first big orchestra. At age nineteen he was assigned to compose, score, and direct the music for a $3,000,000 Jeanette MacDonald movie. In all, Previn did more than thirty film scores, including the originals Elmer Gantry, The Four Horsemen of the Apocalypse, Long Day's Journey into Night, Bad Day at Black Rock, and Two for the Seesaw. His adaptations of the musicals Gigi, Porgy and Bess, Irma La Douce, and My Fair Lady won him four Academy Awards. With his second wife, Dory Previn, he wrote song scores for Inside Daisy Clover (which includes one of the most beautiful songs ever written for a film, the pop standard You're Gonna Hear From Me) and The Valley of the Dolls, whose theme song, as recorded by Dionne Warwick, sold more than two million copies. He was musical director on more than fifty films, including many for which he neither wrote nor adapted music, such as Thoroughly Modern Millie. During the years Previn also accumulated a modest fortune, an impressive art collection, a rambling Bel-Air home, a reputation as a very good jazz pianist and otherwise versatile musician—and at least his share of gossip and scandal.

Previn also played in the MGM orchestra, and in those golden years of film music and film musicals that meant working very hard for your $200 a week. Several valuable lessons were learned. "Sitting in that orchestra, I got to know what quick rehearsals meant. Also, I got used to orchestrating something on Monday and hearing it played as well as it was going to be played on Wednesday. That was better
than any conservatory. I’m now able to get good,
detailed, and fast rehearsals with the LSO and other
orchestras I conduct, and that’s a holdover from the
MGM days. Orchestras also appreciate the fact that,
since I once sat in an orchestra myself, I know what
bores them and what doesn’t."

During the Korean war, Previn was on leave from
MGM and in the army. One night in a club called
Facks in San Francisco he met a jazz singer named
Betty Bennett who was appearing there. "I had
heard of him—I thought he was an English pianist
and not very good," she recalls. "But it was almost
love at first sight. I was supposed to entertain the
troops coming back from Korea, on a ferryboat at 6
A.M. We stayed up talking and I asked him if he’d
like to accompany me while I sang." He did, and
they were married a year later, by which time André
was back at MGM. The marriage lasted five years
and produced daughters Claudia, now seventeen,
and Alicia, fourteen.

"The awkward part," says Betty, "was that he left
when I was three months pregnant with Alicia. He
was engaged to Peggy King [another singer of the
Fifties] before we were divorced and I found out
about it by reading it in the paper. I had the feeling I
wouldn’t have minded so much if it hadn’t been an-
other singer."

Musically, André and Betty Previn were comple-
mentary. "He was the first person in my bebop sing-
ing days who thought that I was not just a good sing-
er but a marvelous person; I’ll put him up for that. I
don’t want to sound like ‘I taught him everything he
knows about jazz.’ All I did was aim him; he wanted
me to aim him. He was reading Down Beat and
didn’t know the names and thought he should. I in-
troduced him to my friends—Shelly Manne, Russ
Freeman, Shorty Rogers," says Betty.

"They became my friends, and she was sweet
enough to resent it and say so," says André.

"When he hears anything, he can do it, so he
learned to play jazz piano. But it was just a few raptu-
rous moments, not a career, and now he doesn’t play
jazz anymore," says Betty.

"Jazz is so much the music of one’s specific
youth," says André. "Oscar Peterson, Miles Davis,
and Dizzy Gillespie are still the end for me. But I
don’t even know what’s being played now; I can’t
drum up any interest in it."

"In exchange for my introducing him to jazz, he
opened up the whole classical area for me," says Bet-
ty. Nonetheless, the marriage went wrong—partly
because André didn’t want Betty to work, "made it
impossible for me to work. He once said to me
‘Women must think I’m great at all times.’ Dory
didn’t come between us; she was a girl or two later."

PREVIN made many recordings as a performer in
those years, some of them, like his My Fair Lady,
with Shelly Manne, jazz classics that haven’t aged.
His biggest record on the MGM label was the highly
commercial "Like Young," with David Rose, which
sold over two million copies. The sequel "Like
Blue" was also done with Rose; Previn wrote a cou-
ples of the songs in each album. Among his original
movie scores, Invitation to the Dance (three ballet-
style pieces, three pictures in one) can now be seen
as a harbinger of things to come.

"It was not lucrative, but it was artistically beauti-
ful and ahead of its time," says Jesse Kaye, who
headed MGM’s West-Coast recording division dur-
ing Previn’s early years and now is "in charge of
what’s left of MGM’s music department." "You
could see what was going to happen with Previn; it
was pure classical music in composition but contem-
porary in the sense of performance."

Previn also won gold stars among his contempo-
raries for making singers of Louis Jourdan (who
couldn’t believe he would actually reap royalties for
Previn has all but disowned his popular piano recordings, such as the two RCA 10-inchers above. A Superscope cassette titled “Previn, Please” (1-A074-C) contains some excellent reissues, however—but wouldn’t “Salad Days” have been more appropriate? his work on the Gigi soundtrack) and Hermione Gingold. In his later movie years he was equally sought after because he brought out the best in real singers—such as Julie Andrews in Thoroughly Modern Millie and in the memorable Christmas album she and Previn did for RCA (LSP 3829).

If Johnny Green was André Previn’s musical father in Hollywood, Arthur Freed, who had brought Green to MGM, was his musical grandfather. Freed, the producer of most of MGM’s great and successful musicals (Kiss Me Kate, On the Town, An American in Paris, Gigi) is now in his eighties and in retirement in Bel-Air. “At first I had the wrong slant on André” he says. “I thought he was interested only in jazz, but I soon learned different. He could do Cole Porter, Irving Berlin, Lerner and Loewe, and all those people. He learned orchestration faster than anybody I ever knew. He’s a great orchestrator—in fact, that was the thing he did best. André was very much influenced by Leonard Bernstein, who also worked for me (the ballet in On the Town), and though he never said it, I always felt he left MGM and went to Columbia because of Bernstein. André has a very wide range, and he knows every kind of music. But as far as composing goes, you can’t do it just once every four years; you’ve got to devote some real time to it. I think that with his talent, if André seriously wanted to, he could become a great composer.”

Previn was also the discoverer of Dory Langdon, a young girl from New Jersey who wrote lyrics. “Somebody sent me some of the lyrics she’d written; they were good, but none had been published. I put her on my staff. About the only person on the lot who didn’t have a lyric writer assigned to him was André. I put them together to see what they would come up with.” The working relationship started in 1957, but they were married in 1959 and continued to work together for the ten years of their marriage. Their magnum opus was a never-produced, eighteen-song score for Goodbye Mr. Chips, a movie that was to have starred Rex Harrison but was later done by MGM with Peter O’Toole and a score by Leslie Bricusse. “It broke both André’s and Dory’s hearts several times over,” says Betty Bennett of Chips. Reportedly Rex Harrison and studio “experts” didn’t like the Previns’ score, and there were numerous disputes over many long years between the Previns and Arthur Jacobs, the press-agent turned producer (Dr. Doolittle).

André credits one of these fracases with putting into focus his decision to leave Hollywood eight and a half years ago. “I came home one day absolutely devastated. I tried to convince Arthur Jacobs on a musical point—Arthur Jacobs, who moves his lips when he reads lyrics. I said to myself ‘I’m not going to go out and get drunk. I just quit.’ Arthur Jacobs was the final insanity for me. I had been spoiled by working with people like Billy Wilder, but then suddenly I got a whole series of Arthur Jacobses.” There was more to it than just that; Previn had begun to find the Bel-Air life “just too repulsive,” and at the same time experienced “the very slow rebirth of my own original ambition. I had wanted to conduct a classical orchestra ever since I was five years old.”

“We all knew he had a classical background when he came to us, but then they all had,” recalls Jesse Kaye. The difference is that when money became too important, everybody else went commercial. Previn always had his eye on the classics, and he preserved that look upward. All the others toppled.”

Previn started his conducting career with guest shots at Fargo, North Dakota, and “absolutely anywhere else they would have me” and the feeling that “the most amateur orchestral players in I-don’t-know-where can’t be as bad as these people in Hollywood.” He is convinced that most of his early audiences came expecting to hear him play the piano instead of conduct. Nevertheless, he quickly worked his way up to guest appearances with the New York, Philadelphia, and Los Angeles orchestras, and in 1967 he became permanent conductor of the Houston Symphony.

The Houston Symphony was the first major orchestra to employ Previn regularly. He did two concerts there in 1962 and went back for more every year. In the 1966-1967 season he was the symphony’s only guest conductor. In 1965 he had begun recording with the LSO for RCA, and in 1967 he succeeded Sir John Barbirolli as Houston’s permanent conductor. Both Previn and the city were ecstatic with one another for the first year. “The orchestra is composed of sensational players, enthusiastic,” he
says. And at the time he loved it “because it's an anachronism: it's a very European-sounding orchestra. Leopold Stokowski, Sir Malcolm Sargent, and Sir John Barbirolli all worked with the orchestra, so it does a great job with nineteenth-century Romantic stuff—Mahler, Brahms, and Elgar. It has a lovely dark, stylish sound.”

Houston is proud of its orchestra and of the brand-new Jesse Jones Performing Arts Hall, in which Previn and the orchestra premiered on October 2, 1967. “I was warned that the people who ran the orchestra—average age 112—were the kind who would say ‘Please let’s not have any of these new people like Dvořák,’ that Beecham had lasted one season, and that Stokowski had been fired. But it was my first orchestra, and I was very happy to have it.” Previn worked with students, got them interested in the concerts (which promptly raised a problem: “They don’t even know how to dress for a concert,” sniffed one member of the board of directors), and toured with the orchestra all over Texas—in high school gyms, wherever there was room to play.

Still, Houston was the one American orchestra that had never given him the “Hollywood’s André Previn came to conduct . . .” treatment, and the first season was a honeymoon. There wasn’t even a murmur of disapproval when Previn agreed, in 1968, to take on the London Symphony as well, “promising not to change or postpone so much as one concert in Houston.” (“‘Commuting between London, Houston, and Los Angeles almost killed me,” says Previn.)

André and Dory Previn broke up their marriage in 1969 and were divorced in September 1970—at which time he married Mia Farrow, the mother of his twin sons. Much has been written about the end of the one romance and the beginning of the other. Dory herself has written and sung an album partly about it, “On My Way to Where.” André pronounces the album “an absolute knockout.” Dory, asked about her ex-husband in connection with this article, said “I have nothing to say about him.”

When it came time to renegotiate his Houston contract, Previn wanted to become musical director as well as permanent conductor, picking the guest conductors and program cycles “with the mutual approval of the symphony.” The board balked. Relations deteriorated rapidly between Previn and the orchestra’s manager, Tom Johnson, and the board. “They hired someone else behind my back and used the beginning of the ‘scandal’ with Mia as an excuse; they also used the LSO, although they hadn’t objected when I signed with them.” Childish behavior followed on the part of the orchestra’s management (Previn’s name was even removed from his dressing-room door before the contract was finished). “I was terribly hurt and upset, but of course I never said so.”

Previn’s relations with the LSO remained cordial, however, and they were used to having him conduct for recordings. Thus, even before his two-year contract with the orchestra expired, it was renewed, and now runs through the 1974-1975 season. Financially, the LSO is as dependent on its patrons (“they are exactly the same,” says Previn, “only the accents are different”) as the Houston organization is—even more so, since there is no subscription income. But the LSO, like many European orchestras, is a collective; its board of directors is self-governing, completely composed of playing members of the orchestra. When it comes time to change conductors, first the board and then the whole orchestra must vote. “Being phenomenally pessimistic, that means that at least 51 per cent of the orchestra wanted me over some devastatingly famous people who were also up for it.”

“I am wildly prejudiced, of course, but the LSO is the best orchestra in Europe,” says Previn. “There are those who will say Berlin, but that is the only possible competition.” The orchestra returns the compliment. “We’ve had a lot of very famous conductors lead us,” says Stuart Knussen, “but none of them has made the impact on the London Symphony that Previn has; at the same time he’s given the orchestra a characteristic sound, a virtuoso orchestra style unique in Europe—but without the permanency of style of the Philadelphia or Cleveland orches-
tras." All ninety-four members of the LSO are men, even the two harpists. "There's no particular reason for that, although I'm sure Germaine Greer would find one," say Previn. "We audition women from time to time, but the men are always better."

Now that the Beatles have broken up, the London Symphony is easily Britain's most famous musical export. This year the orchestra toured not only the United States but Russia and the Far East as well, with concerts in Moscow, Leningrad, Bangkok, Seoul, and Tokyo. Just after the first of the year Previn is scheduled to conduct in Israel, Cleveland, and Iceland. He is now, evidently, one of very few conductors with a truly international reputation. And no matter where the orchestra opens, there is always a good-luck telegram from Previn's friend (and sometime musician) Prime Minister Edward Heath.

At home in England, in Previn's three years as conductor, the orchestra's average attendance has jumped from 65 per cent to better than 90 per cent of capacity. Most of the recent concerts at which Previn himself has conducted have been sellouts, but even those he doesn't conduct are better attended than they used to be. Leonard Bernstein, on a recent visit to conduct the LSO in Verdi's Requiem, pronounced the improvement in the orchestra since his previous visit two years before "phenomenal." London's critics, who were lukewarm in their notices when Previn first took over, now write reviews that range from very good to raves. Two critics even went along on the five-week Russian-Far Eastern tour—at their paper's expense—to send back daily stories.

Previn rides the buses with his orchestra and stays in the same hotels—departures from tradition—but "it never occurred to me not to. We've just come back from this exhausting tour and didn't have one single flareup. I have an interesting mixture of camaraderie with and awe for them that works very well, at least for now."

"He's very democratic in his behavior, but when it comes to repertoire it's rather a different thing," says Stuart Knussen. "There has never been any resentment of him at all for any reason, certainly not because he's an American. But when he gets annoyed with us it's in a curiously American sort of way." (During the recording sessions for the Vaughan Williams Tuba Concerto, Previn commented, "Strings, that was pianissimo like I'm tall.")

Previn, who is only the eighth conductor of the LSO in its sixty-seven-year history, has furthered the celebrity of the LSO with his BBC programs, the most recent of which was an hour on the subject of film music. "I've cribbed the Bernstein formula," he says. Future programs will include ones on Rachmaninoff and Vaughan Williams. There are four other major symphony orchestras in London—the Royal Philharmonic, the London Philharmonic, the New Philharmonia, and the BBC orchestras—and the television appearances give the LSO an enormous edge. "Tickets to our concerts at Royal Festival Hall are harder to get than those for a hit show."

"I work with them most often, and every conduc-
tor has his peculiarities. I try very hard to get everything as rhythmically perfect as it can be, not only in the obvious places but in the rest as well. I want everything perfectly rhythmically played. I also like the strings less... reticent—though not in Haydn, Beethoven, or Mozart, of course. The LSO always had a marvelous elegant coolness, but some of it is a great deal more romantically heated now. And they were always a great sight-reading orchestra—they learn everything so fast and deliver it with individual vitality and springy rhythms. This orchestra will do anything you want them to."

Previn would like to do more American music, particularly on tour with the LSO in America, but it is never box-office anywhere, and he can’t get subsidies for it in London as he can for British music. He admits frankly that he fails on Wagner: "It’s obvious that some of it is among the greatest music ever written—all of Meistersinger, some of Parsifal, the second act of Tristan—but I find most of it repellent. Any given four measures of Berlioz has more in it than all of the Ring. Berlioz was a genius, an all-time immortal great people. The LSO has always been the great Berlioz orchestra, and they like it when their conductor shares that taste."

Previn has so far made only one foray into the lyric theater—with Coco, a musical based on the life of the late Parisian couturière Chanel. It was four years in the making, and Alan Jay Lerner was librettist and lyricist. The show’s reviews were mixed when it opened in New York in December of 1969, and even worse when it opened in Los Angeles in April of 1971. Almost no one liked Previn’s music. The Los Angeles Times called it "as offhand a musical score as has ever been composed." The Los Angeles Herald-Examiner said, "André Previn’s music is astoundingly ordinary. It sounds like a student’s imitation of the most derivative popular music." But even that critic praised the score’s one great song, the show’s closer, Always Mademoiselle. Some critics, however, discovered new virtues in it after Danielle Darrieux took over the title role from Katharine Hepburn.

"You know how you feel about conducting; that’s the way I feel about lyrics," Alan Lerner told Previn during the preparation of Coco. Previn, who was traveling all over conducting, was waiting for lyrics and parts of lyrics for weeks and months on end. "The thirty-two-bar songs don’t fascinate me for very long," he admits. "By the time the show opened I thought we were doing a revival. How many years had I been playing these tunes at parties already? When the show opened, Alan and I sat down and had a talk like grownups. We were supposed to do a lot of things together after Coco—like the movie The Little Prince. We agreed not to do any more for totally valid reasons. He needs someone to work fifty-two weeks, 365 days a year, someone whose only interest in the world is the play; he needs that to function at his best. He thought I was crazy to want to run around the world conducting. I write very fast. I can’t help it; that’s the way I am. I couldn’t believe the kind of soul-searching that goes on with him to get a lyric out. He can actually do nine-tenths of a lyric quite rapidly, but once he finishes it he’s reluctant to let it go. We made a deal that once it was typed I got it—it was mine. Once, during Paint Your Wagon, I waited it seemed forever for one line. I locked him in an office and said, I am seriously going to keep you in there until you finish the god-damned line. But on Broadway I was the neophyte, the new boy. He was the master, the creator of My Fair Lady. It was absolutely oil and water."

Previn would like to do a new show sometime, but in "a very, very concentrated three months." The problem would be a lyricist. "I was spoiled by two brilliant people, Lerner and my ex-wife. I thought about some of the new people. I got a book of Leonard Cohen’s poetry and found it bullshit. The best lyricist I know is Johnny Mercer, so I wrote to him and he wrote back and we’re going to try to do something together. But we’re not sure just what it will be."

Recently he scored and conducted the LSO in "pure unadulterated Tchaikovsky" for the film biography The Music Lovers, with Richard Chamberlain and Glenda Jackson. And he was commissioned to write an original score—his first in a decade—for an as-yet-unreleased movie starring his wife. The film, to be called See No Evil for America and probably See No Evil for England, was called "pure unadulterated Tchaikovsky" for the film biography The Music Lovers, with Richard Chamberlain and Glenda Jackson. And he was commissioned to write an original score—his first in a decade—for an as-yet-unreleased movie starring his wife. The film, to be called See No Evil for America and probably

Previn can be found conducting almost anywhere these days—as here, at the 1969 Ravinia Festival in Highland Park, Illinois.
**Blind Panic** for Europe, is a thriller about a girl (Mia Farrow) who goes out for a walk, during which time the rest of her household is murdered in an insane bloodbath. She returns and doesn’t know it for some time because she is blind.

The film’s producer is Leslie Linder, best known as part owner of Burke’s and the White Elephant, two show-business-oriented London clubs, and Richard Fleischer (Compulsion, Dr. Dolittle) directed. Previn got a reported $30,000 for the picture and the right to use the full LSO. “The movies pay so ridiculously well that it’s hard not to take their money—and also Mia was in it. I used a synthesizer and wrote what I consider a very good score. Three record companies—RCA, Phillips, and Decca—wanted to record it. But Linder and John Von Eyssen, the head of Columbia in Europe, said they didn’t like it because it had no ‘tunes.’ ‘We need a title tune,’ Linder told me. But I said ‘It’s not that kind of movie. It doesn’t lend itself to tunes.’”

According to Fleischer, the beginning of the film was changed to tack on some “social significance” (film segments of the media portraying violence and the suggestion that the crazed killer may have been influenced by them), but Previn was touring with the LSO and was not immediately available for rewrite. He offered to rewrite in Russia and mail it in, but Linder wanted it in London and right then. It was in Previn’s contract that no one else could work on his music, so they had to get a new score. Linder then hired a British pop composer to do the score. That was thrown out as well, and now Hollywood’s Elmer Bernstein is beginning all over again.

“I’m too old and too spoiled by working with serious music and serious musicians to have to justify myself to illiterates who don’t know about anything but shrimp cocktail. I’ll do a movie again someday, but it will be for a friend or someone I’ve worked with before,” says Previn of the experience. “It’s just not worth that kind of humiliation. Sir William Walton wrote a fantastic score for The Battle of Britain. They threw it all out except for one short sequence, and got somebody called Ron Goodwin in to rewrite it. Unless I can work with Johnny Mercer or Billy Wilder, I think I’ll leave the movie end to Mia, although the scripts she gets these dark movie days I wouldn’t want her to read, much less do.”

Previn is proud of some of his movie work, most recently the different, intricate Valley of the Dolls theme, which he wrote in a room at the Savoy in London and mailed in (he has yet to see the picture) and A Million Miles Away Behind the Door from Paint Your Wagon. But he is genuinely more excited that his and the LSO’s recording of Vaughan Williams’ Fourth is selling well in England, “not as well as the William Walton symphony, but nobody’s more surprised than I am.”

ANDRE PREVIN at forty-two is where he wants to be. In spite of a crushing conducting schedule (107 concerts in 1970), he records as much or more than any other conductor. After several years with RCA he has just signed a new recording contract with EMI in London. It doesn’t preclude his working for another label as guest artist, as conductor, or as an accompanist so long as he does five records a year for EMI, three in repertoire, two in accompaniment. Recordings under the new contract are already underway, with Ravi Shankar’s Concerto for Sitar and Gershwin’s Piano Concerto and Rhapsody in Blue (played and conducted by Previn) to be distributed in the United States by Angel this November. Previn admits to having no particular feeling for the Shankar work, which the LSO premiered in live concert

**Cellist Mstislav Rostropovich was guest soloist when Previn and the LSO appeared on tour at the Budapest Academy of Music.**

Previn’s most recent travels took him to (among other places) Russia, where he conducted the LSO in Leningrad’s Great Hall.
last spring, but notes that a previous record Shankar did with Yehudi Menuhin, "East Meets West," was reportedly the biggest classical seller since Van Cliburn's Tchaikovsky Piano Concerto No. 2. "Indian music has no harmony, no development, and no counterpoint. For the LSO it's a technical exercise only, and it bores them. There's nothing for them to think about."

Previn himself is still composing. His guitar concerto was premiered (by Australian guitarist John Williams) this summer with the LSO, and he wrote the (unused) original film score for Mia's latest picture. He sees no conflict in moving back and forth from the classical music world to that of pop, TV, and the movies, and he is able, through his acceptance in both worlds, to do such things as having Ken Russell, the director of Women in Love and The Boy Friend, direct an opera for him, or having the LSO premiere the first symphony of Hollywood composer and new London resident Johnny Williams (no relation to the guitarist). Previn has undertaken the direction of the South Bank music festival in London for 1972-1974, and plans, among other things, to present Miles Davis in midnight concerts. He wants to conduct the LSO with Julie Andrews as soloist at Albert Hall next Christmas, in a mixture of heavy and light carols.

His musical flexibility thus well established, Previn is no longer known primarily as a refugee from Hollywood, but more as the man who has done more (according to a recent survey) for twentieth-century British music—Elgar, Vaughan Williams, Walton, Britten—than any other conductor, English or American. "My love for twentieth-century British music began as a student, particularly with the Vaughan Williams Fourth [his recording for RCA is reviewed in this issue—see Best of the Month] and the Walton Viola Concerto. I was mad for them then and I'm mad for them now. I'm doing Walton's Troilus and Cressida, and for his seventieth birthday next spring I will do all-Walton programs in Cleveland, Los Angeles, London, and Madrid."

"It's nice to know a man who is doing exactly what he wants to do and doing it so well," says his wife,

**AN ANDRÉ PREVIN SAMPLER**

*Angel Records has recorded, especially for Stereo Review, portions of actual rehearsal sessions of Gershwin's American in Paris and Ravi Shankar's Sitar Concerto with André Previn leading the London Symphony Orchestra. The recording is available only to our readers on a seven-inch, 33⅓ rpm disc. To obtain your copy, send 25¢ to D. McKown, Stereo Review, 1 Park Avenue, New York, N.Y. 10016.*

Through Previn finds conducting from the keyboard "circusy," he has just done so for an Angel recording of Gershwin's Rhapsody.
Mia Farrow. And since conductors tend to have a uniquely longer life span than ordinary mortals—many of them are active into their eighties—Previn plans to go on doing just what he is now doing for another forty-two years. He is working twice as hard as he did a dozen years ago in Hollywood, and making half the money. The soft shirts, silk ties, and expensive sport jackets have given way to tee-shirts, blue jeans, and sneakers. Life in an early eighteenth-century farmhouse on twenty acres of woods and flowers in Surrey has replaced the hothouse existence in Bel-Air.

"I have no particular apologia for my years in Hollywood," says Previn. "I was seventeen, at MGM at the height of the movie industry. I was paid too much money. I wore suede shoes and screwed chorus girls. I defy you to put any seventeen-year-old in that spot and expect him to reject it. The trouble was that I stayed too long. The thing I do now I would do for nothing. When a couple of performances of Beethoven's Ninth really work, that's worth anything to me. There is a certain element among my old colleagues in Hollywood who say 'The poor bastard, he's ruined himself.' That's true only by the Hollywood science-fiction standard of money. The music I work with now is better than anyone's performance of it can be. You can chase it the rest of your life, and every performance will still be a premiere. Therefore you can never be bored or complacent about it—it's a lifetime of challenge. But musicians who work only in films are always better than their material. It's more satisfying to work in a field where creatively—or re-creatively—the material is always better."

PREVIN and his wife are, of course, pop celebrities, which may give the orchestra added show-biz glamour. In the village of Leigh, however, near the low-ceilinged 1723 brick house they bought two years ago, the Previns are a nice, quiet, new American couple. When they moved in, the oldest man in the village brought flowers, as is the custom. Mia's sister Steffi and her husband, artist Jim Kronen, live in a house across the lane from the Previns and are constant companions.

Despite all the years in Hollywood, Previn is still not a recognizable celebrity, mobbed by fans wherever he goes, but he does sign programs outside the architecturally hideous Royal Festival Hall, where the LSO plays most often, for about fifteen minutes each performance night. Mia finds his fans polite compared to the mauling mobs she still sometimes gets from Peyton Place, Rosemary's Baby, and Frank Sinatra days. André gets an average of thirty fan letters a week, "which I would think were a lot if I weren't married to a movie star," and three new scores, all of which are read and virtually all of which are returned. Pop celebrity has given him small advantages ("TWA is nicer to me than to Colin Davis, that's about all"), but André's and Mia's constituencies are very different. "The people who are interested in movie stars couldn't care less about conductors—and certainly the reverse is true."

The Previns have no help except a nanny, and Mia does all the gardening, cleaning, cooking, and ironing. "If he wears a shirt, I look at him and think 'I'll have to iron that,' so I encourage him to wear polo shirts," says Mia. A detached guest house also contains a workroom with piano and recording equipment. The only out-of-place element on twenty acres of beautiful woods and flowers is a California-style kidney-shaped swimming pool put in by the previous owners. Previn would remove it but for the two growing boys, Matthew and Sascha, whose looks and personalities are so different that they don't even seem like brothers, much less twins.

Before André and Mia were married, the sensational press of the world pursued their every move, and photographers even perched in trees on his property. As soon as his divorce from Dory became final and he and Mia were free to marry, the press lost interest somewhat. André commutes to London by train or car, about an hour's ride when he must rehearse or record or conduct. Mia, except for the one movie, which was made in Surrey, has done no acting since she became pregnant, but wants to get back to work. This will mean, with his touring and her location filming, separations of perhaps ten weeks or more a year, which will require incredible organization. "He didn't use to be too organized, but he has to be now, he works so hard," says Previn's daughter Claudia.

André and Mia have found their permanent base of operations, they both say. "I wanted to live here before it was professionally necessary, and if anything happens with the LSO after 1975, I'll still live here and go wherever I have to go from here." Previn once said that he liked knowing what he'd be doing two or three years hence on a given Sunday afternoon. "I still have to be scheduled that far in advance, but I no longer feel either 'hurray,' or 'alas' about it." But, then again, he recently found a slip of paper in his coat pocket that read 'MAY 1978.' He called his London agent excitedly and asked "Who wants me in May 1978?" "You idiot, that's my phone number," came the reply.

Robert Windeler has covered the entertainment world, especially movies and music, for Time magazine and the New York Times. He is the author of a biography of Julie Andrews, and his book about actress Mary Pickford will be published in spring 1972.
Most audio components have shown a steady, gradual improvement in performance over the years. But there have never been any leaps forward to equal the recent advances in the cassette recorder field. Among the latest units one finds frequency responses extending to 15,000 Hz and beyond. Furthermore, the signal-to-noise ratio of the better cassette recorders is comparable to that offered by most good home open-reel machines, and with the addition of Dolby Type-B noise-reducing techniques, the best cassette decks have lower noise than most open-reel machines!

Most of the improvement in cassette sound can probably be attributed to the cassette itself. New tape formulations allow more magnetic energy to be stored in the cassette’s narrow tracks, thus providing a higher output voltage in relation to the inherent noise level of the tape and the electronics. Tapes with fine-grain oxides further reduce noise, and permit recording the very short wavelengths associated with high frequencies and low tape speeds—which is not to say that the new ultra-fine-gap heads did not make their contribution also.

After several years of advance publicity, there are now a number of brands of CrO₂ (chromium dioxide) tape on the market. As contrasted with the usual

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**INTERPRETING THE CHART**

All noise and distortion measurements were referred to a 1,000-Hz signal recorded at the standard 200 nWb/m Dolby level, which is 0 dB on the test machine. Noise was measured over a bandwidth of 22 kHz.

- **Virgin Noise.** This is the inherent noise of the tape after being exposed to an external bulk eraser. It is related to the smoothness of the oxide coating. The higher the figure in decibels, the lower the noise level.

- **Bias Noise.** This is measured after running a bulk-erased tape through the machine set at RECORD, but with no input signal. It reflects both the properties of the recorder’s erase/bias signal and the tape’s own properties.

- **Relative Output.** This is the tape’s output-signal level at 400 Hz from a standard input-signal recording level of ~30 dB. A smaller negative number (or a larger positive number) indicates more playback voltage for a recording signal of given strength, and hence, all things being equal, a better signal-to-noise ratio.

- **THD (Total Harmonic Distortion).** This is the playback distortion from a 1,000-Hz test signal recorded at 0 dB. Since the 3 per cent distortion point is commonly used as a reference for maximum recording level on tape recorders, tapes with lower distortion figures can have more (“louder”) signal put on them before distortion is obtrusive than tapes with higher distortion figures.

- **Frequency Response.** These are frequency-response variations relative to the 400-Hz level, which is arbitrarily designated 0 dB on the response curves. They are an indication of the relative performance of tapes, since many machines are designed to work best with specific tapes, or can be adjusted for optimum performance with tapes of widely differing frequency-response curves. All other things being equal, a lower level of hiss and a more extended high-frequency response are achieved with the extended-range tapes.

- **Peak-to-Peak Fluctuation.** This is a rough estimate of the peak-to-peak variation in output of a 10-kHz recorded tone over a 3-minute period. The variation can be caused by tape coating imperfections (“dropouts”), by varying contact between the tape and the head, or by tape-speed variations. Figures under about 3.5 dB can be considered satisfactory, and those under 1.5 dB are very good. Tapes with a 5 or 6 dB fluctuation have an erratic, rough-sounding output.

- **The Case.** For those who might wish to open their cassettes for editing or repair, this shows the method of cassette assembly. The letter W means an ultrasonically welded case (difficult or impossible to open), while the letter S means a screw-assembled case. A few cassettes have a centering screw but are welded at the edges; these are listed under W.
### COMPARATIVE TEST DATA ON TAPE CASSETTE BLANKS

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<th>Cassette (All C-60's unless otherwise stated)</th>
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<th>Bias Noise* (dB)</th>
<th>Output* %</th>
<th>THD*</th>
<th>Frequency Response (dB)**</th>
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*Noise, output, distortion measurements made with 1,000Hz 0-VU recorded signal (equivalent to standard Dolby level of 200 nWb/m). **Frequency response measurements at -30 VU. 400-Hz level is 0 dB. †Peak-to-peak amplitude fluctuation is variation in 10kHz recorded signal during playback over 3 minute period. Single excursions not considered. ††Shell assembly method: W = welded S = screw assembly.
ferrous oxide tapes, CrO₂ has much higher output at high frequencies. It requires more recording bias and a higher recording level than iron-oxide tapes, and it is more difficult to erase. A recorder for use with CrO₂ tapes must be designed with these requirements in mind. Depending on the manufacturer's intentions, a cassette machine using CrO₂ tape can be designed for an extended high-frequency response, a lower noise level (by using more high-frequency roll-off in the playback equalization), or some compromise between the two.

Equally important, in a cassette, is its mechanical design and construction. Even the smallest misalignment of the cassette structure can cause the tape to jam, spill, or break. Only slightly less catastrophic is the wow-producing drag of a binding tape hub or the varying pressure contact of the tape against the head, which can produce large amplitude variations or "dropouts" in the output.

In addition to different tape formulations and cassette constructions, the cassette's playing time can have a significant effect on its performance. The most widely used type is the C-60, which plays for 30 minutes on each side. A C-60 cassette holds about 300 feet of 0.5-mil tape. The C-30 contains about half the footage of the same kind of tape. To extend playing time, some cassettes contain more tape—and in the same amount of space. Thus, a C-90 cassette holds 450 feet of tape, but it is only 0.3 mil thick. Its magnetic coating is correspondingly thinner also. In general, cassette recorders have their performance specified using C-60 cassettes.

The two-hour cassette—the C-120—has been the subject of considerable criticism. To fit some 600 feet of tape into a space designed for 300 feet, it is necessary to use tape only 0.25 mil thick, with a coating half as thick as that on the 0.5-mil tape. The tensile strength for a given tape base material is likewise cut in half, which places an additional burden on the transport designer. Many recorder manufacturers do not recommend using C-120 tape, since a malfunction of the cassette can thoroughly jam up the mechanism as well as ruin the tape. However, considerable effort is going into improving the C-120 cassette as well as the mechanism's ability to handle it, and we have included one in this survey (we had no problems with it, incidentally).

Our test procedures for the cassettes are described in this month's Technical Talk. (We modeled our approach on that used by Craig Stark in his excellent report on open-reel tapes in the March, 1970 issue of STEREO REVIEW, and we recommend re-reading that article for a useful background on tape performance.) Since a cassette recorder is not as convenient to adjust for optimum bias and equalization as a professional open-reel machine, we had to be satisfied with using recording decks (Advent 201 and Sony TC-160) with known characteristics that we could distinguish from those of the tape itself.

Of the forty standard-brand tapes tested, twenty-four had very similar frequency-response characteristics—typically within ±3 dB up to 14,000 Hz. (The recorder went to 15,000 Hz with many tapes, but we preferred to use an upper limit for our evaluation which would be within the capabilities of all the tapes.) For want of a better term, we called the tapes that fell within these limits "normal." The sound quality, insofar as frequency response is concerned, should be virtually the same with any of them on any given recorder. Below 400 Hz, all the tapes showed identical characteristics, differing only in output level.

Another group of tapes, nine in all, had a rising high-frequency characteristic, beginning at about 2,000 or 3,000 Hz, which reached a maximum of 3 to 7 dB between 10,000 and 15,000 Hz. Obviously these tapes, which we called "extended-range," will sound bright on a machine that is set up for flat response with a normal tape. On the other hand, some recorders are adjusted for flattest response with extended-range tapes, and therefore will sound deficient in highs with a normal tape. In the case of the extended-range tapes, turning down the treble to eliminate the extra brightness in the sound will, as a bonus, get rid of considerable hiss. On the other hand, boosting the highs of a normal tape may produce excessive hiss. In either case, the treble adjustment will have to be made by ear for the best compromise sound.

The differences in performance that can be expected from the same types of tape evaluated on two different machines is shown graphically below. The four categories of tape (normal, extended, etc.) refer to the listing in the table on page 59 rather than manufacturers' descriptions. Note that the frequency curves shown do not tell the full story because cassette-deck manufacturers can (by adjustment of equalization and recording bias) trade frequency response for lower noise or distortion with a specific tape type.
DO YOU remember the kind of jackets long-playing records had when they first came out? Some companies were thick, without spines, or spine titles. A few companies added flaps to keep them out of the dust, but even the sizes of the envelopes varied from manufacturer to manufacturer. A similar lack of uniformity plagues the cassette field today. Although the cassette itself is completely standardized in size and mechanical aspects, there is great variety in packaging.

The most common holder is a sturdy plastic "jewel box," measuring 4 1/8 x 3 3/4 x 1 1/8 inches; the part that acts as a cover is transparent, which permits a program information card to be inserted and easily read. This is the kind of holder in which Scotch, Ampex, Advocate, and several others issue blank cassettes. Most of the manufacturers, including Sony, use a "book-cover" enclosure which Sony employs for prerecorded cassettes, such as RCA, Columbia, DGG, Philips, and Angel also use this one. It protects the cassette itself and prevents the title card from becoming soiled. But it has a few disadvantages: the tiny plastic tabs which hinge one part of the container to the other can on occasion break off, which means spending an uncomfortable fifteen minutes with a pair of tweezers and a tube of plastic cement. Then there is the uncontested fact that the holder simply cannot be opened with one hand alone, which may be important only to motorists. The Memorex package, with a hinge on a single corner, is somewhat easier to open; here, the only problem is how to store your program card.

Another type of plastic container, a one-piece affair with the aspirin-box legend, "press to open" innocently stamped on one end (and not too visibly at that) is an even greater challenge. This awkward model used by Ampex, among others, for prerecorded cassettes, and I find it opening it a two- (if not a three-) handed job. Not only that, but the program information is printed on a one-piece sticker that encompasses the front and three of the sides including the spine. Once the cellophane wrapping is removed, the label corners begin unpeeling.

Irish uses this design for blank cassettes with a label that covers only the front and the spine. It seems to stick more effectively than others, but all outside labels get dirty after a time. Mallory's container is a better than others, but all outside labels get dirty after a time. Mallory's container is a thinner transparent plastic box in which a plastic drawer holding the cassette itself and prevents the title card from becoming soiled. But it has a few disadvantages: the tiny plastic tabs which hinge one part of the container to the other can on occasion break off, which means spending an uncomfortable fifteen minutes with a pair of tweezers and a tube of plastic cement. Then there is the uncontested fact that the holder simply cannot be opened with one hand alone, which may be important only to motorists. The Memorex package, with a hinge on a single corner, is somewhat easier to open; here, the only problem is how to store your program card.

The Handi-Holder, a new plastic, "book-cover" enclosure which Sony uses for its top-of-the-line UHF cassettes, is the easiest to handle, but it leaves the cap-

Among the most impressive plastic containers is the one used by BASF. Designed mainly as a mailer, it would, I am certain, hold its contents secure against all manner of hail and rain, but it measures 3 1/2 x 3 1/4 x 4 1/2 inches, which means that it takes up more room and sticks out beyond all the other nearly standardized packages. A similar problem besets Scotch's mailer.

A variation of the cassette package is the container made like a wooden match box, in which a plastic drawer holding the cassette slides downward with all the ease that gravity and absence of friction-fit can give it, and unless you're especially cautious, the drawer and the cassette wind up on the floor while you stand there holding the holder. Superscope uses this one; Angel tried it—and gave it up.

Although many blank cassettes come in plastic containers, there are just as many that are packaged simply in a cardboard box. Aside from the problem of keeping such containers clean, un torn, and un worn, there are untold labeling difficulties. Capitol's cardboard cassette box bears a floral motif on front and back, leaving no room for titles except on the spine. Sony's regular version is pretty good on the back, leaving space for listing contents, but what do you do about the spine, half of which is black, the other half printed in a green that refuses to accept the ink of a ball-point pen? Or what about Cerron's box, which provides no room whatsoever for information except a letter-front format—"From . . . To . . . "—and a place for the stamp? One solution is to affix your own blank label, and for the spine you can always use an embossed tape if you have a label-maker.

Getting program information onto a limited space also affects prerecorded cassettes. So far, cassettes do not include full librettos, English translations, and program notes, although some companies, notably DGG, London (imports only), and Philips, provide small pamphlets that contain a startling amount of copy.

Most other companies, after an initial period of printing nothing in the way of notes except ads for other releases, have come around to including abbreviated program annotations. One hold-out still is Ampex, whose sole source of information as to content is to be found on the cas sette labels where there is little room for details) and on the pasted-on front cover (this is the one that usually begins to fall off). Here, the copy generally consists of a 2 1/2-inch square reduction of the original 12-inch LP cover, plus, at best, a few lines of type. That's carrying miniaturization a little too far.

SUGGESTIONS for improvement? Well, if a European import label such as DGG can do it, there is no reason why American companies can't supply complete labeling and adequate annotation on prerecorded cassettes. That's the least one should expect for a seven- or eight-dollar price. What about time, for their time to be used and not waste valuable labeling space with advertising. Writing space should be provided not only on the cassette labels, but on the container label and the spine as well.

Finally, once you have acquired a number of cassettes, how do you store them? They don't fit easily on a standard shelf for books or records. I ended up having a set of shelves built to size using quarter-inch plywood; it works beautifully, but it's expensive. Ziff-Davis sells ingeniously designed storage cases for either thirty or sixty cassettes. The larger version fits neatly onto the same shelf as your disc recordings—like a regular-sized album, only 3 1/8 inches wide (see page 121 for ordering information). There are also cassette caddies—round ones, square ones, add-a-section types, and units that sit conveniently next to the driver in a car.

In any case, however you decide to store your cassette collection, you'll notice that the plastic containers all have a set of tabs on the inside which prevent the tape hubs from moving. That's important, I'm told, in order to keep the tape from unwinding. The cardboard containers generally include a plastic or cardboard locktab for the same purpose. Don't make the mistake of throwing it out when you unwrap the cassette.
Three tapes had falling high-frequency responses that began to roll off as low as 1,000 Hz, and were down as much as 8 dB at 14,000 Hz. They were also poorer in respect to distortion and dropouts, and would probably not be suitable for serious high-fidelity recording. For the purposes of this survey, we classified them as "limited range."

Finally, there were the four chromium dioxide cassettes, all of which performed in a similar manner. Since the Advent 201 deck changes the playback equalization for CrO₂, these tapes had a noticeably lower noise level than others on this machine. The signal output from each tape was measured relative to an arbitrary reference input level. In itself this measurement has little significance for the average user. In order to be meaningful, a tape's output level must be referred to the bias noise (the residual noise on a tape that has been "recorded" with no input signal) and the THD (total harmonic distortion). Most of the cassettes had distortion levels between 2 and 3.5 per cent at the 0-dB level. When using a tape with distortion approaching the upper end of that range or beyond, it might be advisable to reduce level slightly, even at the expense of dynamic range. On the other hand, a tape with a distortion of 2 per cent or less could be recorded at a higher level, which would in effect give it a higher dynamic range. These distortion levels should not be given undue weight in an absolute sense, since they apply only to the particular recorder and test conditions used. Some machines will produce somewhat lower distortion on some tapes by sacrificing high-frequency response and signal-to-noise ratio to some degree. The figures are valid, however, for comparing tapes.

The fluctuation in audio output for a constant 10,000-Hz recorded tone varied widely among the cassettes tested. The best of them had less than 1.5 dB peak-to-peak variation, with the average in the vicinity of 3 to 3.5 dB. The worst cassettes showed irregularities of up to 6 dB in their output, and could be expected to sound a bit rough on sustained notes.

The close relationship between the recorder and the tape in determining the overall performance was confirmed by our tests of representative tapes on a second machine, the Sony TC-160. This deck was evidently biased for an extended-range tape, since when the Sony tape was used, its rising high-frequency response was markedly lower than with the Advent machine. On the other hand, the Norelco 200, a normal tape with exceptionally flat response on the Advent 201, showed a high-frequency roll-off beginning at 4,000 Hz on the Sony.

The response of the Sony machine with chromium dioxide tape was an excellent illustration of the different design philosophies of the two recorders. Sony changes only the recording equalization (and the bias, we assume) for chromium dioxide tape. As a result, the signal-to-noise ratio was actually slightly poorer with CrO₂ than with standard tape, but the high-frequency response remained strong up to 17,000 Hz. With the Sony tape, this machine had a response to 14,500 Hz.

**HOW TO USE THE TEST DATA IN SELECTING TAPE**

There is obviously no tape that is "best" for all cassette decks. Usually, a recorder manufacturer will recommend one or more tapes that will deliver his rated performance. For example, if your recorder is designed for use with BASF tape, you can assume that it will sound somewhat "bright" with Maxell Ultra Dynamic or Ampex 362 (although, as we mentioned before, amplifier tone controls can frequently correct this). The reverse is equally true. If, for example, you found the sound too bright with the recommended extended-range cassette, a switch to one of the better normal types could improve it.

A tape with a high degree of dropout will sound "rougher." It may still be suitable for speech recording, but don't expect it to do justice to your serious music recording efforts. The distortion figures are a rough guide to how strong a signal you can record on a given tape. Since not all recorders operate at the same flux levels, and meter calibrations vary, this can be no more than a guide—you will have to experiment to determine how meaningful the "0-VU" marking is for a given tape type. Let your ear be your guide. Incidentally, don't expect anything from low-price private-label or unbranded tapes. We tested an "87-cent" unbranded tape whose manufacturer apparently (and, as it developed, justifiably) preferred to remain anonymous. It fell squarely in our limited-range category, with a high noise level and dropout amplitude. *Caveat emptor!* On this same question of cost, no prices are shown for the cassettes tested because special deals frequently result in substantial price variations.

Finally, keep in mind that these tests were made on a single sample of each tape. Normal variations, for better or for worse, can be expected with any mass-produced item. Such variations could easily wipe out the differences between tapes that checked out as closely similar in our tests. If a manufacturer or brand name you are familiar with does not appear in the data table, it is no reflection on the product concerned, it means only that a sample of the tape failed to reach us in time for inclusion in the survey.
WHAT CAUSES CASSETTE MALFUNCTION?

By Ralph Hodges, Associate Technical Editor

The five-year romance between the music lover and the Philips tape cassette has been turbulent. The long list of brand-name tapes tested this month by Julian Hirsch shows how quickly the new format has gained devotees—and manufacturers to supply them. Yet, although cassettes and their players have served as the initial proving ground for numerous design innovations and advanced tape formulations, the question that is often uppermost in a cassette-user’s mind when he tries a new cassette is not how well it will play, but whether it will play at all. And if it plays once, will it play again?

The history of a typical cassette failure is easily documented. The moving tape begins, for any number of reasons, to wind unevenly on the take-up hub, building up against the top or bottom shell of the cassette, or both. As the tape pack grows, the constant torque of the take-up mechanism becomes less and less able to cope with the friction, and the once-smooth rotation of the take-up hub may change to jerks and spasms. If there is hesitation for a moment too long, the tape moving past the capstan, with no place to go, curls into the cassette machine itself and is ultimately captured and ensnarled by the rotating capstan and idler.

Or perhaps the cassette makes it through side one. When it is flipped for side two the loose and raggedly wound take-up pack is then the supply pack. In some cases the cassette may actually play for a short time without the supply hub’s turning at all; the take-up hub is simply winding up the slack in the supply section. But, as the coils of tape tighten around the stationary feed hub, the whole assembly binds, and the music comes to an abrupt halt.

A major difficulty faced by both consumer and manufacturer of cassette hardware and software is assigning blame when a cassette fails. Is the machine at fault, or is it the cassette itself? All cassettes must have some internal friction. Since the supply hub is free-wheeling during record and play, the drag of the supply pack is the only thing that keeps the tape taut across the erase head. But what the designer of cassette players and recorders must know is how much internal friction the cassette will have, and over what range it will vary from one end to the other when played. On the other hand, the cassette manufacturer must try to discover how his product is treated by the machines used to play it, and what he can do to make their association a happy one.

Many of the largest suppliers of blank cassettes in this country set up business here two years ago or less, which is not much time in which to evaluate a product that should—one hopes!—have a life expectancy of at least several times that. Still, reports have been coming in—from company-sponsored laboratories testing their own and competing products, and from retailers in the field with rejects on their hands. These reliability reports are a long way from being codified data, corroborated by all the other sources manufacturers can and should draw upon. Some common factors are emerging, however, particularly in the area of standards, where there is a growing demand for precise specification of cassette friction. Ampex, this nation’s largest producer of cassettes and a major supplier of cassette recorders and players, will henceforth advise against the use of C-120’s and C-90’s in their machines. It seems that the many layers of thin tape introduce complications difficult to control (a company spokesman reports that the chance of cassette failure rises almost exponentially as playing time increases). Some of the other controversial factors in cassette design are discussed in the box on the next two pages, together with a few tips on choosing and living with cassettes.

But what of the lesser difficulties that plague cassette users, such as wow and flutter (caused by excessive friction or improperly controlled manufacturing tolerances) and signal dropout (caused by tape misalignment with head, faulty tape coating, etc.)? Many of these are minor manifestations of problems mentioned above. Others are traceable to the tape itself, and still others are certainly the fault of the cassette decks and players. Physical disparities between the cassette and the transport mechanism continue to occur, along with other incompatibilities.

If causes for cassette malfunction are being positively identified, cures cannot be far off. Next year we may have to worry about how many failures per month a manufacturer will tolerate when determining his product’s acceptibility. This year, however, the emphasis is on the best possible cassette performance, sonically and mechanically.
The plastic shell that encloses the working parts of the cassette is as important to its proper functioning as any other element. Check the external aspects of any cassette that gives you trouble. Are the openings along the tape path well and cleanly formed? Do the shell’s two halves meet all around the edge, and is their alignment good? Sloppy exterior detail, which can cause problems in itself, may reflect poor internal design or workmanship that will interfere directly with tape movement. In addition (unfortunately there is no way to check this by eye), the plastic material of which the shell is formed should be free of internal stresses and stable under extremes of temperature such as will likely be encountered in cars or out-of-doors.

The tape pack, smoothly wound in this photograph, may not always be so. Frequent fast-forwarding or rewinding while searching for a specific tape selection will sometimes result in a ragged “wind” on the pack. This, in turn, will permit the misaligned turns of tape to rub against the inside surfaces (top and bottom) of the cassette.

The liners or slip sheets are the cassette’s hedge against tape-pack friction. They can be made out of low-friction plastic, a material that has been coated with a lubricant such as graphite, or some other specially treated substance. The liner is frequently designed to have a slight curl or fold line to provide a flexible cushioning support for the tape pack and to reduce the tape-liner contact area. Accumulation of static electricity on the tape has been attributed to some types of liners. The constant rubbing of plastic tape against plastic sheet can produce static charges that may not cause mechanical trouble, but can discharge at the head, introducing crackling noises during playback.

Guide rollers have now replaced stationary guides in most premium cassettes, since they are said to cause less tape-path friction. A few manufacturers have put flanges on their rollers—some of these are beveled, some not. In addition, some of the guide rollers are spring loaded for precise centering, and some are not.

The pins on which the guide rollers turn are sometimes made of stainless steel and held in place by opposing holes in the plastic shells. Other cassettes use plastic pins that are an integral part of the molded shells. The stainless-steel faction argues that plastic-roller to plastic-pin friction is too high, and that the parts are also subject to all the imprecisions of the molding process. The
plastic enthusiasts reply that the steel pins can easily be misaligned when they are inserted during final assembly. With premium cassettes particularly, quality control plays as big a part as design theory in this area.

6. The pressure-pad assembly presses the tape firmly—but not too firmly—against the record/playback head so that good tape-to-head contact can be achieved. A felt pressure pad mounted on a beryllium-copper spring that is clamped between the shells in the cassette's head opening is often used. Other designs employ foam-plastic blocks instead of metal. But whatever the design, if the pressure-pad assembly does not resist deformation caused by the sidewise pull of the tape, signal dropouts or loss of response during record or playback may occur.

7. The metal shield, located just behind the pressure pad, isolates the record/play head from stray magnetic fields that could induce hum during playback. The shield is most frequently flat, although a cupped shield that surrounds the whole head-gap area is shown here.

8. The tape hubs are usually made of Teflon or some similar low-friction material. The means used to clamp the tape to the hub should not introduce a crimp in the pack at the clamp point. The six small pins around the inner circumference of the hub engage the cassette machine's spooling shafts. The hub should turn freely, have a reasonable amount of play laterally, and a very small amount vertically (excessive vertical play can result in uneven spooling—see 2 above).

9. Self-tapping screws hold the shells of some cassettes together. This, in our view, is the preferred means of construction, because a screw-fastened cassette that has jammed can be opened so that the user can at least attempt to put things right. The favored (and faster) method of cassette assembly, however, is sonic welding of the shell's plastic edges. There is nothing inherently wrong with this technique, provided the materials, the design, and the execution of the design are compatible with it.

As may be gathered from the foregoing, there are disagreements among manufacturers of quality cassettes as to the best way to design some of the mechanical aspects of the cassette's internal mechanism. The choices as to the type of guides, slip sheets, pressure pads, and so forth will continue to be diverse, simply because they all seem to work equally well, and each manufacturer has an investment in machinery constructed for his particular approach.
DOUG KERSHAW
—The Bayou Paganini

By MIKE JAHN

DOUG KERSHAW in New York is about as comfortable as a bullfrog in a crystal ballroom. Sitting in a room overlooking Seventh Avenue, killing time between newspaper interviews and a TV taping, he points out the window. "Last night I went walking down the street here," he says. "All these people! And this was the first time I've ever really stopped and looked around. It almost scared me, you know, because this is a swamp to me. Now my swamp I know."

Kershaw's swamp is of the authentic kind—not, as he says, "a Walt Disney swamp." He was born January 24, 1936, in Tiel Ridge, Louisiana, and grew up on a houseboat. He had four brothers. Every morning he watched his father, a fisherman and trapper, get up and go fishing so the family could eat. Kershaw wrote about it in a song called Louisiana Man, which since its first appearance in 1960 has been recorded, he claims, by 850 or so performers. Kershaw has written a large number of songs, and he plays twenty-nine musical instruments. He has appeared on many TV programs, made several records of note, appeared in the film Zachariah, and written a book of reminiscences due for publication in October. Wearing velvet suits and dancing as though his legs were made of rubber bands while playing fiddle and singing about alligators, frogs, snakes, and swamp things in general, he has become perhaps our best-known spokesman for the Cajun life of Louisiana.

Kershaw calls his songs, such as Louisiana Man, "American" music—Cajun with bluegrass, country, and other influences. The Cajun people were French settlers (Acadians) who were exiled from their homes in Nova Scotia and finally found new ones in Louisiana. Kershaw (Kasha a few generations back) is descended from one of the original Cajun families.

"Anything I write or sing, I do in Cajun music because I'm a Cajun. But being an American Cajun, I have the influence of a lot of other things." Kershaw's family spoke only French, and even today his mother speaks very little English. His father, who committed suicide when Doug was seven, didn't speak any. "The first English song I ever heard on a juke box was Rainbow at Midnight by Ernest Tubb. I couldn't understand a word he was saying, but I had to learn it."

After the death of his father, the family had to look for some other means of support. His mother took in laundry, and the boys did what they could. It had always been a musical family, but until that time none of them had performed professionally. Doug started shining shoes and one day decided to take his fiddle with him. "I realized about two or three hours later that there was a lot of people around me listening to my fiddle playing. They wanted me to keep playing. So I said, 'The only way I'll play is if y'all let me shine your shoes,' and I wound up making $10.20. I brought it back home, and we cried and ate beans and everything.

"I can remember after I shined shoes and played fiddle, my mother (of course she didn't let me go by myself, I was too young) would play guitar with us. We'd play a little club in Lake Arthur, Louisiana, called the Bucket of Blood, and that was exactly what it was—screaming wild around the bandstand, and the beer bottles, and people would hit you. That was when I was about seven or eight years old."

His mother played guitar, and his three brothers took turns on guitar, accordion, and drums. Doug played fiddle.
After discharge in 1960, nothing much happened for a few years until the mid-Sixties, when Doug went back to Nashville and started recording again. He signed with Warner Brothers Records, which had become one of the hot labels for pop music, and was invited to join the Johnny Cash Show, both the TV program and the traveling show. The phenomenal success of *Louisiana Man* fairly ensured his career. TV exposure didn’t hurt, either. On stage, Kershaw jumps about so wildly that he was once advertised as “The Ragin’ Cajun.”

Since he became successful, a few odd things have happened. Shortly after his father died, his mother sold the houseboat that was their home for thirty dollars. “Five months ago,” Doug said recently in his New York hotel room, “this guy from Louisiana comes to Nashville and says he has seen me on television. He said, ‘I’ve come here to do something I have to do. I’ve come to give you your houseboat back.’ He’s the one who bought it. He gave it back for nothing. It’s still in the same place where my father killed himself, a place called Lowery, Louisiana.”

Kershaw now lives in Nashville with his wife Elsie and two sons. Mrs. Kershaw, a clothing designer, makes his velvet costumes and runs a custom clothing store, House of Kershaw, in Nashville (“right next to the Columbia studios”). Does he ever intend to live in Louisiana again, since he thinks and writes so much about it? “No, I’ve got it just the way I want it in my mind. I don’t want to disturb that. If I go back I may do it like I used to, ignore it. If you live in Niagara Falls, pretty soon you take it for granted.”

His mother, who remarried a few years ago, still lives in Louisiana, a few miles from Lowery, where the old houseboat is. “I bought her a house one time, in 1961. Thought I would move her to the other side of the tracks. I brought her there and showed her the place, and said ‘Mama, what do you think of the house?’ She said, ‘What for?’ I said, ‘To live in.’ She said, ‘And leave my neighbors?’ So I sold it and forgot about it. I think it’s beautiful that she wouldn’t leave her neighbors. She’s safe. It’s her world. I wouldn’t disturb it. Her biggest wish, when her husband retires this year, is to build a new houseboat. They’re going to live on it and fish. That’s all she’s ever known.”

DOUG KERSHAW was in New York City recently being the Ragin’ Cajun. He left a week’s engagement at The Bitter End after one night—and some disagreement with the management. (The management of a New York City folk club has to be cautious when dealing with somebody who learned his trade at the Bucket of Blood.) And he was traveling alone, carrying his amplifier and instruments himself, probably the only star who doesn’t have at least one attendant or road manager. “I found they got heavier than the instruments. They carried my checkbooks. You really have to earn my distrust, but for a few thousand dollars you can do it quick.”

As for his book, which Macmillan is publishing, he seems rather happy about it. “There’s some songs in it. I guess you could call it philosophy. Everybody has thoughts that occur to them. If you go to thank God for that thought, and get down on your knees, you might forget it. But if you write it down and then get down on your knees, you’ve got ‘em both.” He’s been writing ‘em down for a while—reminiscences, thoughts, Cajun philosophy. He wants to call the book *American Cajun*. His editors, he says, want to call it *Louisiana Man*. He might let them. “That’s their business,” he says. “They know how to sell books. I know how to sell a performance.”
THE impressively assembled array of audio equipment that dominates the living room of Roland A. Le Mire in Manchester, New Hampshire, is, surprisingly, easily movable. Mr. Le Mire designed and constructed the unit of 3/4-inch plywood, then covered it with walnut Formica. Measuring 8 x 7 x 2 feet, it is mounted on six heavy casters which not only make it easy to shift about the room, but simplifies access to the equipment for adjustment and repair, considerations often overlooked in many an otherwise well-thought-out installation.

Located to either side of the ornamental electric clock (handy for taping operations) are Mr. Le Mire's two main speakers, AR-3's. A Fisher 600-T receiver set flush with the unit's Formica facing is flanked on the left by an antenna rotator and on the right by a small high-intensity lamp useful in making front-panel adjustments. Just below is a rectangular niche containing a Garrard Lab 80 automatic turntable with Shure M80E Gard-a-matic cartridge. A frosted-glass light panel overhead within the niche provides illumination. Two Ampex 2001 microphones are housed in the smaller compartments flanking the turntable. The tape deck at right is also an Ampex, Model 2150.

The neat symmetry of Mr. Le Mire's design is continued in the placement of the Zenith Command 600 color television set at bottom-center. It is bracketed by two cabinets that provide storage space for records and tapes as well as the switch panels controlling two AR-2ax speakers in the basement playroom and a JBL LS9 Festival patio speaker. The flaw in the symmetry at left center may be soon resolved: Mr. Le Mire is considering adding four-channel equipment.

A former professional musician, Mr. Le Mire has given up the grueling life of a traveling tenor saxophonist for work as a machinist with a Manchester firm. His musical tastes run from jazz to popular music of past and present.

—Paulette Weiss
VAUGHAN WILLIAMS' FOURTH IN A SUPERB PERFORMANCE

André Previn and the LSO pass the halfway mark in their cycle of the composer's symphonies

Once again, as with the "Sea" Symphony, André Previn and Sir Adrian Boult have put us in the happy position of being able to choose between two magnificent accounts of a Vaughan Williams symphony. Or rather, so far as I am concerned, of not being able to choose: both performances, though different in detail, are so good that I would not want to be without either. Boult's Fourth, of course, has been available since early 1969, but Previn's has just now made its entry into the domestic catalog on the RCA label.

There have been other recorded performances of the Fourth: Bernstein's for Columbia is a powerful one and still in the catalog, but it is spoiled by some self-indulgent tempos, by a breathless rush through the Epilogo fugato that hammers home the last nails in this vehement symphony, and, comparatively speaking, by unimpressive recording quality. The versions by the composer himself and by Dimitri Mitropoulos—as well as Boult's older mono recording on London—are all at present unavailable in the United States. The decision thus lies between Boult's Angel disc and the new one by Previn, and it might well be made on the basis of their respective couplings—RCA offers the composer's attractive Violin Concerto in a fairly good performance by James Buswell, whereas Angel's filler is the pleasant but less substantial Norfolk Rhapsody No. 1. (RCA, by the way, has had the wit to put the short-work at the beginning of the disc, so that you don't have to jump up at the end of the symphony to take the pickup off. I wish record companies would do this more often.)

Still, apart from such matters, there are some specific points that can be made for and against the two versions of the symphony. Boult is faster in the first movement—he has, interestingly, speeded up his interpretation since the earlier London recording, and in the process has brought it closer to Vaughan Williams' own rather hell-for-leather treatment. Previn, by contrast, holds exactly to the metronome figure in the score (dotted half-note = 96). He thereby adds a touch more of dignity, yet loses nothing in overall dramatic impact, and he is helped by an outstandingly good recording, with particularly strong and vivid timpani.

Boult is a shade firmer in the last four measures than Previn is.

I prefer Boult's tempo in the Andante moderato; it is closer to the metronome marking, and flows better. In this movement, the New Philharmonia violas give Boult some especially lovely playing, and two passages of antiphony between first and second violins (just before Figure 5 and again before Figure 12, for those who have the score) demonstrate the value of Boult's classical orchestral layout, with first violins on the left and second violins on the right. But Previn gets better as the movement unfolds: he holds the pulse more firmly at the climax,
and he fades the closing flute solo out exquisitely.

In the Scherzo, Previn’s grip on the tricky shifting rhythms seems to be a little firmer than Boult’s. He is more faithful to the score, too, in the Beethoven-Fifthish transition to the finale—here Boult holds the tempo back in the interest of increased tension, but consequently has to juggle the beat slightly when the finale actually begins. Throughout the rest of the finale the honors are fairly even. I am not sure whether Previn is right to play the brief reminiscence of the slow music from the end of the first movement more slowly here than at its first appearance—the metronome figure at the two places is identical, and Vaughan Williams even added a qualifier (non trop-po) to the Lento the second time; Boult’s more ongoing treatment fits better into the prevailing hectic context. Previn is clearly opting for a sharper contrast, and the unflagging drive with which he conducts the rest of the movement certainly enables him to achieve it.

Incidentally, the very clarity with which producer Peter Dellheim has recorded the LSO’s splendid timpanist reveals a small mistake in this finale: just before Figure 5, the player gets a measure ahead for four bars, but he corrects himself quickly and no serious damage is done. I would not be surprised, since the playing of this passage is so full of life and color, if Previn were aware of the error but decided to let it go rather than put it right at the expense of inserting a less exciting take. If so, I applaud his decision, and, at any rate, the blemish is infinitesimal in the context of this worthy addition to a distinguished series.

Bernard Jacobson

VAUGHAN WILLIAMS: Symphony No. 4, in F Minor; Concerto, in D Minor (Concerto accademico), for Violin and Strings. James Buswell (violin); London Symphony Orchestra, André Previn cond. RCA LSC 3178 $5.98.

JÖRG DEMUS: building another musical landmark?

ROBERT SCHUMANN AND SOPHISTICATED SIMPLICITY

Musical Heritage Society presents Jörg Demus in a remarkable introduction to the complete piano music

I MUST admit that I approached the Musical Heritage Society’s new three-record album of the piano music of Robert Schumann with great misgivings. Point one: I detest compendiums. Point two: in the light of Schumann’s ‘finale’ in an insane asylum, the album title “Schumann and the World of Child-
just these qualities in mind. As he remarks in his liner notes: "It was a few years ago that I finally resolved to learn and record all the works of Robert Schumann. At first I was somewhat afraid since all of Schumann's music is extremely complex and some of his works stretch playability to its limits . . . . But I must say that my enthusiasm still increased in the course of the great task of studying this music. The reason was the great quality of even the smallest, the least known and almost forgotten piano piece of Robert Schumann."

This appreciation of things large and small, and their relationship to each other, is perhaps the most crucial factor in approaching Schumann's music, whether you are pianist, critic, or listener. For Schumann, a single tone was an important musical event. If he put two of them together, it was a beginning. If he put three together, it was a phrase, or a phrase on its way. And it mattered little, seemingly, whether he was writing music for children to play, or music for adults to play and listen to while remembering their childhood. The same internal laws obtained. It is an astonishing revelation in these performances that even the pieces we have all heard (or played) countless times in the guise of "simple pieces for piano lessons" are highly sophisticated and elegantly composed. They fit seamlessly into the context of Schumann's music as a whole. How's that for bridging any "generation"—or "intellectualuity"—gap? Robert Schumann seems to have had instinctive command of a concept only the best creative artists are able to arrive at—sophisticated simplicity.

Lester Trimble


THE IMPERISHABLE LENA HOREN

Buddah's new "Nature's Baby" is an astonishing demonstration of versatility in contemporary songs.

Ah, yes, this is some kind of woman. I mean, for God's sake, my mother and father used to dig Lena Horne, and here she is, still with us, Nature's Baby (that's the title of her new Buddah album) singing new tunes with more understanding of their rhythmic and emotional subtleties than performers half her age—maybe even a third her age.

Sure, Lena Horne has always had a reputation as a consummate professional, she's always been a gorgeous creature, and she's always managed to maintain the musky essence of her style no matter what the changing winds of pop fashion have brought. But let's face it, tunes like Leon Russell's A Song for You, Paul McCartney's Maybe I'm Amazed, Elton John's Your Song, and Gene McDaniels' Nature's Baby (to name only a few) demand a musical versatility that would be rare in a contemporary of these various composers but which is absolutely astonishing in a woman of Miss Horne's seniority.

I don't want to be so indelicate as to suggest that the principal fascination of this recording is Lena Horne's staying power. Because the fact is that after you listen to it you won't give a damn how old she is; you will be too caught up in the delicate sensitivity, the hard-driving swing, and the plain old strutting, down-home drive she uses to bring these songs alive. Everything works beautifully. The arrangements are great, the occasional moments of Donny Hathaway's...
JOHN SEBASTIAN:
gentle, whimsical,
and irresistible

piano are super, the production is outstanding, and
the recording has the electric presence of a "live" date. Stick around, Lena; we still need you.

Don Heckman

LENA HORNE: Nature’s Baby. Lena Horne (vocals);
unidentified orchestra and chorus; Donny E. Hathaway,
William Eaton, and Robert Freedman, arrs. Feels So Good;
A Song for You; Maybe I’m Amazed; Being Green; Your
Song; Mother Time; I Wouldn’t Have You Any Other
Way; Only the Moon and Me; More Today than Yester-
day; Think about Your Troubles; Nature’s Baby. BUD-
DAH BDS 5084 $5.98, ® M 85084 $6.95, © M 55084
$6.95.

WHAT’S “CHEAPO-CHEAPO”
ABOUT JOHN SEBASTIAN?

I’ve never quite been able to decide whether I
think John Sebastian can sing well or not. He
seems to have two voices—one a soft, country-nasal
anonymous puff, and the other hard and brassy, as if
some overtone has taken over the fundamental. But
one conclusion I have reached is that John Sebastian
is an extraordinary entertainer. He’s such a pleasant,
gentle, whimsical fellow that few can resist him, and
a "live" album such as his latest ("Cheapo-Cheapo
Productions Presents . . .") for Reprise proves the
point—it is obvious that the audience was having a
marvelous time.

Sebastian has recorded here many of the songs re-
quested by his happy audience—several old rock-
and-roll songs from the Fifties and snippets of still
others. There are also three of the finest songs that
he (or anyone else) has written in recent years—
Younger Girl, Darlin’ Be Home Soon, and Younger
Generation, which boast these uncanny lines: ”And
then I’ll know that all I’ve learned my kid assumes/
And all my deepest worries must be his cartoons.”
Almost off-handedly, Sebastian has written by far the
most insightful generation-gap song I’ve heard.

He also has quite a background in country music.
Did you know he wrote Nashville Cats, the one that
starts, "There are thirteen hundred and fifty-two gui-
tar pickers in Nashville. . ."? He also does some fair
yodeling on Jimmie Rodgers’ Waiting for a Train. I
could go on, but you must experience this fellow’s
work yourself to appreciate what a warm, friendly
person he is and how he makes people feel so good
they forget to check whether he’s talented.

Noel Coppage

JOHN SEBASTIAN: Cheapo-Cheapo Productions
Presents Real Live John Sebastian. John Sebastian (vo-
cals, guitar, harmonica); various musicians. Mobile Line;
Lovin’ You; Fishin’ Blues; Younger Girl; Make up Your
Mind; In the Still of the Night; Blue Suede Shoes; Waiting
for a Train; My Gal; Amy’s Theme; Irene; Rooty-Toot;
Nashville Cats; Younger Generation; Darlin’ Be Home
Soon; Blues for Dad & JBs; Happy Harmonica. REPRISE
2036 $5.98, ® M 82036 $6.95, © M 52036 $6.95.

STEREO REVIEW
Choosing the wrong cartridge for a record player is like putting low octane gas in a high-performance car.

Here's how to choose the right cartridge.

Matching stereo cartridges to turntables and record changers is as important as putting the right kind of gas in your car. Low octane gas just won't work in a high-performance car. And high octane gas in an economy car is a waste of money. It's the same with cartridges. In fact, a cartridge that's great for one system could be disastrous for another.

So, we've developed a simple way for you to precisely match one of our XV-15 cartridges to whatever kind of record player you have or plan to buy. It's called the Dynamic Coupling Factor—DCF for short.

DCF is a numerical index, like an octane rating, that our engineers have assigned to the XV-15 cartridges by pre-analyzing all the electrical and mechanical specifications of all major record changers and turntables. The more sophisticated the record player, the higher the DCF number.

But how we devised the DCF rating system isn't as important to you as knowing what it does. Using our DCF chart to choose your XV-15 makes sure that you get optimum performance when you play your records. And that you can walk into your high fidelity dealer and know just which XV-15 to ask for.

After all, you don't just drive into a gas station and ask the man to "fill 'er up", do you?

Cut out this handy DCF Guide. Use a Pickering XV-15 cartridge with this DCF Number

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Elliptical styli, because of the way they rest in the record groove, track with less radius distortion, and therefore are capable of playing records in good condition with less overall distortion.

Spherical styli are more rugged and can be used with higher tracking forces.

CIRCLE NO. 41 ON READER SERVICE CARD
Some of the most serious conductors and musicians of our time present five of the most enjoyable albums of the year.

E. Power Biggs Plays
Bach in the Thomaskirche
Passacaglia and Fugue in C Minor
Prelude and Fugue in C Major
Toccata and Fugue in D Minor
Prelude and Fugue in G Major

SZELL CONDUCTS HAYDN
SYMPHONIES NO. 97 IN C,
AND NO. 98 IN B FLAT
THE CLEVELAND ORCHESTRA

Pinchas Zukerman
Wieniawski: Violin Concerto No. 2 in D Minor
Kabalevsky: Violin Concerto
Bloch: Nigun from "Baal Shem"
The Royal Philharmonic Orchestra
Lawrence Foster Conducts

STRAVINSKY CONDUCTS:
TANGO/PRELUDIUM
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THE COLUMBIA
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Rumanian Rhapsody
Leonard Bernstein
New York Philharmonic
Liszt: Hungarian Rhapsodies Nos. 1 and 4
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Brahms: Hungarian Dances Nos. 5 and 6
and more

Magnificent enjoyment from Columbia Records.

Also available on tape
BACH, C.P.E.: The Israelites in the Wilderness. Sylvia Geszty and Catherine Gayer (sopranos); Ernst Haefliger (tenor); Hermann Prey (baritone); Berlin Academy Chorus, Berlin Radio Symphony Orchestra, Mathieu Lange cond. DEUTSCHE GRAMMOPHON ARCHIVE 2708 021 two discs $13.96.

Performance: Excellent
Recording: Excellent

Time and again, as I listened to this first recorded representation of an oratorio by one of Bach's most famous sons, I was reminded of the British musicologist Basil Lam's devastating but exact comment on the work of a rather overrated composer: "C.P.E. Bach's paradoxes are the too-easy surprises of a style where anything may happen." Die Israeliten in der Wüste ("The Israelites in the Wilderness") might not unfairly be described as classical music for people who don't like classical music. The composer's spectacular but unruly talent frequently manifests itself in a disregard for accepted principles of tonal and melodic organization that must, to those impatient of such principles, appear refreshingly bold and forward-looking. But it is only when principles are degraded—usually by theorists after the event—into mechanical rules that they lose their validity. The great composers break the "rules" all the time, but they always put something new, some fresh reinterpretation of the principle, in their place. C.P.E. Bach's weakness is that he usually seems to be flouting principles for sheer devilment's sake.

Thus the listener is constantly coming upon chromatic colorations that add a degree of superficial "affect," but without the poise that Mozart's equally poigniant chromaticism always preserves. He is titillated by irregular-phrases that remain at the level of mere anomaly, and, unlike Haydn's dislocations of the expected, never go on to explain themselves, or is brought up short by abrupt key-changes as striking as Beethoven's but far less logical.

It is to these composers, rather than back to the fundamentally different music of his father Johann Sebastian, that Emanuel Bach's Die Israeliten, published in 1775, points—for he certainly was, in his way, a forward-looking composer. But if he was revolutionary, it was in the manner of certain elements in today's body of music; he was a revolutionary without a program. And the incoherence of the result, though at first glance it may evoke the idiom of Haydn's great oratorios or of Mozart's Masonic music, is really closer to the cloying novelty of a sort of naughty Mendelssohn, or to some unimaginably expanded edition of Mozart's Musical Joke.

From a historical point of view it is an excellent thing that the work should be available on disc, and it is attractively done, with just the right galant flavor, in this Berlin performance. The choral and orchestral contributions are strong, and most of the solo singing is splendid, though Catherine Gayer's appealing timbre is undermined by shaky vocal production. If you are not much concerned about creative discipline, or if the end of Handel's Israel in Egypt leaves you breathlessly wondering what happens next, the droopy beauty of this music will have its appeal. But the difference between Handel's piece and C.P.E. Bach's is the difference between the golden and the silver age.

B.J.

EUGENE ORMANDY
A capable, old-fashioned Bach St. John

BEETHOVEN: Mass in C Major, Op. 86. Elly Ameling (soprano); Janet Baker (mezzo-soprano); Théo Altmeyer (tenor); Marias Rinszler (bass); New Philharmonia Chorus and Orchestra, Carlo Maria Giulini cond. ANGEL S 36775 $5.98.

Performance: Spirited
Recording: Big-scale

Beethoven's C Major Mass is a curious work, full of inventions and ingenuities, extraordinary juxtapositions of seemingly unrelated elements, unexpected references to the past, fugal, modal or otherwise, sensational beginnings without endings, fugues that never get off the ground, abrupt transitions, insights that come out of nowhere, and more throwaway lines than any "major" classical work that I know. Next to the most outrageous eccentricities are moments of the deepest and most intense feeling. We might well echo the bewildered Prince Esterhazy, who, after hearing the first performance of the new work he had just commissioned, was heard to say the composer, "My dear Beethoven, what is this you have done now?"

In spite of all that, the Mass in C is a work that Beethoven lovers eventually must come to grips with—but preferably in some performance other than this one. Giulini takes this extraordinary work on a superficial operatic level,
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We make 303AX speakers for fussy audiophiles. Each one is crafted by hand and contains a two-way acoustic suspension system that’s accurate enough to please even the most discriminating listener. The ADC 303AX lacks the distortion and coloration often found in speakers in its price range. Which makes it a superb value in a full-sized bookshelf speaker.

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RECORDING OF SPECIAL MERIT

BEETHOVEN: String Quartets, Op. 18, Nos. 1-6, Juilliard Quartet. COLUMBIA M3 30084 three discs $17.98.
Performance: Excellent
Recording: Very good

Here is a late entry in the Beethoven Bicentennial Sweepstakes, but one that is nonetheless welcome despite its tardiness. The Juilliard Quartet, though generally admired, has something of a reputation for technical and ensemble achievement at the expense of soul. Everyone forgets that the Budapest (the Brackets) Quartet once had just such a reputation (the classical-music audience does not have much longer memories than the pop)! The Budapest Quartet matured—and so has the Juilliard. This is a happy and rewarding musical evolution, because the group retains its sense of ensemble, its care in matters of dynamics, articulation, and phrasing, and its sense of larger structure, while at the same time it enriches the flow of the music with a more flexible time sense. For some reason, flexibility is least applied where one would have expected it to be most apparent: in the C Minor, No. 4. Perhaps they are wary of the common fault of over-romanticizing this piece, which is here treated in a quite classical style. On the other hand, Nos. 1, 2, and 3 and, to a lesser degree, Nos. 5 and 6, are beautifully and flowingly proportioned. This is the kind of near-perfect realization that makes one forget the playing for the music. Ditto the recording. Here is Beethoven studied and treated with respect but with no sacrifice of flexibility, warmth, and inner drama.
E.S.

RECORDING OF SPECIAL MERIT

Performance: Superb
Recording: 1944, noisy

The most amazing fact about this performance is that it took place at all. Turnabout offers us no information about the circumstances of the recording, except that it was made in 1944; it seems astonishing that a performance of Beethoven’s “Pastoral” radiating such exquisite and profound meditative calm could have been produced in what must have been close to the apocalypse of the Third Reich. Leaving such considerations aside, I can only report the highest enthusiasm for the beauty of the performance, the highest realization of Furtwängler’s expressed ideal of the unity of spiritual feeling and architectural balance. It is almost literally true that no one performs this music this way any more. Furtwängler conducts rubatos and the musicians follow him with a remarkable unity of purpose and without any sense of calculation or strain. The whole performance truly breathes Olympian calm and spirituality.

The recording itself is tolerable, but the signal-to-noise ratio is not very favorable to Beethoven’s signals except in the loudest passages. A severe treble cut is probably a necessity. E.S.

BERLIOZ: Damnation of Faust—Dance of the Sylphs (see DEBUSSY: La Mer)

BOULEZ: Improvisations sur Mallarmé (see SCHOENBERG).

RECORDING OF SPECIAL MERIT

Performance: Excellent
Recording: Good location job

When John Lill’s solo record of Brahms piano music came my way I knew little about the pianist and his accomplishments and was not terribly impressed by the playing. However, this release easily explains the English pianist’s first prize in the 1970 Tchaikovsky competition in Moscow. It was this performance, recorded in the Grand Concert Hall of the Moscow Conservatory during the competition, that turned the tide in his favor, and it is easy to hear why. This is in the simplest possible terms, an overwhelming Brahms Second. The pianist’s performance has tremendous scope and spirit from one end to the other. The orchestra and conductor contribute more than a little to the excitement of the occasion, although technically they are not in Mr. Lill’s class. The recording, perhaps mercifully, favors the pianist and obscures some murky orchestral work. All in all, a document of an exceptional musical high.
E.S.

BRAHMS: Songs (see SCHUBERT)

BRANT: Kingdom Come for Two Orchestras and Organ. Henry Brant (organ); Oakland Symphony Orchestra, Gerhard Samuel cond.; Oakland Youth Orchestra, Richard Hughes cond. Machinations. Henry Brant (organ, timpani, chimes, xylophone, glockenspiel, E-flat flute, ceramic flute, double ocarina, double flageolet, harp). DEDO DC 7108 $4.98.
Performance: Excellent
Recording: See below

Henry Brant is an original in the eccentric Yankee-ingenuity tradition of Ives, Cage, and Partch. *Kingdom Come* is a typical Brant apocalyptic circus: a piece for two orchestras, a symphonic ensemble that plays anxious, atonal modern music, and a nutty circus band of slides, whistles, klaxons, and calliopes. In the original, one orchestra plays from the stage, the other, in typical Brant fashion, plays from the balcony. In the recording, spatial separation is achieved—not altogether happily—by putting one orchestra on each channel; the two halves were actually recorded separately and put together afterwards. The two are indeed separate conceptions, they scarcely interact at all, each doggedly pursuing its independent path right to the end. Something is, therefore, missing. It is as if the piece is all statement, all exposition; anyone can draw his own conclusions—the composer draws none. Nevertheless, the intensity and drama of this music is remarkable, and, although undoubtedly even more effective in “live” performance, it makes a deep impression in its recorded form.

... (Continued on page 80)

STEREO REVIEW
You can tell a record by its cover.

The bright yellow label that says where you're at.
What makes our label what it is?
Technical mastery. And quality.
And the ability to know just where your head is. In our ears.
Never before has "classical music" been such an integral part of the new culture because of super-stars like Karajan, Kubelik, Abbado, Böhm, Anda, Eschenbach, Fischer-Dieskau, Argerich, Tilson Thomas, the Amadeus Quartet, and more. And such orchestral giants as the Boston Symphony, the Berlin Philharmonic and the Bavarian Radio Symphony are finding brand new audiences.

We'd like to turn you on to what we consider some of our best albums. We have a full-color catalog that's outta sight. It's called 71 OF THE BEST and you can have it for the asking. Just walk into your local record store and say, "Hey, how about laying that new Deutsche Grammophon catalog on me?" If they've run out of them, just send your name and address to: Deutsche Grammophon c/o Polydor Incorporated 1700 Broadway, New York, N.Y. 10019 and we'll send you one free of charge.

Deutsche Grammophon
"Dust free" means highest sound quality

It's a well-known fact that adhesion of dust and magnetic particles to tape recorder heads cause 90% of sound deterioration in recording and playback. You won't have to clean AKAI's revolutionary GX (glass and single crystal ferrite) HEAD as often as conventional heads. Its core is made of single crystal ferrite, and the inner circumference of the head shield is mounted and set in glass. Dust and magnetic particles do not adhere to the "dust free" GX HEAD because of its hard and smooth ceramic-like head surface. Thus, it's guaranteed for highest sound quality.

"Wear free" means 100 times longer service life

The GX HEAD is also "wear free" because of its hard and smooth surface and is guaranteed for highest sound quality for over 100 times the service life of conventional permalloy heads!

Changing heads costs 10% of tape recorder cost

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CIRCLE NO. 4 ON READER SERVICE CARD
Two new discs of the compelling, highly emotive music of American Composer George Crumb

By Eric Salzman

George Crumb was born in Charleston, West Virginia, in 1929 and currently lives in Media, Pennsylvania (a town better known these days for stolen FBI files than for avant-garde music). He first came to attention a little more than a decade ago with a series of distinctive works based on an evocative use of suspended, sliding, or shimmering sonorities. Crumb’s work, which lies somewhere between the cluster-sonority style of Krzysztof Penderecki and the isolated free sonorities of Morton Feldman, is compelling and highly emotive. Many of his pieces share certain characteristics: sensitivity to timbre, the use of suspended, vibrating sonorities, the use of the human voice even in “instrumental” works, whispered or spoken or sung fragments of Federico Garcia Lorca’s poetry, and the motifs of echoes and recollections from some dimly remembered past.

All of these elements are effectively used in Echoes of Time and the River, one of the rare exceptions to the usual mediocrity of Pulitzer Prize winners. This beautiful work includes quotations from Lorca, bits of a hymn tune, the composer’s name in Morse code, and the state motto of West Virginia “Montani Semper Liberi—‘mountain men are always free.’” Like all of Crumb’s work, this one is about the suspension of time and, since time cannot be suspended (and even mountain men are not truly free), the total effect is deeply tragic.

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Jan DeGaetani performs the difficult solo part magnificently and Michael Dash, the boy soprano, is equally remarkable. An excellent group of musicians under Arthur Weisberg do a fine job, and the Dolby recording is so good that the poor quality of the disc vinyl becomes disturbing. The Louisville performance is also a good one, and the recording is effective. The None such disc spreads a moderate-size work out over two sides: less than half an hour (but with so much real content perhaps it is churlish to complain). The Louisville disc does in fact include another work, but the less said about it the better.

CRUMB: Echoes of Time and the River. ELLIS: Kaleidoscope for Orchestra, Synthesizer, and Soprano. Joan Wall (mezzo-soprano); Louisville Orchestra, Jorge Mester cond. LOUISVILLE ORCHESTRA FIRST EDITION RECORDS LS 711 $5.98.

CRUMB: Ancient Voices of Children. Jan DeGaetani (mezzo-soprano); Michael Dash (boy soprano); Contemporary Chamber Ensemble, Arthur Weisberg cond. NONESUCH H 71255 $2.98.

Machinations is an amusing and brilliantly conceived tape piece entirely based on improvisatory “live” performances by the composer. Some of the tracks have been speed-altered; others have been left alone; the whole was “montaged” and mixed to produce the final piece. The composer calls it “a sort of last warning from the natural world to the human species—a kind of organizational underground meeting of animate and inanimate objects”—a description I cannot improve upon except to point out the basic lyricism of the piece, a striking contrast to the apocalyptic overside.

A great deal of credit is due Gerhard Samuel and the enterprising Oakland forces, who do an excellent job. Both works are very well recorded (apart from the stereo problems of the first), and the disc is highly recommended.

E.S.


Performance: Very good
Recording: Very good

DEBUSSY: La Mer. RAVEL: Daphnis et Chloe—Suite No. 2. BERLIOZ: Dance of the Sylphs (from The Damnation of Faust). London Symphony Orchestra, Leopold Stokowski cond. LONDON SPC 21059 $5.98.

Performance: Ravel fine, Debussy odd
Recording: Excellent

These two new London issues seem to be in competition with each other, but actually they are complementary. Ansermet’s recording of La Mer, L’Après-midi d’un faune, and the Ravel Rapsodie espagnole presents the late conductor and his orchestra, the Suisse Romande, as they played in the mid-Fifties (though the sonics on this disc sound as if they have been updated). Stokowski, on the other hand, recorded La Mer and the Daphnis et Chloe Suite recently. This disc thus gives the octogenarian (at least) conductor’s late-late thinking about these pieces.

Both recordings fall more into a category of special collectors’ items than of records for a basic library. Ansermet’s performances are clear-headed, sensitive and comfortably within the French performance tradition for these works. They are transparent and full of vigor. On the other hand, the orchestra does not sound as opulent and suave as it did on records made a decade later. Whether this is a matter of engineering capabilities in the Fifties or of the orchestra itself is difficult to say. I suspect it is both. But anyone who admired Ansermet’s kind of music-making will probably find this recording of interest.

Stokowski’s approach to La Mer is full of surprises, not all of them delectable. His tempos are extremely slow, and many light, running melodic passages are held up for such detailed examination that they cease to run very much. The effect is studied, a word which might be applied generally to this performance. The second movement, Jeux des vagues, is slowed down to such a point that instead of sailing over the bounding main, as it usually does, it evokes an image of long, rather heavy ocean swells. Not much “jeux,” in other words.

In the Daphnis et Chloe Suite, Stokowski includes the choral parts (which are often omitted) and makes of them an immensely telling part of the texture. Even here, though, there’s... (Continued on page 82)
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Giulini's Don Carlo

At his 1958 Covent Garden debut, Carlo Maria Giulini claimed Don Carlo for his very own. "If Verdi has been better conducted since the retirement of Toscanini and De Sabata," wrote Peter Heyworth, "I have not heard it."

Now Giulini has recorded it for Angel with an all-star cast that would delight Papa Verdi. Placido Domingo is Don Carlo, Montserrat Caballé, Elisabeth. Ruggero Raimondi is Philip II, Shirley Verrett, Eboli. And Sherrill Milnes, Rodrigo. The Ambrosian Opera Chorus and Orchestra of the Royal Opera House, Covent Garden, complete the international company.

Angel has used the "composite" five-act score (containing the famous Fontainebleau scene from Act I) from the 1867 Paris edition joined to the five-act score (containing the famous Fontainebleau scene from Act I) of the Royal Opera House, Covent Garden, complete the international company.

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To me, one of the delights of Dvorák's music has always been its prevailing sunniness and even in "tragic" moments, the composer's inclination toward transparent textures and lyricism kept his hand from growing heavy. These two chamber works (the Opus 1 representing him at nineteen years of age and lacking much of the sophistication that was to come later) are both redolent of sun and air and sweetness of spirit. The members of the Berlin Philharmonic Octet approach them with obvious affection and are easily able to carry all the music's delicacy and songfulness without ever cloying or getting otherwise out of focus. This is really great ensemble playing.

RECORDING OF SPECIAL MERIT


Performance: Splendid
Recording: Splendid

To me, one of the delights of Dvorák's music has always been its prevailing sunniness and even in "tragic" moments, the composer's inclination toward transparent textures and lyricism kept his hand from growing heavy. These two chamber works (the Opus 1 representing him at nineteen years of age and lacking much of the sophistication that was to come later) are both redolent of sun and air and sweetness of spirit. The members of the Berlin Philharmonic Octet approach them with obvious affection and are easily able to carry all the music's delicacy and songfulness without ever cloying or getting otherwise out of focus. This is really great ensemble playing.

RECORDING OF SPECIAL MERIT

FREDERICK THE GREAT: Flute Concerto No. 4, in D Major; Sonata No. 7, in E Minor, for Flute and Continuo. Hans-Martin Linde (flute); Jörg Ewald Dahler (harpsichord, in Sonata); Hannelore Müller (gamba, in Sonata); Schola Cantorum Basiliensis, August Wenzinger, cond. (in Concerto). PRUSSIAN GRENADEIR SONGS AND MARCHES FROM THE TIME OF FREDERICK THE GREAT (Anon.). Gerhard Unger (tenor); Ensemble Musica Antiqua, Vienna, Rene Clemente dir. DEUTSCHE GRAMMOPHON ARCHIVE 2533 059 $6.98.

Performance: Imaginatively conceived
Recording: Excellent

Life under the rule of Frederick II of Prussia must have been anything but easy for most of the musicians in his dominion, Johann Joachim Quantz, Frederick's flute teacher and advisor, excelled. French literature and culture were espoused, except in the realm of music, where a conservative, even straitjacketed cross between Vivaldi and Tartini was the model for instrumental fare. Frederick's own compositions evolved in this mold. They are tuneful and often sprightly, and, within a quite severely limited range, do seem to express a reared kind of emotion. The concerto and sonata included on the first side of this disc adhere to this concept perfectly. They are also exceedingly well played by Linde on what I presume (my advance copy of the disc contained no annotations) to be the one-keyed flute of Frederick's time, and he receives first-class support in a manner anticipating the finest work of Percy Grainger (whom he befriended) and Béla Bartók. Opus 66 is available for the first time on records (at least in greater part) in volume two.

The second side contains a varied selection of Prussian Grenadiereiider and marches from this same period, an area that hereofore has hardly been explored. The songs, all about heroic endeavors, weapons, and battles (two of the three accompanied by band, the last by harpsichord), are stirringly sung by Gerhard Unger. There are some fourteen marches or military pieces, mostly quite brief, which both my six-year-old son (he beating time vigorously throughout) and I enjoyed immensely. Curiously, these sound more stylistically advanced than Frederick's works on the other side. They are fun, and are beautifully recorded.

RECORDING OF SPECIAL MERIT


Performance: Warmly poetic
Recording: Very good

I am very much impressed by the warm-hued and altogether splendid pianism of the young Brazilian pianist Mme. Mourão here, but definitely not by the initially inaccurate labeling and program notes for this first of two Vox Boxes that together encompass the greater part of Edvard Grieg's solo piano music. Of this, more later. First let me say that it was a fascinating experience for me to listen to this album, and for anyone companion Vox Box, taking each piece in chronological order of composition. The pattern reveals itself is like that of Grieg who was daring and impulsive up through the early 1880's, then went through a curious falling off of vitality until he experienced a renewal of vitality in the 1890's, when he experienced renewal in a higher plane of the earlier originality.

Finland's Jean Sibelius produced vast amounts of "palm-court" salon music as a means of earning money, but he is best remembered for his striking symphonies and orchestral tone-poems. Grieg did likewise in much of his piano music, but unhappily it is the popular salon pieces that are best remembered. None of Grieg's orchestral works, not even the Piano Concerto, occupy a position in his oeuvre comparable to that of Sibelius' in his, and a writer considers the best of Grieg's piano music remains for the most part unplayed, even in Norway. I have in mind the Piano Sonata (the rather labored finale to the contrary notwithstanding), the splendid variation form of the Opus 24, among large-scale works. Smaller-scale, but amazing in their intense evocation and their poetic distillation of folkloric essence, are the sets of pieces inspired directly by folk song, beginning with the Op. 17 Norwegian Dances and Songs (volume two) taken from the celebrated Lindeman collection published in the 1850's and 1860's. The Op. 19 Scenes from Folk Life (also volume two) contains the popular Bartered Bride Passes By and a Carnival Scene whose coda is a brilliant cyclic tour de force, and whose harmony and rhythm are of surpassing boldness. With the Op. 66 Norwegian Folk-Tunes and the Op. 72 Slåtter, we encounter the mature Grieg working with folk material in a manner anticipating the finest work of Percy Grainger (whom he befriended) and Béla Bartók. Opus 66 is available for the first time on records (at least in greater part) in volume two.

There are many pieces among the Lyric Pieces and other small groupings, individual works of the most striking power and individuality. The Op. 6 Humoresker, early as they are, reveal all the potential that his tragically
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SEPTEMBER 1971

CIRCLE NO. 25 ON READER SERVICE CARD 83
short-lived Norwegian patron-friend Nordraak sensed at the time of their meeting in 1864 when Grieg was twenty-one. The last of the Op. 54 Lyric Pieces, Bell Ringing, is the equal of any of the Impressionistic pieces penned by Debussy a decade later. Comparably unique in its evocative power is Evening in the Mountains from Op. 66, with its haunting call motif, and the dissonances in No. 3 (Smarold) and No. 5 (Halling) of Op. 71 are fascinating.

As I indicated at the beginning of this review, Mme. Mourão’s performances of the 133 pieces contained in the two Vox Boxes are models of finely honed tonal poetry and cultivated yet vital musicianship, and despite the problems presented by the faulty labeling and program annotation, I recommend unhesitatingly the purchase of both sets by Grieg buffs and lovers of fine pianism. The recorded sound is first-rate throughout.


RECORDING OF SPECIAL MERIT

HANDEL: Coronation Anthems: Solomon: “From the censor curling rise.” The Ambrosian Singers; Menuhin Festival Orchestra, Yehudi Menuhin cond. ANGEL S 36741 $5.98.

Performance: Majestic Recording: Excellent

Among Handel’s many choral works, surely none are grander than the four anthems he wrote for the coronation of George II and Queen Caroline on October 11, 1727. The occasion, with Westminster Abbey as the setting, involved an all-male choir of forty-seven and, rather surprisingly, a huge orchestra that is believed to have numbered anywhere between one-hundred and one-hundred-sixty players.

A smaller band seems to have been used here, in this latest recording of the four (Za- dok the priest, My heart is inditing, Let thy hand be strengthened, and The king shall rejoice), and the choir is not all male—there is a good body of countertenors, though. The ef-fect, however, is exceptionally satisfying on all counts. The singing is quite thrilling, Handel’s sonorities making a splendid impact under Menuhin’s direction. I would say, in fact, that this is the violinist-turned-conductor’s most distin-guished Handel disc to date. There is some competition, of course, notably an Argo disc (ZRG 5369), which features the all-male King’s College Choir and the excellent English Chamber Orchestra under David Willcocks. This is also a highly stirring performance, extremely stylishly conceived, but the one hitch is the overly strident sonoric reproduction, which requires that the listener move the earfaster on the ears, and he also has the advantage of including a filler, the chorus from Solomon which Handel adapted from a movement in his D Major Violin Sonata. Again, the perform-ance is excellent; one might wish that Menuhin had gone even further and included all the rest of that oratorio, but that would be another three discs. Judging from the present one, he’d be very good indeed at such a project.

RECORDING OF SPECIAL MERIT


Performance: Elegant Recording: Excellent

The score of the Michael Haydn Violin Con-certus was discovered only fairly recently. Dat-ing from the mid-1770’s, this work very much of its own time, melodious, galant, and thoroughly entertaining without scaling any (Continued on page 86)
Remember Pandora’s Box?

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expressive heights. The more important piece is the famous twenty-second concerto of Giovanni Battista Viotti (1755-1824). This is a work that was often in the past given to violin students (proficient ones), but it does not turn up much in concerts or even recordings these days. Essentially melancholy in mood, it dates from the early 1790's, and yet, both in its melodic content and in its technical demands, it seems often to foreshadow Paganini (Viotti, who wrote twenty-nine violin concertos, was renowned as a virtuoso). In both concertos, Arthur Grumiaux performs with superb technical control and a magnificent sense of elegance. Stylistically, both he and the young Dutch conductor Edo de Waart seem perhaps more at home with the early Romanticism of the Viotti than with the classic style of Michael Haydn, but overall these are very distinguished performances, impeccably recorded.

I.K.

HENZE: El Cimarrón. William Pearson (baritone); Karlheinz Zöller (flute); Leo Brouwer (guitar); Stomu Yamashita (percussion); Hans Werner Henze cond. DEUTSCHE GRAMMOPHON 2707 050 two discs $11.96.

Recording: Splendid

Hans Werner Henze has created a strikingly colorful theatrical piece in this "Recital for Four Musicians." Like much of his music, it sounds more than a bit facile, and this always tends to put me off. In this case, however, thanks in part to the really stunning performance of the American baritone William Pearson, who sings, speaks, shouts, falsettoes, even whistles his role with a powerful sense of drama, the piece compels attention more than it might otherwise. Henze's fashionable "avant-garde" sounds are produced by a guitarist, flutist, and percussionist who play on everything from an out-of-tune harmonium to a jew's-harp. This surrounds the voice with a jew's-harp. This surrounds the voice with a kind of Kodacolor "environment," functioning pretty much in the manner of an aleatory movie score.

The premise for this piece is one of the most interesting things about it. In 1963, a Cuban-born writer and ethnologist, Miguel Barnet, met a 104-year-old negro man called Esteban Montejo was born and grew up during the time of slavery in Cuba, and became a cimarrón (a runaway slave). Using a tape recorder, Barnet pieced together a spoken history of this ancient man's life: what it had been like to hide in the forests for years, alone among the ghosts and spirits his superstitions provided; laboring in the scorching fields under an overseer's whip; fighting against the Spaniards in the War of Independence (1895-1898); starving in Havana as he watched the arrival of the Yankees; his catchy observations on religion (negative) and girls (positive). It's sonorously authentic material, and very stirring. From Michel Barnet's resulting Biography of a Runaway Slave, Hans Magnus Enzensberger adapted and translated into German the passages which Henze used for this work. They make a fine libretto indeed. And if this Henze work is a little arch and glib, it is nonetheless good theater.

L.T.

RECORDING OF SPECIAL MERIT

HONEGGER: Trois Pièces; Toccata et Variations; Sept Pièces Brèves; Le Cahier Romand; Hommage à Albert Roussel; Prélude, Arioso et Fugue sur le Nom de Bach; Deux Esquisses; Souvenir de Chopin. Jürg von Vintschger (piano). TURNABOUT TVS 34377 $2.98.

Performance: Excellent

Recording: Excellent

Pianist Jürg von Vintschger gives excellent performances on this Turnabout disc of most of Arthur Honegger's piano works. Interestingly, the composer cast a rather considerable proportion of these in the form of "Hommages" to such composers as Ravel, Roussel, Bach, and Chopin.

This is extremely masculine music. In the Trois Pièces, for example, both the Prélude and the final Danse are muscular and full of animal energy, while the middle piece (Hommage à Ravel) is delicate and lyrical, like Ravel. Honegger's piano music is characterized generally by this alternation between traditional French sweetness and a thrillingly sono-
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RECORDING OF SPECIAL MERIT

KODÁLY: Te Deum of Buda Castle; Missa Brevis. Éva Andor (soprano, in Te Deum), Alice Ekert, Klára Makkay, Éva Mohácsy (sopranos), Mári Szirmay (contralto), József Réti (tenor), József Gregor (bass); Chorus and Orchestra of the Hungarian Radio and Television, János Ferencsik cond. QUALITON LPX 11397 $5.98.

Performance: Excellent  
Recording: Excellent

These major choral works are quintessential Kodály: powerful spiritual and emotional expressions, stunningly set and orchestrated and masterfully organized. Neither is entirely new to records, but this brilliantly realized Qualiton pairing will render all previous versions obsolete.

The Te Deum was written in 1936 to honor the 250th anniversary of the freeing of ancient Buda Castle from Turkish rule. Though the opening triumphant trumpet fanfare and passing instrumental passages allude subtly to the national spirit, the Te Deum is not an expressly "nationalistic" work, but rather an uplifting and brilliantly conceived twentieth-century treatment of Gregorian and Baroque elements. (The attention of liturgical tune detectives is directed to Kodály's setting of the words "Sanctum quoque Paracriticum Spiritum" in measures 137-141. This is virtually identical to the Te Deum of Puccini's Tosca. A common liturgical source is certainly the most likely reason.)

The Missa Brevis is not really that "brief"—it has all six traditional sections of the mass, as well as a majestic orchestral Introitus and a closing choral Ite missa est. The "brevis" element probably comes from the tight organization of each section and from Kodály's total avoidance of extended and academic-sounding devices. I cannot help comparing this work with Haydn's Mass in Time of War, another stirring emotionally piece of roughly equal length: the subtitle of Kodály's Missa Brevis is "tempore bello," it was written in the winter of 1944, and the repeated "Da pacem" exhortations in the Agnus Dei section poignant express the feelings of Kodály the humanist amidst the horrors of war. Unlike the Te Deum, the Missa Brevis is entirely devoid of Hungarian elements; it clearly speaks to all mankind.

The performances are nothing short of inspired under the direction of Ferencsik, a Kodály pupil and authoritative interpreter. The chorus is superb. Though there are no showy or extended solos, the parts for the solo singers, especially the exposed passages for the three sopranos in the Missa, are quite taxing. All the singers deserve high praise, and the same is true of those involved in the excellent technical production.

E.S.

G.L.

LORTZING: Der Wildschütz: Arias and Scenes. Tom Krause (baritone), Count Eberbach, Gisela Schröter (soprano), Countess; Peter Schreier (tenor), Baron Kronthal; Ruth-Margret Pirró (soprano), Baroness; Arnold van Mill (bass), Baculus; Rosemarie Rönisch (soprano), Gretchen; others. Leipzig Gewandhaus Orchestra and Radio Chorus, Paul Schmitz cond. LONDON OS 26181 $5.98.

Performance: Good  
Recording: Excellent

This set of highlights rounds out the recorded representation of the music of Albert Lortzing (1801-1851), the master of German light opera. Zar und Zimmermann is on Seraphim; Undine and Der Waftenschmied are available on imported Odeon discs. The story of Der Wildschütz is a pretty wild mixture of amorous tangles and mistaken identities. It is a plot that London's synopsis (no text is provided) can only partially unravel. The music, however, is engaging all the way. Lortzing was a clever man of the theater, and, though his works depended a great deal on sight comedy, his music came from a fertile mind; it is tuneful, fresh-sounding, and colorfully orchestrated. He was a natural contrapuntist in music as well as in stage situations (diligent choral singing set against an animated ballet game in Der Wildschütz), and employed sprightly patter songs Gilbert and Sullivan would have been proud of (and probably imitated). The singing, by noted operatic performers, is uniformly spirited, and the famous Gewandhaus Orchestra of Leipzig (where Der Wildschütz was first presented in 1842) performs in a manner worthy of its reputation.

G.J.

RECORDING OF SPECIAL MERIT


Performance: Magnificent  
Recording: Excellent

In terms of sound engineering, this release is a mixture of many thrilling moments with a few disappointments. As a performer, Mahler's account of the Mahler Third Symphony is close to ideal. And at Nonesuch's bargain price, the new set deserves a clear first ranking among the seven recorded versions now available.

There are still touches, in playing or recording, for which you will have to go to the best of the other versions, Bernstein's on Columbia and Haitink's on Philips. The superbly controlled, extremely slow tempo of Bernstein's Fifth is a fine one, but Haitink's more moderate view is a tenable one and is realized with equal mastery. Haitink's reading—except in that finale, where he is disappointing—is characteristically broad and sane, and is enhanced by some splendid brass playing from the Concertgebouw.

Technically, the most substantial failing in the Nonesuch release is the lack of presence in the wild, uprushing figures in the cellos and basses that permeate the slow sections of the first movement. But though that section is licensed from a small company—John Goldsmith's giant-killing Unicorn label, which operates in London—the recording quality overall is remarkably good, and there is nothing makeshift about it. Harold Lawrence, who used to run Lewis Carroll, I know of heights besides which I never did "cease to hear it," but then, unlike the ordinary listener, I am paid to get through these records at least once, and I perform this duty with a certain grim moral conviction. No. I was not bewitched.

E.S.

(Continued on page 92)
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ROBERT THURSTON DART was a man of many parts, a musical scholar, organologist, educator, reconstructor of manuscripts, harpsichordist, clavichordist, organist, conductor, and editor (Parthenia, Partibus Intra Musicae, Vox Luminis, United States, he was perhaps best known (as Thurston Dart) as a solo performer on records, of which he made a great many. To performers, musicologists, and many knowledgeable producers of classical records, he was—and, through his writings, continues to be—the most stimulating source of information about early music. There is scarcely anyone working in that field today who does not owe Dart a great debt of gratitude. For them, his slim book The Interpretation of Music (Harmondsworth & Co., 1954; paperback, Harper Colophon, 1963) is equivalent to the Old Testament in providing the Prophet's Word.

One can say the same thing about Dart's influence as an ensemble player. Before his emergence, harpsichord continuo realization was done by "live" ears and not—except on rare exceptions utterly bland, consisting mainly of successions of sight-read block chords. I remember my own delighted reaction the first time I heard Dart's imaginative supplementary flourishes "inside" the line of Handel's Concerti Grossi Op. 6, recorded by Dart with Boyd Neel conducting his string orchestra in the early Fifties. So that was what continued playing was all about!

Largely because of Dart, the better continued playing today has gone beyond dull block chord progressions. Sometimes the harpsichord player is too aggressively busy, and that, I suppose, must be laid to Dart's influence, too, but he always blended perfectly, adding to the proceedings the requisite support and variety, and an incalculable spirit as well, without ever obliterating the other parts.

Continuo playing was but one facet of Dart's accomplishment. He was the ideal musicologist-performer. His purpose was never merely to ponder the dry notes on the page; he wanted them heard. And he was able to bring them to life—brilliantly, spontaneously, and imaginatively. It made no difference whether he was performing on the harpsichord, the clavichord, or the organ, directing a small group such as the Jacobean Ensemble, accompanying one or more soloists, or conducting, usually from the keyboard. In all his recordings (and they include everything from English, French, and German keyboard music and Italian songs to the classic recording of Handel's Water Music) his special quality is evident.

Most of these recordings were made in the later Fifties, at the time that Dart was artistic director of the Philomusica Orchestra of London. At that time he was a Fellow of Jesus College, Cambridge, where he had been lecturing in music since 1947. He was a made a professor there in 1962, and two years later he moved to London University as King Edward Professor of Music. The performing activity of the past years necessarily diminished as he set about founding and maintaining a department of music.

Life was not particularly easy for him during these years. Between the work involved in his music editing (Parthenia, Parthenia In Violata, Musick's Handmaid), musicological treatises and articles, his responsibilities as secretary to the esteemed Musica Britannica, the recording activity already mentioned, and his directorship of the Philomusica, his energies were often severely taxed. And there were more frustrations to come. He had hoped to be able to come to New York in the winter of 1967 to participate in a two-harpischord-concerto performance in which I was to be the second harpsichordist. Unfortunately, because of almost insuperable difficulties at the University, the performance never took place.

THURSTON DART
(1922-1971)
By Igor Kipnis

We were never to play together as duo harpsichordists in concert. But another project, a recording of music for two harpsichords, was still in the works then. It had been conceived a few years earlier by CBS's Paul Myers, and I very much liked the idea but was doubtful about Dart's reaction. He was in the United States for a series of lectures when, with some trepidation, I proposed the idea to him. To my relief and delight, Dart agreed.

The recording finally took place in England in spring 1969, a difficult period for both of us: Dart was in the midst of his work at the University and had an exhausting trip to Rumania for some concerts; I was in the middle of a European tour. We had, of course, discussed the repertoire, but we had never sat down to play together. Two full days of rehearsing and recording had been scheduled, and despite the myriad difficulties (meshing interpretive conflicts was almost the least of the problems), the taping finally began with Dart's own reconstruction of a Handel suite for which the second keyboard had been lost. Here, really for the first time, I had the chance to hear the man improve varied repeats on the spot—and naturally I was expected to follow suit.

Dart was quite professional (verbally, not musically) during these sessions, often throwing out concepts of performance practice that were entirely new to me and expecting me to absorb them instantly—things such as playing certain French ornaments before the beat, when I had ingrained it in myself that they were to be rendered very much on the beat. It wasn't until the second day of sessions that I realized I was having perhaps the most valuable experience of all, a two-day lesson with Dart—under pressure! ('The recording we made together is scheduled for release next January on the Columbia label.)

I ought to explain that Thurston Dart did not take harpsichord pupils. I found this out eleven years ago, when I asked him about the possibility of becoming a pupil of his. "But why dear Igor," he replied in his urbane way, "I don't have any harpsichord pupils." He suggested that since the lineage of harpsichord teaching had been broken off at the end of the eighteenth century, and that whatever methods there were today had had to be reconstructed, an ideal system of learning would be to go to the best original sources, to listen critically to other players, and to adapt and discard from it all. It is a procedure I still use. Dart, of course, was incredibly generous both with his time and his critical encouragement. If I cannot say that I was a pupil of his in any formal sense, I can certainly say that I would not be performing today were it not for him.

"I think," he once said in a letter to me, "that a teacher can hope to do, you know, is to make it more possible for the pupil to find his own capabilities. One seldom operates on a higher level than that of a park gardener, cutting down undergrowth, making a bonfire here, pruning there, sweeping up a lot of rubbish, and—just once in a while—planting a seedling."

He could be remarkably offhand about his own scholarly efforts, although he knew their worth full well. "In the new issue of Musical Times," he wrote me in 1968, "the column All About Couperin. Well, nearly all. May amuse you." But he could be eminently practical as well. "Mind you build your programmes sensibly," he wrote not long after I first met him, "as though you were a chef preparing a menu. To fill your recital with an endless stream of masterpieces, brilliantly played, is like sitting down to choose from a menu of nothing but steaks. Remember to begin with a thin clear soup (not too much) and spread the first half with something they can pick their teeth over during intermission.... For God's sake, too, remember there's no law, of God or man, that insists all my metaphors, no matter what I'm writing about, are to do with food & drink. It shows where one's heart, as well as one's belly, is."

Thurston Dart died on March 6, 1971, at the age of forty-nine, of cancer. I, and many others, will miss not only his music but his humor and his humanity as well.

Thurston Dart with the author during recording sessions for their CBS album of works for two harpsichords

Stereo Review
The experts agree on
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JASCHA HORENSTEIN

MOZART: Quartets for Flute and Strings: D Major (K. 285); A Major (K. 298); G Major (K. 285a); C Major (K. 285b). Jean-Pierre Rampal (flute), Isaac Stern (violin), Alexander Schneider (viola), Leonard Rose (cello). COLUMBIA M 30233 $5.98.

Performance: Vim and vigor
Recording: Very good

This recording of the complete surviving Mozart flute quartets probably delivers more than promised. Of the four works recorded here, only two—K. 285 in D and K. 298 in A—are surely completely authentic. Mozart is supposed to have written several such works for a certain wealthy Dutch amateur, and these were mysteriously misplaced. The Quartet, K. 285a, although certified by Alfred Einstein as authentic, does not have the musical ring of truth about it, and K. 285b seems to consist of a partly authentic Allegro and a rather dubious transcription. Mozart is known to have hated the flute, and the commission—which was supposed to have involved a whole series of concertos and quartets—bored him beyond belief. Could he himself have slapped something together? Or did he leave the job to someone else, or pretend to mislay pieces for which he was paid but never wrote?

(Continued on page 98)
Arthur Fiedler has chosen AR-5 speaker systems for use in his home.

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Among other volumes in the LIFE LIBRARY OF PHOTOGRAPHY:
Color, Photography as a Tool, The Print, Special Problems, Light and Film, Photojournalism, The Great Themes.
So much for idle speculation. What does it add up to in terms of this recording? A brilliant authentic side and a rather mediocre dubious one. Everything is performed with equal brilliance and vigor, and, if the musicological niceties are not always observed (some of the eighteenth-century realities are ignored or glossed over), these are still extraordinary readings by an exceptional group of musicians. Rampal, Stern, Schneider and Rose—close to superstar overkill for some pleasant, sometimes minor, occasional music. Still, the spirits are high, the performance quality is exceptional, and the recording is of merit. Mozart himself could hardly have expected so much for his musical stepchildren.

E.S.

MOZART: Symphonies: No. 35, in D Major (K. 385, "Haffner"); No. 39, in Eb Major (K. 543); No. 40, in G Minor (K. 550); No. 41, in C Major (K. 551, "Jupiter"). Cleveland Orchestra, George Szell cond. Columbia MG 30368 two discs $6.98.

Performance: Splendid
Recording: Good

Now that George Szell has gone, it seems more imperative than ever to have his performances in one's record library. This album contains recordings of three symphonies—the exception is the G Minor—which were once in the catalog on the Epic label, but which have exceptions made by Columbia just before the conductor died, but they are good nevertheless. Symphony No. 40, a new issue recorded in London in 1967, has a slightly brighter sound and comes quite close to the latest Szell recordings made in this country.

These, in any event, are all performances to treasure. There is personality in every measure. And it is the special kind of personality which exposes both the composer and the interpreter to total view: a perfect collaboration. Mozart is respected by the conductor and always keenly elucidated. But Szell is right there too, his perceptions growing more interesting and profound year by year, even in the last decade of his life. It's splendid to have a record of this growth available now—and at a bargain price.


Performance: Excellent
Recording: Good

RAVEL: Piano Concerto in G Major. PROKOFIEV: Concerto No. 3. Alexis Weissenberg (piano); Orchestre de Paris, Seiji Ozawa cond. Angel 5 36785 $5.98.

Performance: Good
Recording: Good

There are some interesting parallels between these two recordings. Both were directed by young conductors whose formative experience was gained abroad (Ozawa in the Far East and in Europe, Springer predominantly in Europe) and who have had important contact with orchestras in the United States. Ozawa, of course, has made a full-fledged career here. Al- ois Springer, after a year as Assistant Conductor of the New York Philharmonic under Leonard Bernstein in the 1967-1968 season (a post he won in the Dimitri Mitropoulos Competition), returned to his conducting post in Europe and has not been heard much of. That's a pity and a loss for us, for he is an extremely fine musician and worthy of far more international notice than he gets. (The liner notes for this Turnabout recording neglect to give a single word of information about him, or, for that matter, about the pianist Maria Littauer, who does such a splendid job with the Ravel Concerto!)

Judging by these recordings, neither the Hamburg Symphony nor the Orchestre de Paris is, by American standards, a first-rate ensemble. This makes the work of the conductors and soloists even more strongly a factor to be considered, for one can be sure the orchestras are not carrying anybody along on a free ride.

Of the four performances on these discs, the Littauer-Springer performance of Ravel's Concerto in G is the most satisfying musical experience. Both conductor and pianist have a conception of the work's style and substance which emphasizes its extremely refined sincerity and spins the ideas in a web of purely "musical" continuity—which is to say, they play counterpoints, harmonies, and rhythms the way they ought to be played, straightforwardly and with delicate attention to the relationship of every phrase to every other one. The Adagio movement is compellingly sensitive; the four movements, even though the orchestra has to be dragged along by the scrub of its neck occasionally, lose not one whit of the vigor and bluesiness they should have.

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Weissenberg's playing of the Adagio, though good, does not have the beautifully pensive and concentrated feeling that makes Littauer's so affecting. He plays the movement for its graceful surface, without getting inside the melodic strands and illuminating them. Both he and Ozawa seem to have been driving at what the liner notes refer to as their "very personal, modern view" of the work, a view which doesn't fully reveal itself in practice. Actually, their reading is not terribly different from most others, for there is not all that much leeway available in this meticulously composed piece. But, to my ears, they miss much of the music's real stature. A couple of passages are Stravinsky-need, another is made to sound a bit too close to Victor Herbert for comfort, and the great "blues" quality of portions of the third movement is wiped away. To interpret Ravel in the light of other composers—some of them lesser ones—seems a strange way to arrive at a "modern" view of him if, indeed, so modern a composer needs updating at all.

The Roussel Concerto for Piano and Orchestra is a slightly odd-ball piece, unpredicatable and lumpy, sometimes bombastic, with peculiar moods and colorations which will turn off one listener and probably attract another, depending on taste. Though Roussel was hardly an amateur, there are long portions of this piece, particularly in the Adagio, which have the kind of murky, messy, semi-amateur thrust which I have heretofore associated only with Ives. I can't say I like this work, but it gives a fascinating glimpse of an unusual talent.

The Prokofiev Piano Concerto No. 3 is, of course, one of the most exciting repertoire pieces this century has produced. Weissenberg and Ozawa go at it with all sails flying, and one could hardly accuse these performers of lacking kinetic vigor. At the same time, one has a disquieting sense that the interpretive edges are largely blurred. Where precision is absolutely imperative, it is too often lacking. Again, as in the Ravel, there are cases when the music seems to have been imbued in the light of the other composer's style. Here, Rachmaninoff is the lens through which a number of passages are seen by Weissenberg. I cannot think of a less that Prokofiev would have been less likely to sanction. L.T.

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night-time coloration over everything, as befits the moonstruck Pierrot.

Jan DeGaetani's performance with the Contemporary Chamber Ensemble is, it seems to me, equally adroit and accurate. But if anyone ever wants to know the difference between an American conception of decadence and that of a sophisticated European or Central European, the whole story is here. Heard by itself, Miss DeGaetani's speech-singing sounds exquisitely apposite to the music and the texts. (Indeed, it may be a bit closer to the non-singing Schoenberg demanded than Strakay's (!).)

But its emotional ambiance, and that of the chamber ensemble, is something else again. When put side by side with the European performance, the American one hardly seems to portray decadence at all. Instead, it's full of rosy-cheeked health—clear-eyed, clean-cut, rational. Perhaps the Contemporary Chamber Ensemble's many performances of American "post-Webern" music in the past decade have oriented it toward a kind of anti-subjective, didactic precision which goes a little uncomfortably with Schoenberg's hyper-subjective music. There is, throughout, a certain punc...
**RCA VICTROLA**

**Performance:** Historic collaboration  
**Recording:** 1941 mono re-equalized

This 1941 commercial recording is one many of us grew up with. On four 78-rpm discs, it was a great seller in its day. I still remember the arguments over whether this supercharged, energized, galvanic powerhouse of a performance was the version to own, or whether the slightly older and milder Rubinstein-Barbirolli set was really better Tchaikovsky. When LP's came in, it was eventually transferred, and then RCA issued a 1943 "live" performance with the same artists that, if for no other reason than it was "live" and similarly electrifying, superseded the earlier recording. Now here is the earlier one again. It's a great performance, no question about that, unless the combination of Horowitz and Toscanini is not your thing. Of course, sonically you have to overlook a lot. For this monophonic transfer, RCA seems to have rolled off the highs and added a low mid-range boost. This, I suppose, is intended to minimize distortion (although there is still plenty of that), but I found massed sections very artificial-sounding, with little orchestral detail coming through. The original 78's, though hardly ideal, still sound clearer and more immediate to my ears. There, too, the orchestra has the characteristics of Toscanini's sound; in the present transfer, it just doesn't sound much like the NBC Symphony or Toscanini. Horowitz, of course, can't help sounding like Horowitz, but muddy lows don't help his tone much. Neither does the flutter caused by the warp in the thin disc. Still, as a performance, this is one that ought to be heard if you don't already know it.

**VAUGHAN WILLIAMS:** Symphony No. 4 in F Minor (see Best of the Month, page 69)

**RECORDING OF SPECIAL MERIT**

**Deutsche Grammophon Archive 2533051 $6.98.**

**Performance:** First-class  
**Recording:** Superior

One of the distinguishing characteristics of the music of Tomás Luis de Victoria (c. 1548-1611) is his intensely Baroque quality. In the vocal works such as one hears on this disc, the music sounds amazingly impassioned for this period: there is always either the languishing quality of a yearning for God, or a festive, rapturous spirit—both moods being far more vivid, say, than one finds in the religious settings of Palestrina, of whom Victoria was a slightly younger contemporary. It must be remembered, though, that Victoria is the perfect embodiment of the Spanish temperament. His music is an apt counterpart to the intensity of contemporary Spanish art, with its chiaroscuro effects and bleeding Christ figures.

Some of the selections on this disc are, to the best of my knowledge, first recordings, although the principal work, the Assumption Mass Vidi speciosum (together with the highly imaginative new recordings of España, Bolero, Carmen and Malagueña have all the boing-boings, bwa-bwas, wall-walls, dooey-dooeys and pyeow-pyeows that the composers intended.)

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**On Columbia Records**

The text is cut-off at this point, but the image shows a continuation of the article. The text continues with information about the recording and its features. The image also includes a cover of a record, highlighting the title and artists. The text is too cut-off to provide a complete context or summary of the article.
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COLLECTIONS

RECORDING OF SPECIAL MERIT


Performance: Excellent
Recording: Excellent

One of the leading producers of new recordings of American music today is Deutsche Grammophon Gesellschaft. The center of operations is Boston and, not surprisingly, we are getting a good accounting of music in New England. This record divides about evenly between Harvard and Yale (never let it be said that the Bostonians are musically parochial). Quincy Porter, the only actual academic of the three composers, was the son and grandson of Yale professors, and, after a stint in Boston as Dean and President of the New England Conservatory, became a Yale professor himself.

His "Elegiac" Quintet, written shortly after his retirement and not long before his death, seems to be a kind of farewell: the third movement ends in a grim, distorted version of "Gaudeamus Igitur" and everywhere dramatic, premonitory strokes alternate with elegy and resignation. Indeed it is the drama—curiously ignored by the liner notes—that provides the major interest.

The sonata for flute, oboe, cello and harpsichord by Elliott Carter (a New Yorker but educated at Harvard, briefly a member of the Yale faculty, and certainly a New Englander by temperament) is one of that composer's most ingenious and inventive works and it is outstandingly played here. It is a curious fact of musical history that Carter received his first encouragement from Charles Ives (Yale, '98), here represented by an early and quite beautiful Largo for violin, clarinet, and piano. The largo part of the piece is actually for violin and piano alone; the clarinet chimes in only in the lively middle section. The whole forms one of Ives' simplest and most balanced compositions, and it is, the program note annotator to the contrary, quite characteristic.

The performances are outstanding, particularly in matters of phrasing and articulation. The recordings are equally commendable sonically.

E.S.


Performance: Exemplary
Recording: Good

1957 mono

The fame of Dennis Brain has scarcely diminished since his early death in 1957, and Angel is in the process of issuing a series of old mono performances under the rubric "The Art of Dennis Brain." The recordings at hand were the artist's last; they were made for the BBC and broadcast shortly after his death in an auto accident. They show him as a superb chamber-music player, not as a soloist—all of these pieces are true ensemble works and Brain is

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only (but what an only) an equal among his peers. I wish I could say I liked the music better. The Ibert is a trifle and the Gordon Jacob, dedicated to the memory of Brain's father (also an excellent horn player), is dull. The Mozart, not an extraordinary work, is quite spoiled by an 'arrangement' which has little to recommend it except that it gives Brain a more prominent part than Mozart did. But the performances are excellent, and, except for the slightly hollow piano sound, the recordings are first-class mono.

**RECORDING OF SPECIAL MERIT**


**Performance:** Excellent

Recording: Excellent

Bracha Eden and Alexander Tamir, a fine two-piano team who have recorded several albums of music for London, including such large-scale works as the Bartók Sonata for Two Pianos and Percussion and the Poulenc Sonata for Two Pianos (1953), are heard on this disc in a group of encore pieces, to which they devote a full measure of polished and vigorous musicianship. Thanks to really smooth ensemble playing and to London's suave sonics, the music on this disc sounds almost as if it were being played on a single, huge instrument with 176 keys. It's an interesting illusion and not an easy one to create.


**Performance:** Outstanding

Recording: Very good

The Emperor in Die Frau ohne Schatten is a role with which James King has been associated for many years. The scene in which the Emperor follows his falcon through the forest is one of the most beautiful parts of the opera, and it is heard on this record in all its evocative power, with the splendors of Strauss' orchestra surrounding the ringing eloquence of the tenor's tones. For a convincing combination of musical rightness and theatrical realism, the Parsifal and Otello scenes are also impressive. However, 'Am stillen Herd' is a mite heavy-handed for a young hero. And unfortunately for the music of Puccini and Giordano, King's tone production is effortful, and his sound is not sufficiently smooth and mellifluous to be idiomatically Italian. Accompaniments and sonor engineering are very good.

**RECORDING OF SPECIAL MERIT**

**WANDA LANDOWSKA: Harpsichord Sonata.** Bach: Partita No. 2, in C Minor (BWV 826); Fantasia, in C Minor (BWV 906); Prelude, Fugue, and Allegro, in E-flat Major (BWV 998); Fantasia, in C Minor (BWV 919); Capriccio on the Departure of His Beloved Brother (BWV 992). Wanda Landowska (harpsichord). RCA Victrola ® VIC 1594 $2.98.

**RECORDING OF SPECIAL MERIT**


**Performance:** Rich and dramatic

Recording: Harpsichord good, piano fair

Occasional quirks of interpretation, and the fruits of a musico-logical judgment astonishingly keen in its time but inevitably overruled in some details by recent research, should not blind anyone to the marvelous artistry displayed in these two releases.

The harpsichord disc, devoted to Bach and subtitled—significantly, I hope—"The Landowska Collection of Harpsichord Music, Volume 1," offers playing typical of the great woman who restored the instrument to modern consciousness. It is playing of irresistible generous response, sometimes overdramatizing the resources of the gargantuan Pleyel iron-frame instrument in a way that might have startled Bach, but always drawing its expression from a profound love and study of the music, not applying self-indulgent ideas from outside.

Mme. Landowska's piano-playing is less familiar but similarly accomplished. She never made the mistake of trying to make the piano sound like a harpsichord, and all three works on the Haydn-Mozart disc are late enough in date to warrant the choice of instrument.

The best performances on the two records are those of Bach's C Minor Fantasia, BWV 906, and the Mozart sonata. Both of them illust...
James Pellerite and his pianist-colleague Walter Robert from Indiana University, I thoroughly enjoyed the Schubert, Varese, and sprightly Charles Koechlin works. I enjoyed especially hearing the Schubert played with a lean, yet substantial flute tone, comparable to what might have been obtained on the wooden flutes of Schubert's day. The moody Bernard Rogers and mildly bluesy Alec Wilder pieces are best known with string orchestra accompaniment, but they come off nicely here. The Boehm Duo, of only mild musical interest, offers a nice example of well-balanced "track-minton," but they come off nicely here. The remainder of the disc falls into the expertly orchestrated "uncongenial to the major firms. Nevertheless, it should be pointed out that hidden within many of these so-called "educational" LP's are first-and-only recordings of significant and interesting works. So the reader of these pages interested in searching out the unusual would be well advised to pore over the "educational" browser boxes of the university-town record shops, or their big-city equivalents, to see what he can turn up on such labels as Coronet, Golden Crest, Virtuoso, et al., not to mention a sizable number of University-based or-affiliated labels specializing in repertoire uncongenial to the major firms.

As for the present Coronet disc by flutist James Pellerite and his pianist-colleague Walter Robert from Indiana University, I thoroughly enjoyed the Schubert, Varese, and sprightly Charles Koechlin works. I enjoyed especially hearing the Schubert played with a lean, yet substantial flute tone, comparable to what might have been obtained on the wooden flutes of Schubert's day. The moody Bernard Rogers and mildly bluesy Alec Wilder pieces are best known with string orchestra accompaniment, but they come off nicely here. The Boehm Duo, of only mild musical interest, offers a nice example of well-balanced "tracking" of both parts by Mr. Pellerite. The remainder of the disc falls into the expertly played "test-piece" category.

Certainly any serious flute student would want this album, and I would add it to my own collection for the Schubert performance. The recording throughout is clean, with just the right sense of spatial "surround."

D.H.
A working musician talks about the new VM professionals.

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Ingrid would nervously start patting down her mentals, he got this strange glint in his eye, and every time Gregory got around sharp instruments for an attack of the crazies. It seems that played a lady shrink who was treating Gregory...

ALICE COOPER: Love It to Death. Alice Cooper (vocals and instrumentals). Second Coming; Is It My Body, Sun Arise; I'm Eighteen; and five others. WARNER BROS. WS 1883 $4.98, © M 81883 $6.95, © M 51883 $6.95.

Performance: Sick Recording: Good

If we ever get really serious about this pollution thing, one of the first items that has to go is Alice Cooper. This is the group that, you may remember, performs in drag and throws live poultry at the audience. From their photos they look like the ultimate choice for the "before" part of a deodorant commercial, and their performance here has all the allure of a rotting gardenia. It does have some unintentionally funny moments, however—particularly in Is It My Body ("you want?"). This plaint is apparently directed at those insensitive souls who only want the Cooper flesh and don't want to bother finding out "who I really am." Since I can't imagine even the most fervish groupie wanting to touch them without the aid of ice tongs, it may be the most pointless rhetorical question of the year. Aside from their concern about their bodies, the group also offers a tract on speed ("I'm eighteen, don't know what I want/Baby's brain in an old man's heart") and then try a little God-rock in Hallowed Be My Name. There's some good instrumental ensembles, choruses, and solo drumming in this case, of course—especially in Gerry Mulligan's score. At the time, and for several years after, Waxman's score stood as the ultimate "Music to-Go-Crazy-By" album. "Oblivion Express" is just as self-consciously "weird," but a good deal more raggedly performed than Waxman's triumphant Kitsch. Auger seems also to have been a student of the 2001 soundtrack, the trip album recently, but to little real effect. To paraphrase Erich Segal: oblivion means not having to say you're sorry.

Warner Bros.

BRIAN AUGER: Brian Auger's Oblivion Express. Brian Auger, Barry Dean, Jim Mullen, Robbie McIntosh (vocals and instrumentals). Dragon Song, Total Eclipse, The Light; and three others. RCA LSP 4462 $5.98.

Performance: Still at the depot Recording: Gimmicky

Remember Spellbound? Ingrid Bergman played a lady shrink who was treating Gregory Peck for an attack of the crazies. It seems that every time Gregory got around sharp instruments, he got this strange glint in his eye, and Ingrid would nervously start patting down her hair in a bun) while Franz Waxman's theramin-drenched score triple-underlined Gregory's every tic. At the time, and for several years after, Waxman's score stood as the ultimate "Music to-Go-Crazy-By" album. "Oblivion Express" is just as self-consciously "weird," but a good deal more raggedly performed than Waxman's triumphant Kitsch. Auger seems also to have been a student of the 2001 soundtrack, the trip album recently, but to little real effect. To paraphrase Erich Segal: oblivion means not having to say you're sorry.

P.R.

BEAVER AND KRAUSE: Creative electronic questing

BEAVER AND KRAUSE: Gandharva, Paul Beaver (Moog synthesizer, Hammond and pipe organ), Bernard Krause (Moog); various instrumental ensembles, choruses, and solo singers. Soft/White; Saga of the Blue Beaver; Nine Moons in Alaska; Walkin'; Walkin' by the River; and five others. WARNER BROTHERS WS 1909 $4.98, © M 81909 $6.95, © M 51909 $6.95.

Performance: Pop electronic cornucopia Recording: Excellent

On the evidence of what I've been hearing lately, it seems to be increasingly difficult to find creative ways to use electronic synthesizers. How ironic that is: the Moogs, Arps, etc., were supposed to liberate the composer, and they seem, increasingly, to be imprisoning him.

Paul Beaver and Bernie Krause, two pioneers in the use of synthesizers (and many other forms of electronics) for the coloration and artistic expansion of various forms of pop music, are still hanging in there. "Gandharva" is a mixed bag of Beaver and Krause material, ranging from snatches of Gerry Mulligan and Bud Shank jazz to gospel choruses and pure Moog meanderings. Half the album was recorded in San Francisco's Grace Cathedral, with the enormous room's long, long echo delay producing remarkable effects not dissimilar to those created by electronic tape loops. In this case, of course—especially in Gerry Mulligan's solo work—the strange sound overlays are "created live.

The most impressive aspect of the work of Beaver and Krause is their refusal to get locked into the now too-familiar Moog sounds. They don't always succeed in uncovering particularly provocative answers, but they keep asking good questions. And there can never be too many good questions—in pop music or anywhere else.

D.H.

BREAD: Manna. Bread (vocals and instrumentals). She Was My Lady, I Say Again; Contest Again; Truckin'; Too Much Love; If; Take Comfort; and five others. ELEKTRA EKS 74086 $4.98, ® M 4086 $6.95, ® M 84086 $6.95, © M 54086 $6.95.

Performance: Good Recording: Excellent

Bread seems to be essentially a one-man group, and that man is David Gates. He has written many of the songs here, done all of the arrangements, and functioned as the producer. He's talented in all three areas, but most strikingly as a composer. His best songs (Let Your Love Go, He's a Good Lad, and If) have a decidedly commercial tang to them without lapsing into an outright pandering to the tastes of teenagers. The lyrics often get bogged down in a moony kind of sentimentality about lost loves, lost loves, and the pain caused by a lady's refusal to let her love go (i.e., say yes). The performance by the group is expert and professional, but still lacking the sort of spark that would make them unique—not an unusual circumstance in one-man groups, where one creative mind seems to be at work and the rest only tagging along. This is a nice album, but one has the feeling it's time Gates went out on his own.

P.R.

THE FLYING BURRITO BROTHERS: The Flying Burrito Brothers (vocals and instrumentals). White Line Fever; Colorado; Hand to Mouth; Tried so Hard; Just Can't Be; and five others. A & M SP 4293 $4.98.

Performance: Waxed country music Recording: Very good

I know the Burritos are supposed to be the hottest thing since chili sauce for all the old folkies from the middle Sixties, but I find the group's devotion to "country" music self-con-
scious and a little plastic. After all, the tradition of country music is every bit as strong as the blues tradition, and there are plenty of originals around, in both cases. When I hear young performers who obviously have grown up in another environment going through such obvious contortions to duplicate the elements of a style that doesn't sound natural to them, I frankly get turned off.

I might be able to get past my initial bad vibes if the material were strong enough, or even just interesting enough to make me forget about the superficiality of the playing. But guitarist Rick Roberts' seven originals are virtually instantly forgettable, and the only mildly memorable moments are provided by Merle Haggard's "White Light" and Bob Dylan's "To Ramona." I don't, by the way, question the good intentions of the Burritos. No doubt their hearts are in the right places, but you know what they say about good intentions.

LEROY CARR: Blues before Sunrise. Leroy Carr (piano and vocals); Scrapper Blackwell and Josh White (guitars). Midnight Hour Blues; Mean Mistreater Mama; Hurry Down Sunshine; Corn Likker Blues; Shady Lane Blues; Blues Before Sunrise; Take a Walk around the Corner; My Woman's Gone Wrong; and eight others. COLUMBIA C 30496 $4.98.

Performance: Street blues from the Thirties
Recording: Fair

The collaboration of John Cale and Terry Rill was fated, I guess. Cale is a veteran of the Velvet Underground, and one of the musical darlings of those members of the underground press who love obscurity for its own sake; Rilley has been trying to convince us for years that repetitiveness is next to godliness, with a series of quasi-improvised pieces that go on and on. For instance, their version of Bacharach's "Don't Say I Didn't Tell You So" is presented aides, but I doubt it. The placid cafeteria-bland Miss Cale and crew try desperately to rock the boat, but only sink the thing. Burt Bacharach's "Don't Say I Didn't Tell You So" is the only band on this album that moves. The rest of it is so lazily done that only the laziest listener will stand for it.

LEROY CARR: Meat-and-potatoes performer

CLARENCE CARTER

Performance: Relaxed
Recording: Good

Miss Clark approaches the material in this collection (mostly rotten, if you ask me) with the attitude of a princess who finds herself in the wrong part of town. Maybe a thing called "Cry Like a Baby" would sound like a real song in the hands of Barbra Streisand and her crew of talented aides, but I doubt it. The placid cafeteria-bland Miss Clark and crew try desperately to rock the boat, but only sink the thing. Burt Bacharach's "Don't Say I Didn't Tell You So" is the only band on this album that moves. The rest of it is so lazily done that only the laziest listener will stand for it.

R.R.

CLARENCE CARTER: The Best of Clarence Carter. Clarence Carter (vocals); various instrumental accompanists. Slip Away; I Smell a Rat; Too Weak to Fight; Making Love; Snatching It Back; Patches; and six others. ATLANTIC SD 8282 $4.98.

Performance: Funky
Recording: Good

Very simply, this is a collection of state-of-the-art black pop music. Carter possesses neither the charismatic presence of an Isaac Hayes nor the high-voltage energy of a James Brown. His material is basic, down-to-earth, and, like most performers whose popularity is centered in the black community, his songs are concerned with the meat-and-potatoes problems of everyday living and loving.

Carter is an honest performer, with few tricks and, accordingly, a not especially unique musical identity. His songs are best heard as singles rather than in the connected sequence of an LP. Tunes like the rocking "Funky Fever" and "Snatching It Back" work just fine in themselves, but listening to eleven other tracks of material that is stylistically so similar is a bit too much for my tastes.

D.H.

CLARENCE CARTER: Meat-and-potatoes performer
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Now Maestro Crayton is a fine blues-picking guitarist—one of the best, as a matter of fact. I not only respect Peewee Crayton, I enjoy listening to this finely produced record. S. K. Blues is one of the most exciting and amusing cuts I've ever heard. Larry Nash's piano is so expressive as to make me positively giddy. So now I've paid my respects to Pee Wee & Co. and will file "Things I Used to Do" dutifully away on the record shelf labeled "Of Interest Historically.

R. R.

CROSBY, STILLS, NASH & YOUNG: 4 Way Street. David Crosby, Stephen Stills, Graham Nash, Neil Young (vocals and instrumental); Jimmy Baratta (drums); Calvin Samuels (bass). On the Way Home; Cowgirl in the Sand; Teach Your Children; Triad; 49 Bye Byes; Don't Let it Bring You Down; Carry On; Southern Man; Ohio; The Lee Shore; Chicago; and five others. ATLANTIC SD 2 902 two disc $9.96

Performance: Disappointing

Recording: Very good

Crosby has the best voice, Graham Nash is the most volatile, but Neil Young is the only one of the four who—individually—has anything approaching style. So this album is a disappointment, for the most part, except when Young is featured singing one of his own songs. The album was recorded "live" at various concerts, and in concert they usually have had some sort of a progression. The best thing that can be said about it is that the boys need the discipline of the studio; his version of 49 Bye Byes (running into America's Children) might have been exciting at the concert but it sounds preachy and rambling in the living room. The supporting voices behind Crosby and his Le Temps Qui Se Trompe seem to collapse, and that apparently messed up his timing. The vocal harmonizing isn't very tight together on Stills' Carry On or Nash's Pre-Road Downs either, although Nash gets decent backing on Chicago and Crosby is ably helped during his moody All Along the Lee Shore.

The album is half acoustically-backed (the first disc) and half electric, the latter containing long, mostly dull, jams around the songs Southern Man (by Young) and Carry On. Crosby, Stills and Nash, when they do harmonizing right, have great style collectively, and have provided some of pop music's finest moments in recent years, but apparently they need a studio to get it right. Young continues to try to sing higher than he can sing; nevertheless, an audience always has confidence in him, and his On the Way Home and Cowgirl in the Sand are far and away the best things about this album. N.C.

DADA: Dada (vocals and instrumental). Big Dipper; The Last Time; This Is My Song; Seel of Peace; Organ Interlude; Tonite Is; and five others. ATECO SD 33 352 $4.98, @ M 8352 $6.98, @ M 5352 $6.98.

Performance: Promising

Recording: Sorry

Dada, despite the nihilistic pretentiousness of its name, turns out to be a delightful new (to me) English rock band. Like so many other current groups, it is comparatively large, with seven instrumentalists (including three horns) and two singers. And they have wisely chosen to leave many of their instrumental numbers (largely composed by guitarist Pete Gage, singer Paul Korda, and keyboard player Don Shinn) with a couple of outside songs from the Rolling Stones and Tony Joe White. Yet I have to view Dada as a promising, rather than a here-and-now successful, band. They have been saddled with an offensively heavy production that uses far too many electronic tricks (vocal and instrumental doubling, filtering, etc.) and whatever clear, natural sound they may have had somehow has gotten lost in passage. But the potential is there. Now if Man Ray were still around, and available as a producer, he might have some good ideas about how to . . . D.H.

BILLY ECKSTINE: Feel the Warm. Billy Eckstine (vocals); Sherlie Matthews Singers (vocals); orchestra, Artie Butler arr. Make it With You; Think About Things; Don't Leave Me; Mixed Up Girl; Third Child; Feel the Warm; and four others. ENTERPRISE ENS 1017 $4.98.

Performance: Big voice, little songs

Recording: Good

One by one, the old-time singers test their voices and the album's potential as a blues album. The most interesting song, he masses huge orchestral and semi-electronic backdrop of sound, suggestive of an out-of-control train speeding through an endless tunnel, that more acutely exemplifies the horror of the amphetamine abuser than the lyrics do. In My Plan, not a very interesting song, he masses huge orchestral and choral effects behind it, reducing it to a theme on which to apply extravagant variations. And, wonder of wonders, Giguere has humor. I have never heard as funny a send-up of the Monster to view Dada as a promising, rather than a here-and-now successful, band. They have been saddled with an offensively heavy production that uses far too many electronic tricks (vocal and instrumental doubling, filtering, etc.) and whatever clear, natural sound they may have had somehow has gotten lost in passage. But the potential is there. Now if Man Ray were still around, and available as a producer, he might have some good ideas about how to . . . D.H.

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Performance: Big voice, little songs

Recording: Good

One by one, the old-time singers test their voices and the album's potential as a blues album. The most interesting song, he masses huge orchestral and semi-electronic backdrop of sound, suggestive of an out-of-control train speeding through an endless tunnel, that more acutely exemplifies the horror of the amphetamine abuser than the lyrics do. In My Plan, not a very interesting song, he masses huge orchestral and choral effects behind it, reducing it to a theme on which to apply extravagant variations. And, wonder of wonders, Giguere has humor. I have never heard as funny a send-up of the Monster to view Dada as a promising, rather than a here-and-now successful, band. They have been saddled with an offensively heavy production that uses far too many electronic tricks (vocal and instrumental doubling, filtering, etc.) and whatever clear, natural sound they may have had somehow has gotten lost in passage. But the potential is there. Now if Man Ray were still around, and available as a producer, he might have some good ideas about how to . . . D.H.

RUSSELL GIGUERE: Hexagram 16. Russ Giguere (vocals and guitar); orchestra. Now We Begin; In New Germany; My Plan, Brother Speed; Let It Flow; Pegasus; and four others. WARNER BROS. WS 1910 $4.98, @ M 8190 $6.95, @ M S 5190 $6.95.

Performance: Promising

Recording: Excellent

This is a fresh, interesting album, filled with all sorts of innovative production effects. The twentysomething Mr. Giguere wrote two of the songs in the album (they are good ones). As a performer, he is often decidedly lightweight. But as a producer (with John Boylan) he has made an album bristling with ideas. For instance, in Brother Speed he uses a whooshing semi-electronic backdrop of sound, suggestive of an out-of-control train speeding through an endless tunnel, that more acutely exemplifies the horror of the amphetamine abuser than the lyrics do. In My Plan, not a very interesting song, he masses huge orchestral and choral effects behind it, reducing it to a theme on which to apply extravagant variations. And, wonder of wonders, Giguere has humor. I have never heard as funny a send-up of the Monster to view Dada as a promising, rather than a here-and-now successful, band. They have been saddled with an offensively heavy production that uses far too many electronic tricks (vocal and instrumental doubling, filtering, etc.) and whatever clear, natural sound they may have had somehow has gotten lost in passage. But the potential is there. Now if Man Ray were still around, and available as a producer, he might have some good ideas about how to . . . D.H.

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AD-110 SPECIFICATIONS – Frequency Response (record-play): ±3 dB from 30 Hz to 12 kHz typical. Inputs: Aux. 70 mV to 10 V. Mike 0.2-6 mV. Hum and Noise: -45 dB. Bias and Erase Frequency: 110 kHz. Wow and Flutter: Less than 25% WRMS record and playback. Motor: Solid-state regulated DC. Speed: 1½ in./s. Fast Forward-Rewind Time: Less than 120 sec. Tape: C-30, C-60, C-90 cassettes. Controls: Power switch, record level (left and right channel), record, rewind, stop-eject, play, fast forward, pause. Transistor Complement: 13 transistors and 1 IC. Output: Greater than ½ volt from low impedance amplifier stage. Finish: Black with walnut end panels. Dimensions (overall): 3½” H x 13¼” L x 11” D. Power: 120-240 volts, 50-60 Hz, 7 watts.
LE JUIE-BOXE DE PAPA. Suzy Delair, Eddy Marnay, Ginette Garce, Mistigri, Gina Balty, Germaine Montero (vocals); various orchestras. En douce; Ou est-il don?; La Java bleue; Mandarines; Sur Deux Notes, and ten others. LONDON SW 99518 $4.98.

Performance: Varied
Recording: Mixed

One of my fondest childhood memories is of sneaking into a theater in my town that alternated weekly bills of skin flicks, for which you had to be eighteen and prove it to enter, with world-famous films open to all. We left after every other week I sat there absorbing what I chose to think of as culture (and, I also knew, getting to see a lot more skin casually exposed than I would in the American exploitation films). It was there that I first discovered the talents of Suzy Delair, in a film re-titled Jenny Lamour for America. It was a gossipy murder mystery starring the great Louis Jouvet. But after my first look at Delair, Jouvet could have phoned in his part as far as I was concerned. Delair played a music-hall star and conducted her first interview with l'inspecteur search, with much display of thigh and cleavage on the top of a piano. Plump as a pouter pigeon, with a sulky little mouth and a delectable décolletage (then a rarity among French actresses, whose mustered-up cleavage was often not as ample as the cleft in Cary Grant’s chin), she captivated me at once. Later on in the movie she sang two songs, Avec son tra-la-la (my favorite at the time, since she performed it in a brief costume, vigorously shaking a tambourine which made ripples all along her lush figure) and the now standard Danse avec moi. There was an old Decca ten-inch 78 of these two songs, taken from the soundtrack, which I replaced regularly for several years as it wore out.

So who should turn up on this new collection of old French single hits? None other than—En douce is the only track allotted to Suzy Delair, but she still sounds the way I remember her when she first bounced across the screen to become my first French adrenalin super.

The rest of this disc is pretty much a mixed bag. Mistigri sounds like one of those ladies with the large handbags who used to attend the movies with me, and Gina Balty offers a rendering of miro bist du schoen which could drive the Germaine Montero (vocals); various others. RCA LSP 4485 $5.98.

MERRYWEATHER & CAREY: Vacuum Cleaner. Merryweather & Carey (vocals); instrumental accompaniment. Livin' in the U.S.A.; Let it Shine; So Fine; Few and Far Between; No Worries; If I Were You; and six others. RCA LSP 4485 $5.98.

Performance: Rollicking
Recording: Very good

LENA HORNE: Nature’s Baby (see Best of the Month, page 71)

MANHATTAN TRANSFER
A potpourri of good-time music

Clearer idea of what I take to be the Muscle Shoals Sound: a sophisticated blend of c-k-w and Cajun music. Lampe, who writes all of his own material, is a very persuasive performer, in a low-key way, who works through the Sound rather than over it. Lampe’s songs are mostly gentle little excursions such as After the Rain and Laughter’s Secrets, and he generates considerable warmth in his performances. The Muscle Shoals Sound, however, is not so much a Sound as an aura—and the string arrangements by Art Mardan don’t help a bit in their Mantovanized glossiness.

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P.R.
That's about as good as things get. The album itself is some kind of plot. Merryweather & Carey groan and claim to be "outrageous," and sometimes Miss Carey herself sounds like a fair imitation of Tina Turner, but none of these descriptions are meant as recommendations. "Vacuum Cleaner" tidily sweeps all the droppings of the rock age into one bag. Who cares? Merryweather & Carey are going to need all the friends they can get. R.R.

ANNE MURRAY: Anne Murray (vocals and instrumentals); Brian Ahern arr. It Takes Time; People's Park; One Day I Walk; Child of Mine; Sycamore Slick; Wishing Smiles Made it All True; Sing High—Sing Low; Days of the Looking Glass: A Stranger in My Place; I'll Never Fall in Love Again. CAPITOL ST 667 $5.98, @ M 667 $6.95, @ 8XT 667 $6.98, @ 4XT 667 $6.98.

Performance: Rural gentility
Recording: Okay

Anne Murray reminds me of all those wonderfully good-hearted church ladies of my youth—the ones who taught Vacation Bible School on hot summer mornings without perspiring. No matter how trying the class became, our lady of discipline smiled sweetly and continued to smell like a fresh sprinkling of Johnson's Baby Powder. Anne Murray's voice is big, firm, controlled, and naturally sweet. It is perfectly suited to nursery songs and lullabies. A perfect example of this exists on this album in Carole King's Child of Mine. Miss Murray sings a small duet with herself on this one and, lo and behold, sounds so much like Patti Page that I thought I saw a doggie at my window. Anne Murray's musical genre could be termed rural-gentility, for this is the quality she brings to the entire mixed bag of selections here. R.R.

BRUCE PALMER: The Cycle Is Complete. Bruce Palmer (acoustic guitar, bass, electric guitar); various other musicians. Alpha-Omega-Apocalypse; Interlude; Oxo; Calm Before the Storm. VERVE FTS-3086 $1.98.

Performance: Indulgent space music
Recording: Very good

Such nonsense. Why do record companies continue to waste their money (and production time and release quotas) on self-indulgent tripe like this? Palmer's music consists of long, long, long drone-based improvisation-style pieces for a nine-man ensemble of rhythm instruments, guitar, violin, and a couple of woodwinds. The results could be duplicated by literally thousands of faceless young musicians, and improved upon by almost any professional jazz man (or even studio man) you might care to name. But I doubt it will be possible to convince anyone who has a sufficiently cosmic sense of his own self-importance to name a composition Alpha-Omega-Apocalypse that he is wasting his time. Just make sure he doesn't waste yours.

D.H.

PROCOL HARUM: Broken Barricades. Procol Harum (vocals and instrumentals). Simple Sister; Power Failure; Lukus Delph; Poor Mohammed; and four others. A & M SP 4294 $4.98, @ 4294 $6.98, @ 4294 $6.98.

Performance: Good
Recording: Poor

This is one of those occasional disasters that strike all entertainers but can be averted by shelving the album and never releasing it. Procol Harum has had a sketchy history of success, often following one fine album, such as Salty Dog, with a mediocre one, such as "Home." They've been accused by many of interminably milking their first successes. Nevertheless, there has always seemed to be something somewhere in each album that had genuine merit. "Broken Barricades," however, has nothing whatsoever to recommend it. It is a flacid, flaccid exercise in bombast that cannot help but damage their career. Forget about this one.

P.R.

JOHN SEBASTIAN: Cheapo-Cheapo Productions Presents Real Live John Sebastian (see Best of the Month, page 72)

ALEX TAYLOR: With Friends and Neighbors. Alex Taylor (vocals); orchestra. Baby Ruth; Southbound; All in Line; Night Owl; C Song; and four others. CAPRICORN SD 860 $4.98.

Performance: Good
Recording: Good

Alex Taylor has James Taylor and King Curtis along to help out on this one, but it is still soggy going most of the time. Alex Taylor's voice doesn't exactly turn me on, and his gravely down-home (Macon, Georgia, where this was recorded) approach definitely bugs me. I did like Southern Kids and parts of It's All Over Now, but his overall just-one-of-God's-creatures air gets to be a bit trying. There is a point where humility of this kind seems to turn into humbug.

P.R.

(Continued on next page)
**JAZZ**

THE ADDERLEY BROTHERS: *In New Orleans*. Nat Adderley (cornet); Julian "Can nonball" Adderley (alto sax); Nat "Perrilliat" (tenor sax); Ellis Marsalis (piano); Sam Jones (bass); James Black (drums). *In the Bag; Chatterbox; New Arrival; Mozart-in; Low Brown; R.S.V.P.; Sister Wilson.* MILESTONE MSP 9030 $5.98.

Performance: Sixties mainstream jazz. Recording: Good but a bit thin

The Adderley Brothers were hitting their commercial peak in May of 1962, when these tracks were initially released on Riverside. Julian and Nat had pretty well worked out a potent formula of sturdy, down-home blues mixed with some of the then-current jazz styles—Horace Silver-styled blues, sliding waltzes, and hard-bop lines.

For this occasion, the Adderleys used their regular bassist, Sam Jones, with an unfamiliar rhythm section and tenor saxophonist Nat Perrilliat. The absence of the well-integrated rhythm backing they were familiar with brought things down. The Adderleys were—and are—too good ever to play bad jazz, but they can hardly be described as at the top of their form here. Brother Nat was still locked into his Miles Davis style, and although he did it well enough, he also had a tendency to get lost in his own mannerisms. Cannonball, on the other hand, was working with a fluidly original style, but he too seems to be struggling against the rhythm. In any case, the Adderleys are making infinitely more effective and attractive music today, so the release of these out-of-date, inferior tracks was hardly necessary. D.H.

JOE BAUER: *Moonset*. Joe Bauer (drums); Banana (guitar, piano); Michael Kane, Jack Gregg, and Steve Swallow (bass); Richard Anderson (harmonica). *Explosion; Five Ten; Old Shoe; Cat Gone; Moonset; Frogs; Swallows; Pelicans, Earthquake Blues.* RACCOON S 1901 $4.98, AMPEX ® M 81901 $6.95, © M 51901 $6.93.

Performance: Amiable jazz-rock. Recording: Very good

It's not quite clear why drummer Joe Bauer is listed here, since the Youngbloods' guitarist-pianist Banana clearly dominates the proceedings. I had always suspected that Banana's orientation was toward jazz, even in his featured spots with the good-timey Youngbloods music. "Moonset" confirms it, and the only surprise in this is that it is so adept with both instruments. On guitar he touches everything from Wes Montgomery-ish jazz lines to flamenco, country picking, and slurry blues licks. His piano is equally fleet and equally eclectic in its sources of inspiration.

Most of the pieces are little more than improvisational launching pads, making the most effective performances those on side two, where the too little appreciated bassist Steve Swallow plays. Side one is no slouch either, since electric bassist Michael Kane (and Jack Gregg on one track) holds his own quite well, too, thank you. This is a pleasant, if not particularly memorable, recording. Good friends who also are good musicians don't always make profound art when they get together, but they do create good vibes. Sometimes that's enough. D.H.

ERROLL GARNER: *Feeling is Believing*. Erroll Garner (piano); various accompanists. *For Once in My Life; Yesterday; The Look of Love; You Turned Me Around; Mood Island; Spinning Wheel;* and four others. MERCURY SR 61308 $4.98, © MCB 61308 $6.98, © MCR 61308 $6.95.

Performance: Garner goes pop. Recording: Very good

Erroll Garner goes on and on, on his lag-behind, weirdly out-of-tempo style the same, his squishy chording as familiar as ever. The tunes have changed, however, as you will note from some of the titles mentioned above. Like other jazz musicians who have carved out small niches for themselves in the popular listening audience, Garner is turning more and more to rock-based material, and finding it to be a little richer than some of his contemporaries would have us believe. Though his style has changed little over the years, Garner's artistic overview has broadened, and many of the elements which had verged on gimmickry—the out-of-time melodies, the sudden dynamic-level changes from loud to soft—have, miracle of miracles, blossomed into highly useful artistic devices. Up until recently I wasn't much of a Garner fan, but after hearing him live at the Plaza Hotel's Persian Room, and now at his very best in this collection, I'm ready to start believing, too. D.H.

CHARLES MINGUS: *Sixties avant-garde jazz at its best*

HUBERT LAWS: *Afro-Classic*. Hubert Laws (flute); Ron Carter (bass); Dave Friedman (vibes); Gene Burrellini (guitar); Fred Warts (drums); Richie Landrum and Airto Moreira (percussion); Bob James (electric piano); Fred Alston, Jr. (bassoon). *Fire and Rain; Allegro from Concerto #3 in D; Theme from Love Story; Passacaglia in C Minor; Flute Sonata in F.* CTI RECORDS CTI 6006 $5.98.

Performance: Jazz meets the classics. Recording: Very good
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CIRCLE NO. 53 ON READER SERVICE CARD
have cooked up a blend of show-business and artistry similar to that made by Duke Ellington. Certainly the creative gifts of both men are comparable, as composers and as extraordinary instrumentalists. Unfortunately, as most jazz fans know, Mingus has been erratic in many respects, an understandable reaction to what life in America as a black artist has been like. Anyway, Mingus was at his very best for this concert (recorded at the Tyrene Guthrie Theatre in Minneapolis, probably in 1963), spurring on by the brilliant assembly of musicians working with him.

The extremely long performance time of *Praying with Eric* (announced by Mingus as *Meditations*, and apparently retitled since Dolphy's death) may cause some five minutes into the piece, but better an awkward cut than a truncated version of what was a truly brilliant performance. Mingus' themes jump and spin like dervishes, driving fast spams alternating with sudden romantic slow sections. Dolphy does things with a bass clarinet that are almost unbelievable, then switches to flute and strains credulity even more. Coles does his Miles Davis imitations to perfection, and Jaki Byard reveals, as he has so many times, that he is one of the most underrated pianists in jazz. And Mingus-Mingus is stunning, kicking the soloists along, plucking his instrument with a titanic, surging swing that pushes the rhythm with the energy of a tidal wave; when he solos it is with the articulate facility one would expect from a violinist.

Yes, indeed, folks, we could use a few more recordings like this—true chronicles of the best avant-garde jazz of the early Sixties. And, in fact, this one apparently has been available before, in a somewhat different incarnation. It includes material released in 1963 on a United Artists recording, also titled "Town Hall Concert." So if you are a Mingus fan from way back, you'd better check your collection to avoid duplication.

**WILLIE THE LION SMITH: Live at Blues Alley.** Willie the Lion Smith (piano). Relaxing; Music on My Mind; Sweet Georgia Brown; Contrary Motion; Conversation on Park Avenue; Here Comes the Band; Blue Skies; and nine others. HALCYON HAL 104 $5.98 (postpaid from Halcyon Records Inc., P. O. Box 4235, Grand Central Sta., New York, N. Y. 10017). Performance: Boring. Recording: Good

Willie the Lion Smith’s name is a legend to jazz buffs, and only a fool would tread on his good reputation. Still, I can recommend this oddly flabby and lethargic sample of his work only to those old enough to remember both Harlem and Greenwich Village as safe, fair havens on the Isle of Manhattan, when the music didn’t have to be good as long as it tinkled merrily on the other side of the bar. The number of bars still playing host to those denizens of the dark who tipped old-fashioned us while people like Willie tickled the ivories has dwindled to almost zero. Willie seems to know this, and although this album re-creates a world long gone but ever gentle on the mind, the music is tired. Willie’s time seems to be given up.

**CAL TJADER: *Tjader.* Cal Tjader (vibes and organ); Al Zulaica (piano); Michael Smithie (congas); Jim McCabe (bass); Dick Berk (drums); John Rae (tambourine); "Coke" Escovedo (timbales); Pete Escovedo (congas), unidentified horn section. I Showed Them; Weary Your Love Like Heaven; First There Is A You; What Are You Doing the Rest of Your Life; and five others. FANTASY 8406 $4.98, M 8406 $6.95, M 88406 $6.95, M 58406 $6.95. Performance: Tepid jazz-pop Recording: Good

Cal Tjader was one of the first jazz players to push his music out toward the larger pop audience. A decade ago he was into Latin jazz, bossa nova, cha-cha, and God knows what else. More recently he has altered his recipe to a fairly homogeneous mix of Latin rhythms, rock tunes, and jazz improvisations.

It’s an okay premise, so long as Tjader stays out of the "easy listening" bag—which he doesn’t always do. Usually what happens is that the best performances are the ones—*Weary Your Love Like Heaven, What Are You Doing The Rest of Your Life*, and *She’s Leaving Home*. Tjader’s style is based on strongly established melodies. The other stuff tends to drift away into a vaguely sinuous but not very attention-getting Latin swing. Good dance music, but not much else.

The only really surprising thing on this Tjader release is his first-class organ playing. I knew he was a highly competent drummer and vibes player, but had no idea he could get off so well on a keyboard. A fine talent, Tjader, but he still seems to be circling around the edges of the action.

**JOE ZAWINUL: *Zawinul.* Joe Zawinul (electric piano, composer); various other musicians. Doctor Honoris Causa; In a Silent Way; His Last Journey; Double Image; Arrival in New York; ATLANTIC SD 1579 $5.98. Performance: Solid contemporary jazz Recording: Very good

Joe Zawinul is surely one of the top four or five jazz musicians currently in Europe. He is not yet in the Django Reinhardt class, but he’s getting there. After a number of years spent working in the soul-jazz orchestras with Cannonball Adderley, Zawinul has recently begun to dip into the headier vintage of the new jazz-rock improvisational movements pioneered by Miles Davis. (Zawinul is now part of a new group, called Weather Report, that follows the Davis lead closely, their first recording has just been released by Columbia.)

Improvisation, in fact, is the word that keeps recurring to one who is listening to these tracks included here (two very long ones, two of medium length, and one very short fragment)—the use of jazz improvisation and all the many new electronic devices for the express purposes of what are essentially highly interior musical thoughts.

What we gradually are beginning to hear, I suspect, in Zawinul’s music, in Miles Davis’ music, and in most other new jazz, is the vanguard of a new "classicism"—one in which the noise elements, harmonic freedom, and rhythm multiplicity are subordinated to the avant-garde jazz musicians of the Sixties are becoming part of a specific, increasingly viable, and noticeably personal kind of musical vocabulary. It sounds like a very positive development to me, and suggests that the long awaited jazz renaissance may finally be taking place. Not in the form anyone expected—a true renaissance rarely does—but in a style and manner whose limits have only begun to be explored. Listen to *Zawinul* and you’ll see what I mean. D.H.
Now that Lenny Bruce has become the subject of plays and movies about his life and career, it is difficult to know how to relate to his memory. Was he a saint? A guru? A preacher? A martyr? A prophet? In some measure he was all of these, but primarily he was, after all, a comedian, an entertainer, and one tends to lose sight of that amid the welter of articles and critical analyses of him. Hearing his own voice performing his routines helps place the matter in perspective. "The Midnight Concert," recorded in Carnegie Hall on February 4, 1961, was first released some years ago under the title "Lenny Bruce in Concert," and covered in these pages by this reviewer. I found it funny then. It is interesting to listen to the same material again in light of the legend Bruce has become. Certainly he was ahead of his time, anticipated the idiom that is now part of our everyday interchange, and compulsively used it. The majority of them occur because people have written their names or addresses differently at different times. For example, if your subscription were listed under "William Jones, Cedar Lane, Middletown, Arizona," and you were to renew it as "Bill Jones, Cedar Lane, Middletown, Arizona," our computer would think that two separate subscriptions were involved, and it would start sending you two copies of Stereo Review each month. Other examples of combinations of names that would confuse the computer would include: John Henry Smith and Henry Smith; and Mrs. Joseph Jones and Mary Jones. Minor differences in addresses can also lead to difficulties. For example, to the computer, 100 Second St. is not the same as 100 2nd St. So, please, when you write us about your subscription, be sure to enclose the mailing label from the cover of the magazine—or else copy your name and address exactly as they appear on the mailing label. This will greatly reduce any chance of error, and we will be able to service your request much more quickly.

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**RECORDING OF SPECIAL MERIT**

**Lenny Bruce: The Midnight Concert**

Lenny Bruce (comedian). UNIFIED ARTISTS UAS 6794 $4.98.

Performance: Vintage Bruce
Recording: Good location job

Now that Lenny Bruce has become the subject of plays and movies about his life and career, it is difficult to know how to relate to his memory. Was he a saint? A guru? A preacher? A martyr? A prophet? In some measure he was all of these, but primarily he was, after all, a comedian, an entertainer, and one tends to lose sight of that amid the welter of articles and critical analyses of him. Hearing his own voice performing his routines helps place the matter in perspective. "The Midnight Concert," recorded in Carnegie Hall on February 4, 1961, was first released some years ago under the title "Lenny Bruce in Concert," and covered in these pages by this reviewer. I found it funny then. It is interesting to listen to the same material again in light of the legend Bruce has become. Certainly he was ahead of his time, anticipated the idiom that is now part of our everyday interchange, and compulsively used it. Most important of all, though, his routines remain funny. They have been plundered since by others, but nobody else has been able to deliver the same kind of material in the high-strung patter through which Bruce backed into an anecdote.

"The Midnight Concert" is a good way to encounter Bruce and his method, even though it doesn't maintain the level of, say, "The Best of Lenny Bruce" (Fantasy 7012), which has the built-in advantages of a selected anthology. But in Carnegie Hall we hear Bruce warming up the audience of 2,760 faithful followers (Roberto Ruark described them in the Saturday Evening Post as 'call girls, their business advisers, and you were to renew it...
When Beatrix Potter died in 1943 at the age of seventy-seven, she left behind a whole library of children’s books teeming with tales about animals with such names as Squirrel Nutkin, Jemima Puddle-Duck, Mrs. Tittlemouse, Mrs. Tiggy-Winkle—and of course, Peter Rabbit. All these busy little creatures pursued their adventures and misadventures in the Lake District of England, where Beatrix, as a child, was sometimes taken on holidays away from her home in London, and where she ultimately bought a farm and, at age fifty, married a local lawyer named William Heelis. The exploits of Peter Rabbit alone were once privately printed in an edition of 250 tiny books with white covers, illustrated by the author in rather cloying pastel tints.

Today, only the gentlest child or most sentimental adult could be expected to sit through any motion picture (or recorded reading)—there are several—in which Miss Potter’s characters are allowed to converse in their peculiar Victorian idiom, but Peter Rabbit and the Tales of Beatrix Potter, a recent MGM movie, spares us all that. Five of the best-known tales in the series have been turned into an enchanting ballet choreographed by Sir Frederick Ashton, with a sampling of the exhilarating picnic music that crowns the action in the movie. Embedded in this delicious pudding of a score are such delightful plums as the musical reference to the “Ode to Joy” from Beethoven’s Ninth. Lanchbery, one of the world’s best ballet conductors as well as a singularly adept orchestrator, draws a fine performance from the Covent Garden Orchestra. The film is the most successful yet made of a ballet, and the music from it is so choice of its kind that just writing about it makes me want to put the record on again.

According to the film liner notes, the music from the Covent Garden performance will be released by Angel Records in a special issue of its kind that just writing about it makes me want to put the record on again. It opens with the music to which the two bad mice raid a doll house and are defeated by cheeses made of plaster, follows the episode of Jeremy Fisher and the fish, includes the dance of the squirls and the attempt of the fox to capture Jemima Puddle-Duck for a cassette dinner, the piglings’ march, the mouse waltz, and the music to which Mrs. Tiggy-Winkle takes care of the laundry, and ends with a sampling of the exhilarating picnic music that crowns the action in the movie. Angel offers a choice suite of excerpts from the John Lanchbery film score.

By PAUL KRESH

CROW DOG’S PARADISE: songs of the Sioux. Henry Crow Dog (vocal and drum); Leonard Crow Dog (vocal and gourd); Al Runyon (water drum); Four Peyote Songs; Wolokata (Peace Song); Jesus, Light of the World; Song for Him Who Do Not Return; Yuwipi Song; Gourd Dance; and four others. ELEKTRA EKS 74091 $4.98.

Performance: Excellent

FOLK

HAMZA EL DIN: Escalay: The Water Wheel. Hamza El Din (voice and oud). The Water Wheel; I Remember; Song with Tar. NONESUCH H 72041 $2.98.

Performance: Authentic Sioux ceremonial music

Recording: Excellent field job

Ten miles south of a town in South Dakota called Rosebud there is a valley amid hills dotted with pine trees. At the entrance to the valley is a truck tire as tall as a man, crowned by a buffalo skull, and marked in white letters with the legend “Crow Dog’s Paradise—How Kolda.” In Sioux language, that means “Welcome, friend.” Inside Crow Dog’s Paradise, where the scenery consists of abandoned railway cars and houses and stumps of trees, live the descendants of Henry Crow Dog, the patriarch of the clan. They are full-blooded Sioux Indians who spend much of their time observing the ceremonies of their Sioux religion. Music is an important part of that religion, and so is eating the peyote mushroom with its high content of the hallucinogen mescaline.

On this album, richly decked out with color photographs and a fascinating text by Richard Erdoes, Henry Crow Dog and his son Leonard perform the music that is heard when the dwellers in Crow Dog’s Paradise observe their ceremonies. And plaintive, encompassing, compelling music it is. There are peyote songs, prayers that are addressed to the sacred mushroom itself as well as to the “four directions” of the universe, making use not only of chants but of accompaniments on the gourd and water-drum and ending with the piercing sound of an eagle-bone whistle. There’s a “grass dance” that stems originally from a ceremony performed by “sacred clowns.” “There’s the ‘vision quest’ of a song called Hanblechia, sung by a fasting man on a lonely hilltop, seeking illumination through dreams sent by the supernatural powers.” Other songs, called yuwipi, reach back farther in time than the peyote cult. These are chants connected with the ceremony of the sweat bath, when the sick are treated by invoking spirits to speak to the medicine man, who is bundled up like a mummy inside a blanket-covered tent filled with white steam. All is superbly recorded and annotated.

P.K.
seminal artists who create, almost literally without precedent, cultural aesthetics of their own. In the land of his birth—the Sudan area of the upper Nile that now has been submerged in the waters behind the Aswan Dam—music was a deeply rhythmic, functional accompaniment to everyday activities. But there was no classical music of the substance and quality of Arabic or Indian music. The oud, Hamza El Din's instrument, was not even generally used in Nubia.

Somehow, out of this background, Hamza El Din managed to study at the Conservatory of Music in Cairo, and gradually evolved a highly original, semi-improvisatory style that used the formal structures of Arabic music as a framework for the melodies and rhythms of the Nubian music he remembered from his youth. The result is an artistic amalgamation as fascinating as the mixture of, say, American jazz with Brazilian samba rhythms.

The oud has a sound almost impossible to describe—somewhere between acoustic guitar and the Indian sarod—and is incredibly soothing. Hamza El Din's playing employs the trance-like repetitions characteristic of much Eastern music, and it takes a few listenings before most Westerners can allow the music to sink through our too-busy consciousness. But it's worth the time and the effort. Hamza El Din is a great virtuoso, a master musician whose work is the aesthetic equivalent of that of a Casals or an Ali Akbar Khan. He should be heard.

THE VOICES FOUR: Our Rock and Our Redeemer. David Koffman (tenor, Fender bass, organ, piano and trumpet); Ron Isaacs (tenor and rhythm guitar); Mary Rosen (vocals); Holly Lipman (vocals); Jonathan Sachs (lead guitar); Howard Friedland (drums and tambourine). Sim Shalom; Eyfo Heym Kol Avoteynu?; V'Taher Libeynu; Eytz Chayim Hee; and four others.

MONITOR MFS 720 $4.98.

Performance: Uneasy alliance
Recording: Good

"In an age when everything is being questioned, when even our most basic values are under attack," the Voices Four are quoted as saying (presumably in unison), "the truth of Torah lights a path for living." Like many a young group that has passed this way, the Voices Four purport to be bringing their ancient message "wrapped in the sound of today." They sing various excerpts from the Jewish liturgy, and songs popular in Israel like Eyfo Heym Kol Avoteynu?, which wonders where all the Abrahams and Isaacs have gone, to a modern beat just muted enough not to wake up that fellow sleeping in the back of the synagogue. On the other hand, there is something about their syncopated musical idiom that is curiously out of kilter with "the message," and seems terribly lightweight in terms of the lines being sung—such lines as Isaiah's mighty vision of a world where swords will be beaten into plowshares. An exception is the condensed version of Shabbar Shalom, a "Friday evening rock service" where the music does succeed in bridging the gap between the requirements of ritual and the rock idiom. They are at their best, though, in such popular hits of present-day Israel as Sharm El Sheikh and Jerusalem of Gold, where they can let themselves go with plenty of fervor and stop trying to mix Judaism with the popcorn.

P.K.

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THE LANGUAGE AND MUSIC OF THE WOLVES. Robert Redford (narrator); Actual 'language and music' of the wolf. TONSL Records $5.95 (obtainable from Natural History Magazine, 85 West 77th Street, New York, N.Y. 10024).

Performance: Ecological extra
Recording: Very good

Whither the phonograph record? In recent years, in addition to music, sound effects, and human speech, we have had the language of dolphins, the chatter of the barnyard, and the song of the whale. Now, with the current emphasis on ecology, such recordings are not only technically feasible but economically viable. The song of the whale, discussed previously at some length in this magazine, was produced by a company called CRM Books in order to raise money to help save the whale population; it later was released commercially on the Capitol label. "The Language and Music of the Wolves" comes to us courtesy of the American Museum of Natural History on a label appropriately designated "Tonsil Records," and has also just been released commercially by Columbia Records (C 30769).

As Studs Terkel says in his jaunty liner note, "a glissando sweep, up and down, like a very lonesome, sentimental fire siren with a soul." Mr. Schonberg went on to say, with a technical grasp few of us could hope to emulate, that "the best wolf singer, swell-to-rolloff, is a messa di voce to the sixth above, hold it sweetly and purely, then perhaps embellish to the upper partial before going down to a pianissimo and trailing off on an inconclusive micropolyphony. Some have a range of over an octave." Mr. Schonberg acknowledged, however, that "some wolves have it, some don't." On the record, we hear individual pup and adult howls, barking, single howls "joined to give illusion of pack howl," and, for finale, a "joint group howl." I personally found the "group howls" strangely reminiscient of Miklos Rózsa's eerie, plaintive music for Spellbound. I'm inclined to say in general that wolves are rather better singers than whales, but Carusos they ain't. My dog, who heard the record with me, tilted her head critically during most of the concert by her canine cousins.

The point is that, musical abilities aside, wolves are much-maligned creatures. They don't howl to frighten people, and there is no record of their ever eating a single American. They sing to converse with other wolves, to make him pause to think how similarly outcasts and minorities have always been treated everywhere, including right here at home. Many a respectable householder was interviewed for this show, and few had a kind word to say for the gypsies. The tales of cruelty are harrowing—a pregnant woman refused shelter or medical treatment as she is about to give birth, hungry and thirsty travelers being refused food and water, the wanderers grudgingly skimpy education and unsanitary living conditions, and told always to move on. As Mr. Parker points out in his liner notes, "Recent work on animal behavior shows that when a wild animal is introduced amongst domesticated animals of the same species, they will turn on him and try to destroy him." There is, in fact, a revealing similarity about the contempt of the conventional English for the gypsy ('tinker,' 'mumper,' or 'potter') and American attitudes toward the hippie—that same resentment against the drop-out who is presumed to be leading a free and easy life at the expense of others who must earn their bread.

Like its predecessors in the series, this album combines marvelous original songs, folk tunes, field interviews, and a hard-hitting, unsentimental narration written with the economy and concentration of good verse in order to build a relentless impact. It isn't always easy for American ears to unravel the local dialects, and there is little by way of sweetness to relieve this bitter exposé, but in every way the treatment makes the most of its materials. Though there is very little optimism, there is much charm, especially in the songs intoned by the gypsies themselves, preserved over hundreds of years by a people who share in common with other Englishmen a regard for tradition, even though it is the tradition, in this case, of the rejected and despised.

P.K.

RECORDING OF SPECIAL MERIT

THE TRAVELLING PEOPLE. Radio ballad by Ewan MacColl, Peggy Seeger, and Charles Parker. Ewan MacColl, Peggy Seeger, Belle Stewart, Jane Stewart, Joe Heaney, and John Faulkner (vocalists); Alfie Kahn, Bryan Daley, Dave Swarbrick, Alf Edwards, Peggy Seeger, Jim Bray, Dinah Demuth and Bruce Turner (instrumentalists). ARGO No. DA 133 $5.95.

Performance: Authentic
Recording: Decent
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The 45 Lb. Studio
Very Heavy, Indeed!
RECORDING OF SPECIAL MERIT

MASCAGNI: Cavalleria Rusticana. Fiorenza Cossotto (mezzo-soprano), Santuzza; Adriano Rinaldi (tenor), Turiddu; Giacomo Guelfi (baritone), Alfonso Chiusi and Orchestra of La Scala, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON @ 3581 003 $10.95.

Performance: Impressive
Recording: Excellent
Playing Time: 79' 50"

This recording of Cavalleria, made several years ago, is the first complete one in the cassette medium, although excerpts from it have been available for three years. The cast is first-rate: Fiorenza Cossotto is a marvelously impassioned Santuzza, and Carlo Bergonzi brings his usual sensitivity and gorgeous vocalism to the part of Turiddu. Karajan, it is true, treats the orchestral accompaniment with far more refinement than it usually receives, but he also keeps the opera moving dramatically. It is a stirring, well-detailed, and thoroughly convincing performance. Except for some tape hiss, the cassette reproduction is excellent; there is no constriction, even in climactic moments.

The single tiny reel can serve as a quite superior example of how impressive cassettes are capable of sounding at this point in their development. A synopsis of the plot is included. I.K.

RECORDING OF SPECIAL MERIT


Performance: Beyond cavil
Recording: Excellent
Playing Time: 51' 46"

The serenades of Mozart are beyond praise: they shimmer with some of the loveliest music he ever composed. The Serenade No. 9 in D Major (called the "Posthorn") because that instrument makes a surprise appearance in the second trio of the second minuet in the work) was completed in 1779, in time for the end of a university term in Salzburg. What a way to end a term! The piece is in seven movements, the outer ones festive and lighthearted. Between are the two minutes, a concerto, a rondo, and a reflective andantino, each rivaling the other in splendor and musical interest. Although most of the serenades were written for outdoor performance, the "Serenata Notturna" on side two was actually meant to be played indoors, and was scored for two little orchestras to perform in different rooms. This effect is beautifully achieved in stereo here. As for the performances, they are above reproach just as the scores they celebrate are, and the sound of the cassette is exceptionally alive and believable. Notes are included. I.K.


Performance: For cliché collectors
Recording: Hollow
Playing Time: 39' 41"

They're off and running on this cassette—warhorses in the stereotype sweepstakes, the endless mile from the gate, of predictability to the finish-line of fatuity. If you simply can't go anywhere without your Russian and Ludmila Overture, your Sleeping Beauty Waltz, and your Dance of the Tumblers, here they are, served up in portable form with frenetic tempos in Phase Four sound that ranges from claustrophobic to what might result from having an orchestra play in a giant tile bathroom. Mr. Black is a conscientious conductor and the London Symphony can make just about anything sound good, but battle fatigue seems to have caught up with everybody here. P.K.

RECORDING OF SPECIAL MERIT

MASTERS OF THE LUTE AND GUITAR. Milàs: Pavanas Nos. 1 in C Major, 2 in D Major, and 3 in A Minor; Fantasia in F Minor. Narvaez: Baxa de Contrapunto, Canción del Emperador Mudarra; Pavana II de Alejandro; Fantasia que contrahaze la harpa en la manera de Ludovico Pisador; Pavana muy liana para el caballero. Sanz: Six pieces from "Instrucción sobre la Guitarría Española." Holborne: Galliard. Dowland: Captain Digory Piper's Galliard; My Ladye Hunsdon's Puffe (Allemande); Lachrimae Antiquae. Pavan, Alman. Three other pieces. Oscar García (guitar). MUSICAL HERITAGE SOCIETY © MHC 2023 $6.95 (plus 60¢ handling).
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Performance: Fresh
Recording: Excellent
Playing Time: 47' 25"

This is a most pleasant program, well varied in content and with but one exception (Alessandro Scarlatti's Gavotte as transcribed by Segovia) all written for guitar, lute, or other plucked instruments of the type. Oscar Caceres, who was born in Montevideo in 1928, is a proficient performer, he seems a little more aware of stylistic details than many of his guitarist colleagues, and he has both a rhythmically alert manner and a welcome lack of romantic tendencies in his playing. Technically, he handles his instrument well, if not with the superb projection and brilliance of Bream or Williams.

The quality of sound on this cassette is really newsworthy, however. The tape, first of all, is TDK Super Dynamic Gamma Ferric Oxide, and the Dolby noise-suppression process has been utilized. The result, therefore, is both clean and unrestricted sound and no discernible hiss. I made a careful A/B comparison of the cassette and the disc version here, and the two differ mainly in the cassette's having a slightly greater bass prominence and a marginally less open quality at the high end. I can state that, heard on its own, the cassette version is astonishingly good, and even more so under the restricted conditions of listening in a car while driving. I can also attest that this particular cassette, together with another MHS release, Las Cantigas de Santa Maria by the thirteenth-century composer Alfonso X (MHC 2024), represent this medium at the very best I think can be attained today. Processing is excellent, except for a slight flutter at the end of the first sequence. The container, which includes a list of the contents but no notes, has a small error: the Holborne Galliard is placed at the start of the second sequence, not the end of the first.

ENTERTAINMENT

RECORDING OF SPECIAL MERIT

FRESH: Fresh Today. Fresh (vocals and instrumental). Desdemona; For You, Pass the Salt, Mother; Tricky Says We're Helpless; Stoned in Saigon; and five others. RCA © PK 1628 $6.95. © PSS 1628 $6.95.

Performance: Spunky
Recording: Good
Playing Time: 34' 04"

"I've heard it said/Old soldiers never die,/But all the young ones seem to, /And the old ones never cry . . . . ." Bitter sentiments like this one are characteristic of the hard-edged numbers that make up this program by Fresh, a sassy and spirited group who mix their anti-war numbers, including The Peasants Are Revolting and a wonderfully insolent item entitled Stoned in Saigon, with jarring parodies of love songs (Desdemona) and black-comedy exercises on the order of Horrible Breath. At first this listener was sure he was going to smother under the weight of the pummeling Fresh was dishing out, but after a while, as the words came into focus and the frenzy settled into a style, they turned out to have something to say and to know how to say it unflinchingly, and they projected the emotional charge of every number in terms of its own unique musical requirements. By the time they got to "Mr. General, what you fightin' for?/Is it love of country, Or is it love of war?", I knew I was in the hands of a gang equipped to live up to its name.

BURL IVES: Time. Burl Ives (vocals, instrumental accompaniment). Time, Real Roses, Raindrops Keep Falling on My Head, Another Day, Another Year, Snowbird; and five others. CYCLONE © M 5417 $6.95, © M 8417 $6.95, © M 5417 $6.95.

Performance: A trip for the old folks
Recording: Good
Playing Time: 27' 02".

Burl Ives is preoccupied much of the time in this release with the problems of our "senior citizens," of whom he is certainly one of the youngest in spirit. In that plain-spoken, direct style which is his hallmark, he sings touchingly about the humiliations age brings ("Today in the park a young man called me sir"), pleads for understanding of the old in Another Day,
but I would suspect from listening that the girls who make up the Joy of Cooking ensemble listened carefully to the Supremes before trying out their own recipe—and then lowered everything about an octave. The fare they offer in this middle range is sad stuff: neglected ladies who resort to drinking “white wine in the morning, red wine at noon” while their husbands are traveling in Europe on business; a girl who is walking out on the man she cared for in vain, with “nothin’ of my own to lose.” In fact, like Mary McCarthy’s heroines, the girls of the Joy of Cooking seem to have been given a raw deal by the opposite sex in general, left high and dry with babies to feed, hurting inside, lonesome and discouraged. Considering this subject matter, and the banality of the tunes to which the despairing lyrics are set, they manage to keep up quite a cheerful, energetic tone throughout, as they sing of their sad lot with considerable flair. They are worth hearing for that, and for the sly mockery with which (again, like the Supremes) they undermine the self-pity of the material, suave in the midst of every shambles (even in a number called Brownsville), and always harmonizing coolly against well-groomed instrumental arrangements.

P.K.

FILM MUSIC

RECORDING OF SPECIAL MERIT

NILSSON: The Point! Harry Nilsson (vocals, narration); orchestra, George Tipton arr. and cond. Everything’s Got ‘Em; The Town (narration); Me and My Arrow; The Game (narration); Poli High; The Trial and Banishment (narration); Think About Your Troubles; The Pointed Man (narration); Life Line; The Birds (narration); P. O. V. Waltz; The Clearing in the Woods (narration); Are You Sleeping; Oblio’s Return (narration). RCA © PK 1623 $6.95, ® P8S 1623 $6.95.

Performance: Sharp
Recording: Very good
Playing Time: 32’55’’

Hitting an audience on two levels at once with a single stroke is extremely difficult, but Nilsson has scored a rare double bullseye with this little story about a round-headed boy in a land of pointed-headed people. The Point! was an animated cartoon movie on television and my three-year-old and I watched it squint-eyed with equal concentration. The story seems to me a bit complex for kids that age, but the neighborhood seven-year-olds loved it, and it gave adults a few things to mull over as well. As usual, Nilsson did it without being gimmicky or faddish.

The story, written and narrated by Nilsson, frames seven songs, written and sung by Nilsson, and they are as charming and as multifaceted as the story. The best one, I think, is Think About Your Troubles, telling how a boy’s teardrops, dropping into his teacup, eventually wind up as sea water, which is chemically similar to teardrops (it would make a nice diagram in National Geographic). Lyrics in the other songs are skimpy, repetitive, and ambiguous—any song, lifted out of the story, will tell its own little story—and yet somehow they neatly sketch in the mood behind the adventures of Oblio and his dog Arrow. Just when you’re thinking the songs are beside the point, something happens to remind you that, as the story says, everything has its point. The real question is: is it all poignant? The answer is: yes—exclamation point.

N. C.
STEREO REVIEW CLASSIFIED

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SEPTEMBER 1971
EQUALIZATION, LOW AND HIGH

MANY people are probably not aware that in tape recording—or audio recording of any kind—"equalization" (engineers call it "EQ") has at least three distinct meanings. First, the term is applied to those modifications of any portion of the audio spectrum that are meant to make the recording sound better subjectively. Amplifier tone controls and filters permit this to a limited degree, but in a recording studio the engineer may go farther and give a 5-dB boost in the mid-range ("presence") area to a singer’s microphone in order to make him stand out from the accompanying instruments. Or he may boost the highs or lows to "sweeten" the violins or add power to a plucked bass. The result is that the reproduced sound is made "equal" to nothing more than what he thinks his listeners want and expect to hear.

Second, "equalization" is the process of reducing high-frequency noise inherent in the tape, disc, and FM media by deliberately boosting the high frequencies before they are recorded or broadcast. When the boosted highs are restored to normal level during playback, the high-frequency noise that has been introduced during the recording and broadcast processes is cut back by the same amount.

In its third sense, equalization is compensation in advance for inherent and predictable high- or low-frequency losses in the recording medium itself, and it is into this category that tape-recorder playback equalization circuits fall. Without them tape would sound as if you had turned your bass controls all the way down and switched in a scratch filter to cut the extreme highs as well. Why is this so? Let’s look at the low-frequency losses first.

If you played a tape on which all audio frequencies were recorded at the same level through an unequalized ("flat") preamplifier, you’d find that from 100 to 200 Hz as there are from 50 to 100 Hz. Therefore, if we take the lowest bass tones up to about 3,000 Hz the output signal would increase in strength as the frequency increased. Specifically, the rate of increase is 6 dB per octave; therefore, the output signal strength doubles every time the frequency doubles. This is because a tape playback head responds to the rate of change of the signal presented to it, and there are twice as many changes (alterations between positive and negative polarity) per second in the octave from 100 to 200 Hz as there are from 50 to 100 Hz. Therefore, if we take 1,000 Hz as our 0-dB reference point, the playback-head output at 50 Hz will be down by a disastrous 26 dB! We can’t boost the bass notes during recording or they’d overload the tape. So instead we “equalize” our tape-playback preamplifiers to supply the needed bass boost.

Usually, you’d hardly think of 3,180 Hz as a low-frequency tone, but that is where the "bass boost" begins for tape speeds of 7½ and 15 ips, according to the NAB standards. (It starts at 1,770 Hz for 1½ and 3½ ips.) At all speeds it increases at a 6-dB-per-octave rate as the frequency falls, exactly matching the playback loss. This augmentation continues down to 50 Hz, after which it tapers off. Thus we get our bass back, but what happens to the treble frequencies? For the story of those, see next month.
TEAC's new low S/N cassette duo: The A-24 stereo deck and our new AN-50 Dolby accessory

At TEAC when we set out to design a new tape deck, we place particular emphasis on those critical components that make the difference between a good looking product and one that's also a good performer.

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And where's the Dolby? Right alongside, thanks to TEAC's new AN-50 plug-in noise reduction accessory.

So if you're looking for a stereo cassette with the quality of TEAC and the convenience of Dolby-type noise reduction, choose TEAC's A-24 cassette deck and the TEAC AN-50 noise reduction accessory. They're sensibly priced at $229.00 for the duo. Separately the A-24 retails for only $179.50 and the AN-50 for only $49.50. And of course, if you already own a TEAC cassette model, the AN-50 was designed for you. It's perfectly matched to the TEAC A-23 stereo cassette deck.
4-CHANNEL SOUND

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Being more a progress report than an advertisement.

The Promise
Thousands of people have heard 4-channel stereo reproduction at hi-fi shows and special demonstrations in the last few years. Others have read about this fascinating and rewarding technique that promises more faithful reproduction of musical performances. Early experiments have also shown 4-channel to be an effective tool in creating new sonic environments for both serious and popular musical forms. The concept has met with almost universal critical acclaim, and strong general approval.

The Problem
But alas only a handful of enthusiasts can actually enjoy this advance today. Because only a few 4-channel tapes have been produced for sale. The problem is simple, but basic: 4-channel means just that—four separate signals. And to reproduce it properly demands four of everything, right down the line.

Using four amplifier channels and adding four speakers is easy. Even creating a 4-channel tape recorder is practical (although expensive). But the stumbling block has been finding a way to put four completely independent signals in a record groove, or broadcast them over a standard stereo FM station.

And if you can't buy a 4-channel disc, or hear it on FM, the market is limited to a precious few 4-channel tape owners. But their numbers are so small that record companies just can't afford to release four channel material. So they continue to produce 2-channel stereo that you can play (and that they can sell in volume).

The Way Out
Now Electro-Voice has moved to break the impasse. With a system that can offer the significant advantages of discrete 4-channel, yet is compatible with present record playing equipment and present FM broadcasting. It is called STEREO-4.

STEREO-4 is a system that encodes four channels into a stereo signal that can be transmitted over FM or recorded on a disc. In the home you add a STEREO-4 decoder, plus another stereo amplifier and a pair of rear speakers. The result is reproduction that closely rivals the original 4-channel sound. Four different signals from your speakers, with a feeling of depth and ambiance you have never before heard from any record.

Admittedly, STEREO-4 is not quite the equal of 4 discrete signals. But while there is some loss of stereo separation, there is no reduction in frequency response or overall fidelity. We might note that this reduced separation actually seems to aid the psycho-acoustic effect for many listeners in normal listening situations. And on the plus side, STEREO-4 offers an advantage that even discrete 4-channel cannot provide.

The Remarkable Bonus
Playback of almost all of your present 2-channel stereo library is greatly enhanced when fed through the STEREO-4 decoder. It's the result of multi-microphone recording techniques that include a remarkable amount of 4-channel information on ordinary stereo discs and tapes. Adding STEREO-4 releases this hidden information for you to enjoy.

The Details
A STEREO-4 Model EVX-4 Decoder costs just $59.95. And with it, plus 4 speakers and dual stereo amplifiers, you're equipped for almost any kind of sound available. Encoded 4-channel, enhanced stereo, regular stereo, and discrete 4-channel (assuming suitable source equipment). Even mono. So you have the one system that is completely compatible with the past, present, and foreseeable future.

The Present
And what about encoded 4-channel discs and broadcasts? Well, recording companies have already started mastering STEREO-4 records, and more are joining in. And STEREO-4 is now being broadcast in many major cities around the country.

The Future
Like you, we hope for the day when discrete 4-channel sound will be commonplace on records and FM, and your STEREO-4 decoder will be relegated to enhancing your present library. But that day will have to wait until some very knotty design problems are solved. And probably after a host of new FCC regulations define an utterly new system. Indeed, there is serious question whether these problems can be solved at all.

In the meantime, the STEREO-4 system is getting 4-channel recordings into the marketplace in increasing numbers, in a form that people can enjoy. Hear STEREO-4 at your E-V soundroom soon. And ask your local FM station for a schedule of STEREO-4 broadcasts. Or write us for complete information. It's not too soon to start planning for tomorrow.

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In Europe: Electro-Voice, S.A., Lys Strooss 55.
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