

# Stereo Review

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MARCH 1970 • 60 CENTS

## SPECIAL TAPE RECORDER ISSUE

HOW A TAPE RECORDER WORKS \* KNOW YOUR TAPE TYPES  
MAINTENANCE TIPS \* IS YOUR CASSETTE PLAYER READY?

TAPE



TAPE  
TAPE

TAPE



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# speeds service... cuts repair costs.

## ADDITIONAL PROTECTION FOR YOU

Scott's regular Two-Year Warranty remains fully in effect. During the first two years there is no charge for either parts or labor costs. This new Modutron circuit board exchange policy is additional protection . . . it assures you of minimal service cost no matter how long you keep your Scott component.

### SCOTT AUDIO COMPONENT, LOUDSPEAKER SYSTEM, AND STEREO MUSIC SYSTEM WARRANTY

All H.H. Scott professional quality tuners, amplifiers, receivers, compact stereo music systems, and loudspeaker systems are warranted against defects in material and workmanship for two years from the date of sale to the consumer. The unit must be delivered to and picked up from either an authorized Scott warranty service station or the Customer Service Department, H.H. Scott, Inc., 117 Powdermill Road, Maynard, Massachusetts 01754.

This warranty covers repair and/or replacement of any part found by the manufacturer, or his agent, to be defective, including any associated labor cost.

The above warranty does not apply to (1) accessory parts explicitly covered by the field warranty of an original manufacturer (2) units subjected to accidental damage or misuse in violation of instructions; (3) normal wear and tear; (4) units repaired or altered by other than authorized service agencies; and (5) units with removed or defaced serial number.

**This applies to 1968 and later model year units.**

## WHAT UNITS ARE COVERED

Most of Scott's new receivers utilize Modutron construction. Included are the 342C FM stereo receiver at \$269.95, the 382C AM/FM stereo receiver at \$299.95, the 386 AM/FM stereo receiver at \$349.95, and the Scott 2506 compact stereo systems, ranging from \$399.95.



## WHAT WILL EXCHANGE BOARD COST?

Sample 1970 factory-tested replacement boards costs are listed below. A complete list is available by writing to our Service Manager, Don Whitney.

| MODUTRON BOARD                      | Regular Cost | Exchange Cost* |
|-------------------------------------|--------------|----------------|
| 342IC Stereo Pre-amplifier          | \$28.84      | \$10.00        |
| 342C Quartz Crystal FM IF Amplifier | \$48.88      | \$10.00        |
| 382C Tone Control                   | \$30.32      | \$10.00        |
| 382C Power Amplifier                | \$30.64      | \$10.00        |
| 386IC Multiplex                     | \$37.52      | \$10.00        |
| 386 Driver Amplifier                | \$25.92      | \$10.00        |
| 386IC Stereo Preamplifier           | \$40.95      | \$10.00        |
| 2506 AM/FM IF Amplifier             | \$40.44      | \$10.00        |

\*Exchange price applies only if board is not physically damaged.

## NEW MODUTRON CONSTRUCTION APPROVED BY EXPERTS

The 1970 CONSUMER GUIDE published by BUYERS GUIDE Magazine discusses Scott Modutron construction: "Scott is . . . pioneering the use of plug-in modular construction. With entire banks of transistors on plug-in modules, troubles are easier to isolate and service costs are down accordingly. Instead of troubleshooting for a single defective unit in the spaghetti of circuitry, clipping out, and then delicately soldering in a replacement, the entire module can be yanked out and a new one plugged in. . ."

"Many a hi-fi buff has experienced having a defective receiver, with poorly accessible circuit boards, sit in the service shop for two or three weeks while waiting for the necessary skilled and tediously laborious attention. There is no good excuse for that situation with plug-in modular construction. In fact, a great deal of emphasis for the use of electronic modules comes from the service agencies handling warranty work, and, as for out-of-warranty repairs, modular circuit design can cut service bills by 40-80% compared to what it costs to have a non-modular receiver repaired."

# SCOTT®

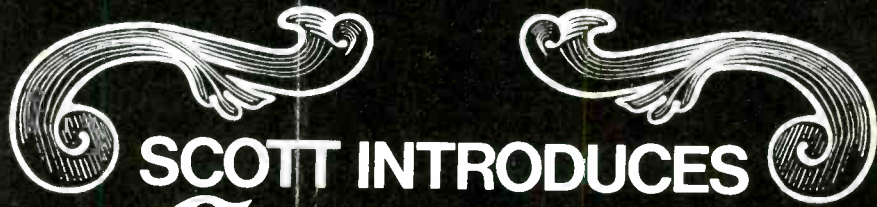
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\*Or the equivalent 1970 purchasing power.

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SCOTT INTRODUCES

**Component  
Long-Life  
Insurance**

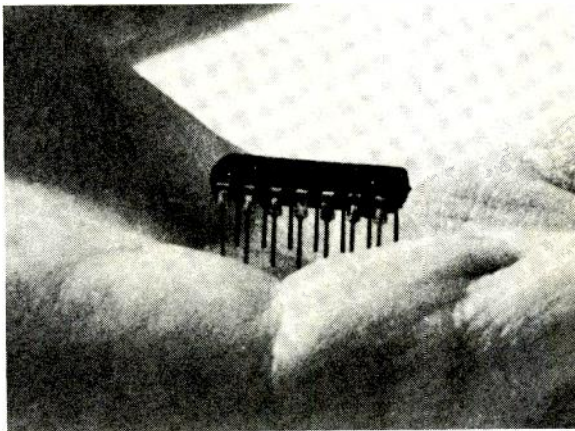
**NEW MODUTRON  
CIRCUIT BOARD  
EXCHANGE POLICY**

**A SERVICE YOU  
MAY NEVER NEED...  
(But isn't it great to know it's there?)**

# Scott's New Modutron Circuit Board Exchange Policy:

Let's face it . . . electronic devices are becoming progressively more complex and are therefore more difficult and costly to repair.

Scott engineers have solved this problem two ways. First, they minimized the need for service through careful selection of parts, then they went on to simplify servicing through the use of replaceable Modutron circuit boards.



## **BUILT TO LAST**

Scott designs-in more Integrated Circuits than any other manufacturer (as many as eight in most receivers). These frozen-in-silicon devices are virtually indestructible.

Massive power transformers are built to take it . . . welded type electrolytic capacitors are virtually fail-proof . . . wire-wrap construction eliminates most solder joints, the most common electronic bug-a-boo.

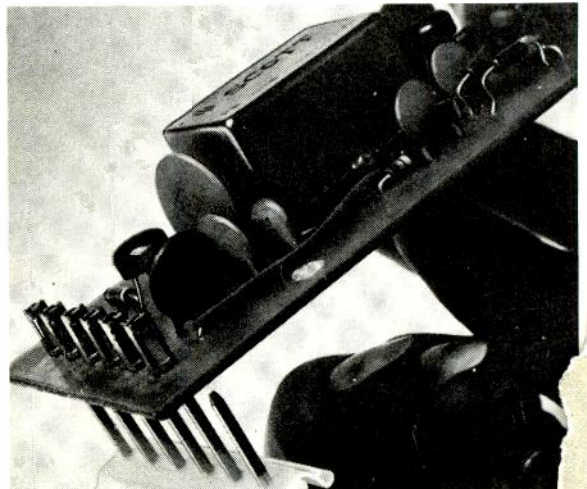
With all of this, service is still an occasional necessity.

## **NEW MODUTRON CIRCUIT BOARDS**

To make servicing easier and less costly, Scott engineers designed new Modutron circuit boards. All major electronic circuits are modularized on separate printed circuit boards . . . and each of

these boards plugs into place on the chassis. This means that a failure in any major circuit can be repaired instantly by plugging in a replacement board.

Our new service policy allows replacement of any printed circuit board at deliberately low cost no matter how long you've owned your unit!



## **HOW SCOTT'S MODUTRON EXCHANGE POLICY WORKS**

Should your Modutron unit ever need service, here's all you do:

Take or ship your component to a Scott Warranty Service Station.

Your unit will be electronically tested and the problem isolated. (Experience shows that 95% of problems can be repaired by plugging in a replacement board.)

The warranty station will then exchange the defective board for a perfect one right from stock, or contact Scott for air shipment.

This means service is faster than ever before and that you pay only for minimum service time, plus the low exchange cost of a perfect factory-rebuilt Modutron circuit board.



**IF ANY PRINTED CIRCUIT  
BOARD ON ANY SCOTT MODUTRON  
COMPONENT NEEDS SERVICE,  
WE'LL EXCHANGE IT  
FOR ONLY \$10!\***

\*Or the equivalent 1970 purchasing power.



## You can tell it's the Opéra at Versailles when you listen with a Stanton.

The Opéra at Versailles, completed 1770, scene of the first performances of Jean Baptiste Lully's operas and ballets. (Lully was court composer to Louis XIV.)

PHOTOGRAPH BY FRANZ ECKHART

The ultimate test of a stereo cartridge isn't the sound of the music.

It's the sound of the hall.

Many of today's smoother, better-tracking cartridges can reproduce instrumental and vocal timbres with considerable naturalism. But something is often missing. That nice, undistorted sound seems to be coming from the speakers, or from nowhere in particular, rather than from the concert hall or opera stage.

It's easy to blame the recording, but often it's the cartridge.

The acoustical characteristics that distinguish one hall from another, or any hall from your listening room, represent the subtlest frequency and phase components of the recorded waveform. They end up as extremely fine undulations of the record groove, even finer than the higher harmonics of most instruments.

When a cartridge reproduces these undulations with the most precision, you can hear the specific acoustics of the Opéra Versailles, or of any other hall. If it doesn't you can't.

The Stanton does.



# Stanton

**The specifications.\*** Frequency response from 10 Hz to 10kHz,  $\pm 1/2$  dB. From 10kHz to 20kHz, individually calibrated. Nominal output, 0.7mV/cm/sec. Nominal channel separation, 35dB. Load resistance, 47K ohms. Cable capacitance, 275 pF. DC resistance, 1K ohms. Inductance, 500mH. Stylus tip, .0002" x .0009" elliptical. Tracking force,  $3/4$  to  $1 1/2$  gm. Cartridge weight, 5.5 gm. Brush weight (self-supporting), 1 gm.\* Each Stanton 681 is tested and measured against the laboratory standard for frequency response, channel separation, output, etc. The results are written by hand on the specifications enclosed with every cartridge. The 681EE, with elliptical stylus and the "Longhair" brush that cleans record grooves before they reach the stylus, costs \$60. The 681T, identical but with interchangeable elliptical and conical styli both included, costs \$75.

For free literature, write to Stanton Magnetics, Inc., Plainview, L.I., N.Y. 11803.

CIRCLE NO. 57 ON READER SERVICE CARD

FORMERLY HI-FI/STEREO REVIEW

# Stereo Review

MARCH 1970 • VOLUME 24 • NUMBER 3

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By WILLIAM ANDERSON



## EDITORIALLY SPEAKING

### MUSICAL ARCHEOLOGY

RUBBERNECKING along the street recently, I watched a crew of workmen top off something like thirty stories of structural steel with a tattered little Christmas tree—it was not for any seasonal observance, but to propitiate whatever gods there be that keep skyscrapers standing. And since the building is grand enough to afford it, a cornerstone will doubtless be laid in later containing among other souvenirs the day's newspaper, intended perhaps for the eyes of whoever it is who tears skyscrapers down. During the Depression, when I was growing up, there was, oddly enough, a lot of cornerstone laying, but I recall also a mania for those larger efforts called "time capsules." For the then-bleak present, these may very well have been a way of affirming confidence in the shaky future, as well as expressing a harmless immodesty about our importance in history.

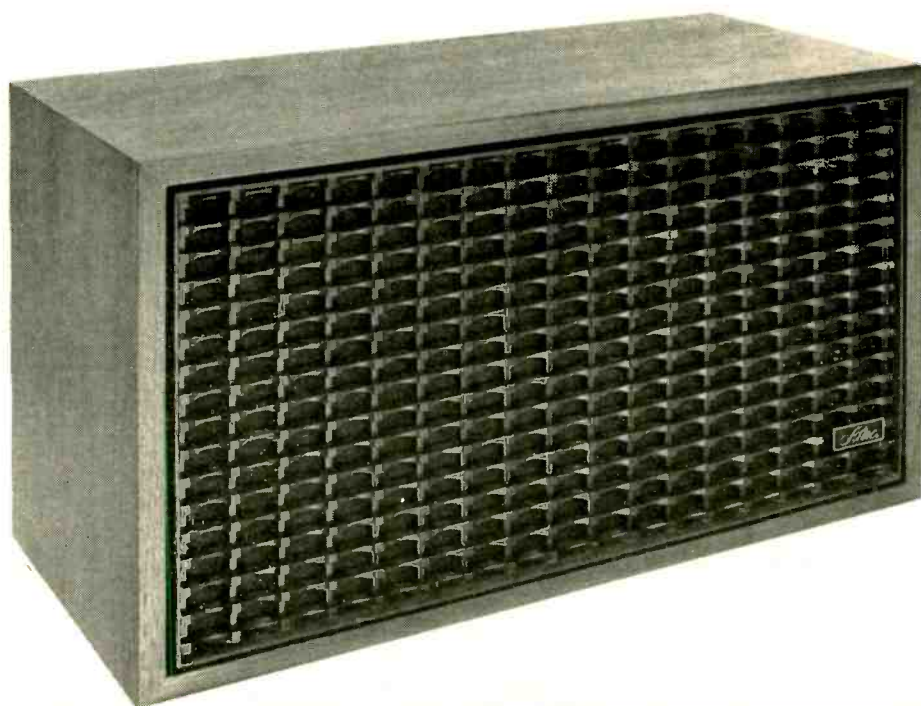
Time capsules with very advanced delivery dates are still going underground here and there, but we no longer really need them. Living as we do in what may easily be called the Age of Documentation, all but buried in microfilm, tape, xeroxes, photographs, photostats, film, carbon copies, and copies of copies, it sometimes appears that we are turning the planet itself into a time capsule. This special issue of STEREO REVIEW reminds me that the tape-recorder has played a large role in the accumulation of all this data. Public figures cannot even pass—shall we say—a comment on the weather without its being set down for posterity by the timely interposition of a microphone, and singers in the sanctity of recital halls will have their worst as well as their best vocal moments captured for scoffers and appreciators of the future. Scholarly researchers may—or may not—thank us one day for our assiduity in preserving every last laundry list and TV commercial, but they will not be able to complain that we didn't leave them enough material. The haul of recorded music alone, both good and bad, will be an almost inexhaustible mine.

Other eras were not so blessed with documentary media, and though their mid-dens may have swallowed up much that is inconsequential, they also contain much of value. There are in music, for example, many lost great works by great composers tantalizingly mentioned in casual correspondence, reported from performance, mislaid by friends or family, or destroyed by the ignorant. Much of the old music we do have, moreover, has come to us not through the normal channels of careful hand-to-hand preservation through the years but has been unearthed by indefatigable scholar-detectives carefully sifting the sands in likely and unlikely places. One might think, for example, that a composer of the importance (even in his own time) of Franz Schubert would by now be completely documented—after all, he died in 1828. But only a year ago his "Grazer Fantasie" for piano (composed when he was twenty) was discovered in a copy made by his friend Josef Hüttenbrenner in the attic of a house in Austria owned by the widow of Hüttenbrenner's great nephew.

The search for old music goes on, with minor (and occasionally major) pieces of treasure being turned up regularly. Such projects, usually labors of love, are best undertaken by those peculiarly gifted with optimism, industry, ingenuity, and a measure of healthy skepticism. Robert Offergeld, former music editor of this magazine and initiator of our American Composers Series, has for years been hot on the trail of Louis Moreau Gottschalk, an elusive subject with a particularly challenging amount of unlocated music to his credit. The first result of Mr. Offergeld's researches is the soon-to-be-published *Centennial Catalogue of the Published and Unpublished Compositions of Louis Moreau Gottschalk*, and excerpts from its provocative introduction are printed in this issue. The whole may be considered metaphorically as a kind of map of buried treasure, or the first spade in at an archeological dig. There is more of Gottschalk's delightful music out there somewhere, in attics and trunks from here to Rio, and one day it will be heard again.



**Nobody likes a name-dropper,  
but it's pretty difficult  
not to drop a few names  
when you own  
Altec Lansing bookshelf speakers  
and stop and think  
that the same fine quality  
of Altec sound equipment  
is now playing at  
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Universal Recording Studios,  
Nashboro Records, Universal Decca  
Recording Studios,  
Century Records, Lincoln Center,  
and a lot of other famous places.**

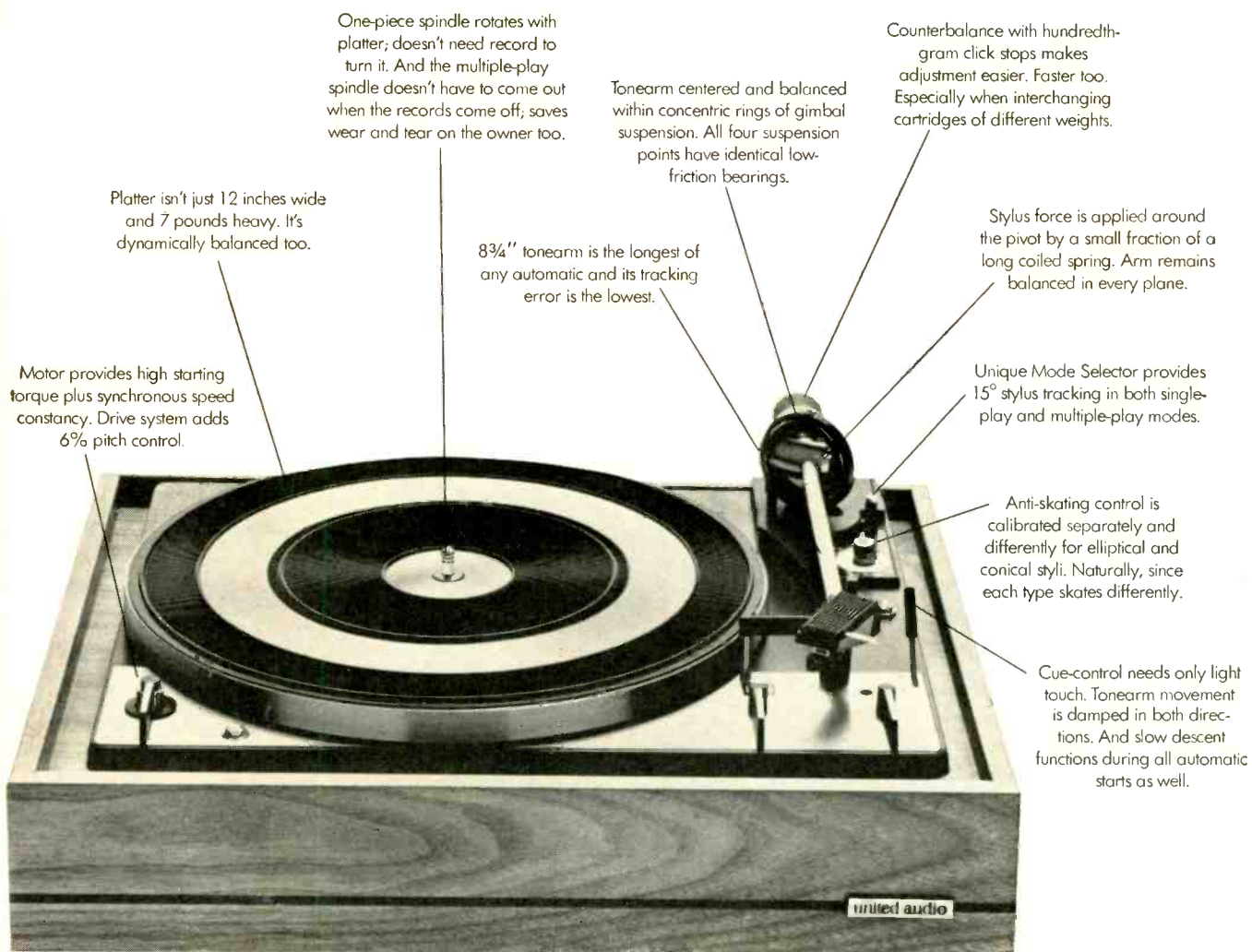


Altec Lansing bookshelf speakers include the Bolero (shown), \$179.95 each; the Madera, \$149.95 each; and the Corona, \$85.50 each. Hear them for yourself at your Altec Lansing dealer. Or write for a free catalog: 1515 South Manchester Avenue, Anaheim, California 92803.



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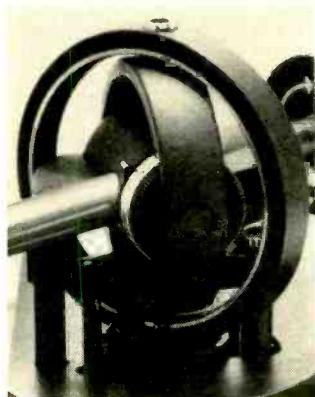
# Every record you buy is one more reason to own a Dual 1219.



If you think of your total investment in records — which may be hundreds or even thousands of dollars — we think you'll agree that the component that handles those fragile records should do so with the utmost precision and care.

Which brings us to the Dual 1219, an automatic record playing instrument of such incredible precision that testing labs cannot fully measure how close to perfection its performance actually comes.

At \$175, it has the added distinction of being the most expensive apparatus of its kind. But it lives up to its cost every time you play a record. By allowing the stylus to extract the purest possible signal from the record groove to the amplifier. With the lowest wow, flutter, rumble — or any other distortion — of any turntable ever made for home use. No matter how many times you play that record.



All four pivots of the 1219's gimbal have identical low-friction bearings.

No mean accomplishment. Especially when you realize that the record groove isn't all that groovy.

Under a microscope, it looks more like a two-sided roller coaster in Grand Canyon. As the stylus rides through this trough, it must perform an incredible balancing act — not just to stay in the groove — but to maintain equal pressure on both walls while pivoting up, down and sideways, and changing direction thousands of times a second. Any lapse in equilibrium results in loss or distortion of signal. Any curve the stylus can't follow, it's likely to eliminate. Permanently.

To perform this feat more precisely than ever before required a whole new technology in tonearm design.

One result was the first true gimbal ever used to suspend an automatic arm. (In the gimbal, the tonearm pivots vertically from an inner ring which, in turn, pivots horizontally from an outer ring.)

We went to equally extensive lengths to ensure that the stylus would track at precisely the correct angle —  $15^\circ$  — whether playing one record or a stack. This is achieved by the Mode Selector, another Dual innovation, which shifts the entire tonearm base — down for single play, up for multiple play.

The total tonearm system also includes a counterbalance with hundredth-gram click stops, and separately calibrated anti-skating scales for each stylus type.

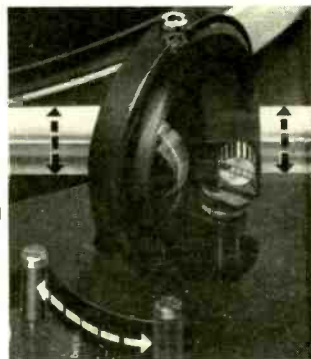
To turn the record, we designed a motor that brings the platter to full speed in less than half a turn and keeps it there, even if your house voltage varies. That platter is twelve inches in diameter, and the flywheel action of its seven pounds helps reduce wow and flutter to the vanishing point.

Alas, the rest of the world is not as accurate as our turntable. So we added pitch control that lets you, if you must, match the 1219 with less fortunate instruments like off-speed tape recorders and out-of-tune pianos.

These are only a few of the advantages we believe a precision turntable should offer, and just a few of the delights of ownership you will discover in the Dual 1219. (Others are on the opposite page.)

Naturally we're biased. So if you'd like some independent views, write for complete reprints of four independent test reports on the 1219. We'll also include a 16-page booklet on tonearms and turntables, originally an article in Stereo Review.

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## LETTERS TO THE EDITOR

### Beethoven Bicentennial

● In reference to your January issue celebrating the "Beethoven Bicentennial," I must say that I am very disappointed. Martin Bookspan's opinions in "Beethoven Two Hundred Years Later" confirm my ideas about his qualifications as a critic: a person who calls Baroque music "sewing-machine music" simply should not be on the staff of your excellent magazine.

Then we come across Dr. William B. Ober's "Beethoven's Feet of Clay." I am still trying to figure out what Dr. Ober was attempting to prove. He should know that arguments *ad hominem* are invalid. Maybe he cannot grasp that authentic human beings express what is inside them in ways other than the mediocre ones he values so highly.

E. A. ZANINI  
Boston, Mass.

● Goodness gracious! Is it possible that Beethoven's unpolished boots and poorly tied cravat have survived 175 years to offend William Ober? Was the price of those glowing masterpieces too high, in his opinion? I refuse to believe it!

DAVID B. WEEKS  
Chicago, Ill.

● Congratulations on achieving that rarity, a balanced evaluation of Beethoven, for his bicentennial. In the midst of so much fervid hoopla and morbid doting on Ludwig as THE great composer, you have struck a blow for musical sanity.

Particularly valuable was Henry Pleasants' insight into the master's fatal flaw: an obsession with his own greatness that robbed his work of natural grace and humor.

William Ober's article was also a useful antidote to the torrent of "tormented genius" pap. While Beethoven did have a hard time of it, and led a thoroughly unpleasant life, he always did his best to inflict at least as much thoughtlessness and rudeness on society as it contrived to inflict on him. Doubtless, had he been a fuller human being, less of his energy and creative force would have gone into his music. But it would certainly have made it easier on his family, his neighbors, his patrons, and those who, although appreciative of much in his music, are put off by the character of its composer.

ARAM BAKSHIAN, JR.  
Washington, D.C.

### The Four-Channel Disc

● Reading Larry Klein's report on "The Four-Channel Disc" in the January issue should be enough to give all of us who are serious audiophiles a bit of a respite from the where-will-it-all-end syndrome.

I'll readily admit to being one of those devil-may-care types who abandoned their mono gear when something better came along. I have spent the last ten or eleven years building a tape and disc library, and it is now quite sizable. It's all in stereo, of course, and it's all played on the best equipment that I can almost afford.

Recently, however, I've been averting my eyes when passing my shelves with their rows of records and tapes the way one might try to avoid the searching gaze of an incurably ill friend. Each trip to the local audio arena brings with it the thought that perhaps this is the week they and I have been made obsolete.

For this reason I've kept a keen eye on the development of the four-channel audio system. Unfortunately, the problems with this new system show every sign of getting out of hand. Typically, the cost of sorting out the final system from all the others will be borne by the consumer if past history is any indication. In view of this, Mr. Klein's article describing the Scheiber matrixing system was a real breath of fresh air. Since I agree with Mr. Klein's feeling that quadrasonic discs and tapes are an idea whose time has come, the beautiful, simple compatibility of Scheiber's encoder is enough to make one weep.

But don't stop now. We, the audio consumers, are much in need of guidance through the jungle of possible four-channel systems that we are about to be let loose in. Those who already own fine audio systems ought to have some protection against instant obsolescence.

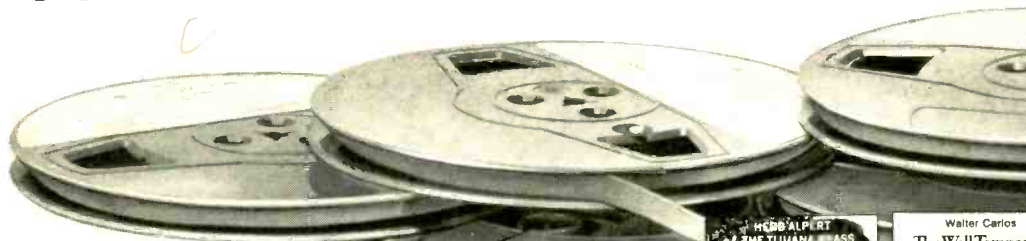
I urge STEREO REVIEW (my God, you may have to change your name!) to champion the cause of Scheiber's simple and logical route to quadraphony.

ROBERT J. SPEAR  
Harrison, N. Y.

*Mr. Klein replies: "If and when I am absolutely sure that Mr. Scheiber's system works as well as I hope it does, champion it I will!"*

(Continued on page 12)

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plus mailing and handling

FOR ONLY

if you join now, and agree to buy five additional tapes during the coming year, from the hundreds to be offered

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**DEAN MARTIN**  
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181875

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### Rock and Ruck

● I am writing to thank William Anderson for his editorial on "Pot-Rock Festivals" (November) and his latest words on the subject that appeared in the January issue ("Rock as Ruck"). For the first time, someone has articulated the truth about the current musical scene. I agree with what he said, and particularly enjoyed the lucid way in which he said it. I think your magazine is currently the only one that cares enough to "tell it like it is" rather than pander to what some publications would have us believe is the public taste.

I also want to mention that I think James Goodfriend is currently the only other writer for a monthly publication who has the honesty to report the truth and the writing ability to make it clear. Keep up the good work.

HOWARD KOERPEL  
Dumont, N. J.

● Thank you, Mr. Anderson, for putting into words my repulsion for rock music. Your analogy of rock music to pizza was beautiful. I too believe that rock music should not be in the "arena," for I'm nineteen and was on the pizza diet until three years ago, when I quit rock and searched for and found something more nourishing.

RICHARD CHU  
Houston, Tex.

● I read Mr. Anderson's "Pot Luck" article in November when it came out, chuckled, then waited to see what kind of protest mail would arrive. After considering all sides in the basic issue, which boils down to personal preference, I have made one valid observation. That is: Mr. Anderson is using his position as an editor of a widely read magazine as a weapon, in precisely the same way Agnew spews bombast, and his utterances differ very little from our Subtle Spiro.

I would remind Mr. Anderson that he seems to feel he is a chosen member of the "silent majority" in condemning "rock" *per se*, but judging by the numbers, he is not. His pseudo-intellectual tastes in music should not be compared to "rock" (I would prefer "contemporary music" as a label) but all other forms of music, different eras in classical music included. In addition, the "cretins" he refers to as rock composers are in most instances highly gifted composers, some of them former classical musicians.

In sum, it isn't precisely clear as to what Mr. Anderson's basic argument really is. If he feels rock festivals are bad, that's one thing; but when he tries to intertwine rock itself with drugs and the generation gap, his argument tends toward the specious.

FRANK JOHNSON  
Far Hills, N. J.

*The Editor replies: "I read Mr. Johnson's letter with a great deal of pleasure, for I could not have come up with a better example of the confused nattering I alluded to in my January editorial if I had produced it myself. Following the latest fashion in insult, he would like to pin the label of 'Agnewism' on me and then condemn me for wearing it. Sorry, but it won't stick; I suspect that Mr. Agnew would find my politics as disturbing as Mr. Johnson apparently finds his. The characterization of my musical tastes as 'pseudo-intellectual' does have a familiar ring, however, and I did not call any rock composers 'cretins'—fight fair, Mr. Johnson.*

*How I could 'use my position as an editor of a widely read magazine as a weapon' and still be a member of the 'silent majority' is the question of the week, unless I am willing to believe that 300,000 people manage to ignore my sounding off every month. And if Mr. Johnson is going to continue to believe that I am responsible for intertwining rock with drugs and the generation gap he will first have to convince himself that I wrote, say, the Beatles hit She's Leaving Home and Lucy in the Sky with Diamonds. I do not condemn rock, only the uses to which it is put. Art (even minor art) as propaganda is itself narcotic, useful only for manipulation and exploitation. I would hate to see the energy, honesty, and fervent seeking of the best of our young people faked off in any more Bethels: pot and rock = bread and circuses. And those who would persuade the young that rock, vital and real though it may be, is anything more than one of many possible kinds of music are indulging in a cruel hoax, 'former classical musicians' notwithstanding."*

● What entitles certain young people to talk about "their generation's" position on rock music festivals, as if serious music were the exclusive possession of the "old"? Enrollment in music courses at universities across the country is spiraling upward. Universities do not teach rock in formal music curricula.

Most rock is largely unwritten, unplanned, glandular, instinctive, and primitive, and requires little or no knowledge of music theory, composition, counterpoint, *etc.*, the tools of the musician's craft. Serious music is largely written, planned, and intellectualized, and incorporates various compositional devices. If rock "musicians" possessed knowledge of these, they wouldn't play rock, because their cultivated minds would demand that they utilize what they have learned to attain greater heights of accomplishment in the realm of sensitivity to and manipulation of sounds.

Between these two types of music there is a spectrum of other musical endeavors, but, as in literature, music becomes a work of art when a skilled and inspired artist molds it into a complete, polished entity capable of being enjoyed at several different levels besides the visceral, and puts it in writing.

LINDA GREER MORALES,  
Assistant Professor  
Oklahoma State Univ.  
Stillwater, Okla.

*The Editor replies: "I hope I am wrong in detecting a note of impatience in Prof. Morales' letter; granted that the musical spectrum is a broad one running from the visceral to the cerebral, but we are animals with brains, and I therefore see no justification for any hierarchy. We should try rather to understand, express, and integrate these opposites where possible without invidious comparisons between greater and lesser activities. Why not, indeed, teach rock in formal music curricula? Have we not yet proved the unproductiveness of over-celebration in that area?"*

### Duke Ellington

● Since Duke Ellington has long adopted a self-depreciatory tone, it's not surprising that revealing comment didn't abound in the Dance rhapsody ("Duke Ellington" by Stan-  
*(Continued on page 16)*

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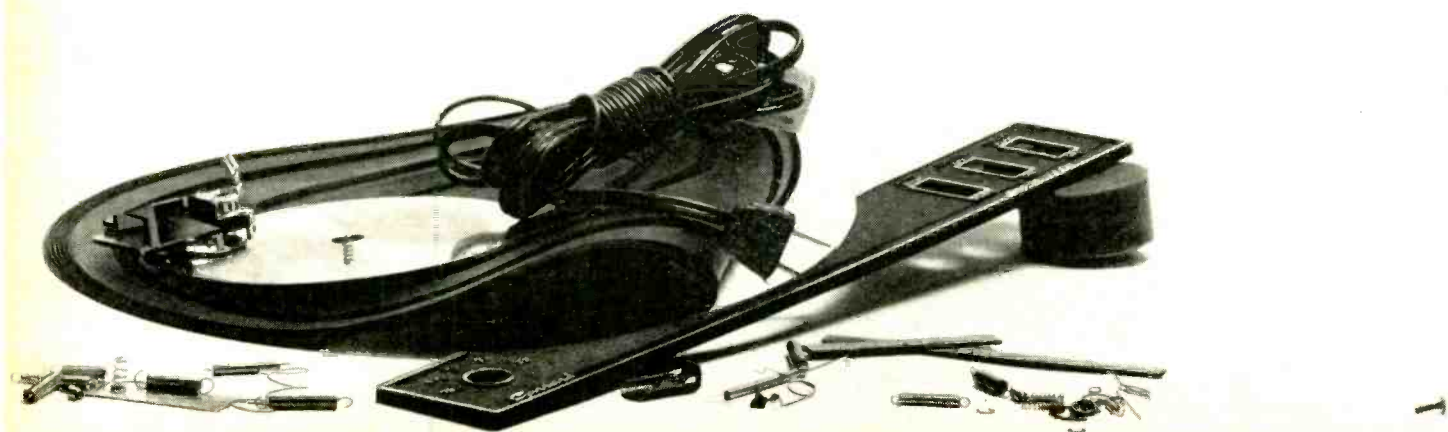
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ley Dance, December). When in 1943 Robert Goffin asked which records he would take upon fleeing a prospective Sodom and Gomorrah, Duke reflected: "Well, I'd take Ravel's *Daphnis and Chloë*, Delius' *In a Summer Garden*, Debussy's *La Mer* and *Afternoon of a Faun*, and Holst's *The Planets*." I wonder if he would make the same choices today. Pressed further, he allowed that he would take a few jazz records: *any* Tatum, Hawkins' *Body and Soul*, Berigan's *I Can't Get Started*, Waller's elfin *I'm Gonna Sit Right Down*, Shaw's *Nightmare*, and, not for *amour-propre* but the singing of Jean Eldridge, his own *Something to Live For*.

At one point Mr. Dance makes a statement that could lead to confusion. The 1936 proto-concertos for Barney Bigard and Cootie Williams, respectively, are *Clarinet Lamens* and *Echoes of Harlem*; yet the association of the words concerto and Cootie could mislead one into thinking that the 1940 *Concerto for Cootie* was being alluded to. It certainly deserves being alluded to, for it's a classic stylization, if not the object of perpetual adoration André Hodeir would have us believe it is. As for the pious fiction that Ellington sidemen who defect are magically dwarfed for their presumption, Cootie's work with Goodman (*Superman* and a goodly dozen Septet sides) was, if anything, of greater amplitude than formerly; and Barney's recent appearance on NET's "Jazz Alley" proves that his tone and ideas still have the lambent, mellow nobility of his palmist days.

DAVID WILSON  
Carmel, Cal.

### Stereo Headphones

● In the December issue of your magazine, I read with great interest the article on stereo headphones by William Wollheim. I own four pairs myself, and agree generally with Mr. Wollheim as to the advantages of owning such equipment. However, there are several drawbacks he did not touch upon which may be of interest.

The reason I have four pairs of headphones is because I have not found a perfect pair yet. I discovered that some of the cheaper headphones not only do not shut out ambient noise, but often accentuate it, on the principle of cupping one's hands behind one's ears to hear better. My two more expensive phones succeed in shutting out such noise at the cost of clamping my head in a vise-like grip. None of them, however, succeed in eliminating the bass rumble emanating from my neighbor's stereo rig; in fact, they accentuate it. Furthermore, if one is quietly listening to music on stereo headphones, the neighbors often assume one is out, and really roll with the Rolling Stones, *etc.* I live in an apartment building where they really let it all hang out. I have a secret terror weapon, though, for lovers of records with a heavy bass. I crank up my own bass electric guitar and practice for an hour or so, reading *basso continuo* at double fortissimo. For milder cases, I simply try to tune in on my good stuff and convince myself that the other music is just traffic noise.

ALBERT R. STRAKNA  
Washington, D. C.

### Great American Record Companies

● Mr. Richard Freed's general critique of the major classical record manufacturers in the

November issue is something that was long overdue, especially in an age when the record buyer may well know what to expect from his favorite artists but must accept prepackaged technical quality—or lack of it.

Speaking from the Canadian point of view, I wish that Mr. Freed could also have done as thorough an analysis of this nation's output of recorded classical material. The Canadian scene differs somewhat from that in the United States, since many record pressings here are done by local manufacturers acting under agreements with major U.S. and other foreign record firms. As a result, technical quality of pressings here may be at variance with like items manufactured by the home firms in the home nation.

RICHARD F. GLAZE  
Scarborough, Ont.



### Losing Touch

● The subject of James Goodfriend's "Going on Record" column for December ("Losing Touch") is one on which I consider myself familiar.

I am twenty years old and admittedly own few classical records, but I do not believe that when I was eight or ten I was led blindly to a record counter—heart pounding, forehead perspiring—and forced to lay down my eighty-nine cents for a copy of something like Jerry Lee Lewis' *Great Balls of Fire*, as Mr. Goodfriend implies, nor was I dragged from the classical counter by a money-crazed advertising agent.

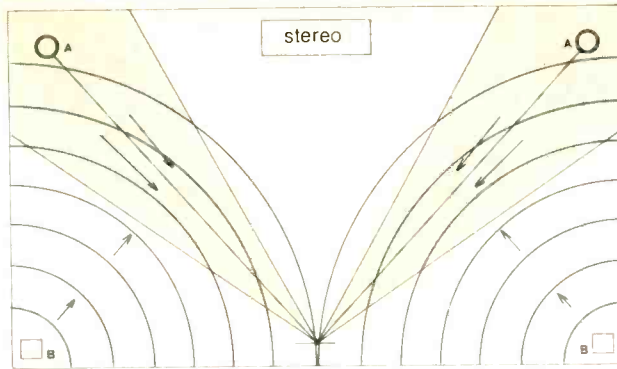
I listen to rock music now, as I did ten years ago, for the same reason, probably, that Mr. Goodfriend listens to classical music: because I enjoy it. To say anything else is to complicate an uncomplicated subject (read taste).

Finally, I would like to say that Mr. Goodfriend's statement that "fewer classical records are being sold because people are dying" sounds like something from an Eisenhower State of the Union address.

ROBERT BURNS  
Wheelerburg, Ohio

Mr. Goodfriend replies: "You may not have been physically dragged from the classical section to the rock counter, Mr. Burns, but you certainly were dragged over psychologically. Your taste is not completely your own doing, as you would have it, but is largely a result of what you were exposed to and what you were not, a situation determined by other people. I do not mean to suggest that you would like rock any the less had you been exposed to anything like a comparable amount of classical music (though that might be true), but rather that

(Continued on page 18)



Shaded areas indicate direct and reflected direct sound from satellites (A). Concentric circles represent omni-directional reverberant sound reproduced by sound cubes (B). Similar acoustical principles apply for any listening position within rectangle formed by satellites and sound cubes.

# Now: the practical answer to 4-channel sound.

(From Electrohome, Canada's leading stereo manufacturer)

You've probably heard quite a bit about 4-channel stereo sound. Which means you've also heard about the problems.

Problems like restricting 4-channel sound to tape only and limiting playback time by 50% in the process. Not to mention the cost of replacing your current playback equipment and recordings because they are obsolete.

And finally, the whole thing is not yet available.

Relax. We have a practical answer to 4-channel sound: Electrohome Environment I. And it's here today!

## What Is True High-Fidelity?

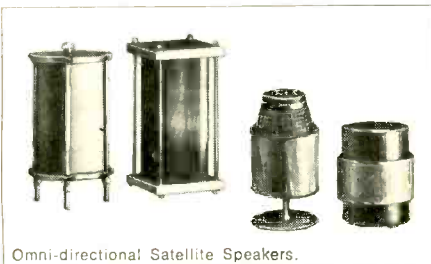
To provide true high-fidelity reproduction similar to sound experienced under "live" conditions requires consideration of six fundamental acoustic factors.

First — Wide range and wide angle frequency response equal to the response of your ear.

Second — Minimum distortion; less than your ear can detect.

Third — Maximum *natural* power level adequate for your listening room.

Fourth — Stereophonic directional information producing natural physical separation of the orchestral instruments.



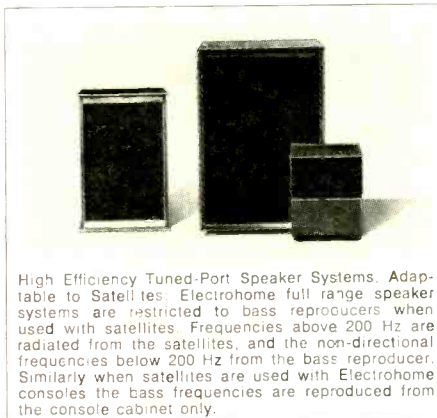
Omni-directional Satellite Speakers.

## But There's More

These have been the only factors considered by the High-Fidelity Industry in general. Due to the limitations of speaker positioning, and their sound-radiating patterns, the results even for the above characteristics have been something less than satisfactory. But high-fidelity reproduction is dependent upon other equally important factors which have been ignored until recently:

Fifth — Reproduction or simulation of spatial characteristics of orchestral instruments, i.e., a grand piano should sound like a large instrument instead of a small point source.

Sixth — The reproduction or simulation of the omni-directional reverberant sounds characteristic of a good concert hall (as a separate entity from the directional sounds from the orchestra.)



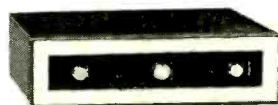
High Efficiency Tuned-Port Speaker Systems. Adaptable to Satellites. Electrohome full range speaker systems are restricted to bass reproducers when used with satellites. Frequencies above 200 Hz are radiated from the satellites, and the non-directional frequencies below 200 Hz from the bass reproducer. Similarly when satellites are used with Electrohome consoles the bass frequencies are reproduced from the console cabinet only.

## Omni-Directional Satellites: A Forward Step

Pioneered in 1960, these treble speakers are designed to radiate in a hemispherical pattern to provide direct high-frequency dispersion to all parts of the listening room. In addition their radiation pattern provides expansion of the sound source by controlled reflection from the adjacent wall and ceiling areas, producing the natural "acoustic" size of the instruments in the orchestra. With even distribution of sound in a hemispherical pattern no reflected beaming of sound occurs which can reduce or confuse stereo directional information. Corner location of these satellites provides natural separation of instruments, raises the sound source through the large radiating area of reflected sound, and literally forms a sound stage in front of the listener. (It is interesting to note that nine years after the introduction of satellites by Electrohome, many so-called "leaders" are heralding their own adaption of the technique as a "major development" and "substantial breakthrough.")

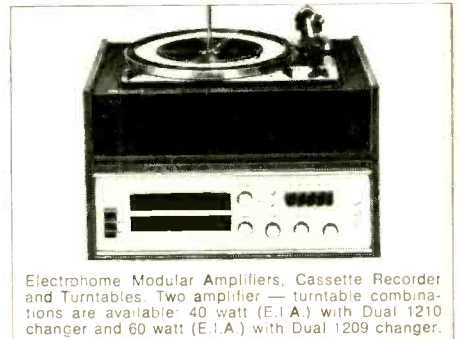
## Environment I: A Giant Step

Electrohome engineers didn't stop here. There remained the problem of controlled omni-directional reverberation, a significant quality of any live concert hall performance. The limited reverberation electronically injected on most recordings is *supplemented* by the output from Environment I dispersed through a pair of full-range omni-directional Sound Cubes.



Thus natural loudness levels of the environmental sounds of the concert hall reach the ear from a non-directional source. This

sound is designed to have a delay of 25 milliseconds and a reverberant period of 1.8 seconds, which are the reverberant characteristics of an ideal concert hall. The Environment I unit is a dual-channel 30-watt amplifier with dual dynamic reverb components producing the desired frequency pattern of reverberant sound. In conjunction with omni-directional satellite speakers, Environment I forms the world's first total Environmental/Audio System — or a complete four-channel sound system. *Most important, it functions with today's FM stereo and does not obsolete present tape or record libraries.*



Electrohome Modular Amplifiers, Cassette Recorder and Turntables. Two amplifier — turntable combinations are available: 40 watt (E.I.A.) with Dual 1210 changer and 60 watt (E.I.A.) with Dual 1209 changer.

## Hearing Is Believing

Ask your Electrohome dealer for a demonstration. All the technical talk in the world won't convince you of its incredible realism as much as hearing one selection of your favourite stereo recording in four-channel sound on Electrohome Environment I. Or mail the coupon and we'll look up the dealer for you — and send more information. But don't waste time waiting for 4-channel stereo from all those "leaders." Remember — it took them nine years to catch up with Satellite Sound.

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*you certainly would like classical music a great deal more than you do at present had that been the case. I amplify this point in 'Going on Record' this month.*

*"I resent only your equating my thought with that of the late Dwight Eisenhower. Mr. Eisenhower's musical taste (or lack of it) was well known and I doubt he would have known what either of us was talking about."*

● The thought of the discontinuance of classical recordings by American record companies saddens me. I am sixteen years old and have a fairly large collection of classical music, as well as popular records. Since I was two years old, my mother has encouraged me to take an interest in music—all kinds of music. Today I prefer classical music to rock and most popular music—there is always something new and interesting and touching in it. I never tire of classical music. It lasts. I hope the day is far off when STEREO REVIEW loses touch with readers like me.

CLAUDE DROJET  
Winnsboro, La.

● I found James Goodfriend's December "Going on Record" immensely interesting, and, while I do not altogether agree with his diagnosis, I do believe that he has identified a significant problem that deserves the thoughtful attention of music lovers.

I have no particular affection for the record companies, but it seems to me that in placing the blame mainly on them for the lack of musical taste among the current generation of young people, he is singling out the wrong group. I would like to suggest a somewhat different explanation. Let us assume that, in our egalitarian, middle-class, middlebrow society, it is difficult for "high-brow" tastes to find acceptance. A few institutions in America have managed, even so, to establish themselves against the grain, and insist upon the importance of excellence and the preservation of Western traditions, musical and otherwise. Among the more important of these institutions (not the only one) is the private liberal-arts college. If my own *alma mater*, Dartmouth, is at all typical, a conscious decision was reached by the trustees of such colleges, as well as by the preparatory schools which share much with them in terms of institutional tone, not to expand significantly beyond the size they had reached in the 1930's. Good reasons were given why such expansion should be avoided (getting too large would destroy the "community" atmosphere, the place would begin to seem like an education factory, etc.). Whether the decision was wise or not, there can be no disputing the fact that as a result a lower proportion of the taste-setters in the U. S. today have a prep-school or liberal-arts college background than at any previous time in our nation's history. (I do not intend this to deprecate the genuine achievements of our state universities, but simply suggest that these achievements have been for the most part in areas other than high culture.) Since the private liberal-arts colleges did, and still do, affirm the importance of the Western musical tradition, the relative decline in the numerical significance of these schools is perhaps related to the problem Mr. Goodfriend has called attention to.

HENRY J. PRATT  
Atlanta, Ga.

● Bravo to James Goodfriend for his com-

ments in his December "Going on Record" column. I wish that I could agree that the recording companies were so totally to blame for the state of serious music listening in this country today, but speaking for only one music educator—myself—I feel that the burden of blame is on our shoulders, for we seem to have undertaken to ignore the long-playing record and its potential.

It need not be thus. Bjornar Bergathon and Eunice Boardman, in their music methods text, state: "Singing is second in importance only to listening as a basic (elementary) classroom activity." And the Music Educators' National Conference, in its book *Music in General Education*, states in part: "The generally educated person listens with a purpose. . . . The generally educated person has good taste. He has learned to make sensitive choices based upon musical knowledge and skill in listening. . . . He is not naïve with respect to the functional use of music for commercial purposes nor to the commercial pressures which will be exerted to obtain what money he can spend for music."

Perhaps it is time for lip service to end and for the development of serious music listeners to begin.

EDWIN SCHATKOWSKI,  
Associate Professor  
Music Department  
Kutztown State College  
Kutztown, Pa.

● To what extent do record companies try to sell classical music as distinct from other types? You can go into any supermarket today and find records enough, but never classical. There are even numerous little shops that call themselves record stores in which you can find no more than a handful of classical recordings. I am still trying to locate a place less than 200 miles away (the approximate distance of Albuquerque from here) where I can find a selection of classical records to choose from. The stores probably would answer that they don't handle classical records because they don't sell, but the opposite too is true: people don't buy what you don't have. And I haven't been buying for months simply because there are no records available.

TIMON COOK  
Farmington, N. M.

*Mr. Goodfriend comments: "Bull's-eye, sir! For your own convenience I suggest you deal with a mail-order house. But I hope you won't. I hope that instead you write a few angry letters to the companies who manufacture the records that interest you, and that you pester your local stores either to stock more classical records or at least to special-order them for you. A little overtly expressed dissatisfaction has been known to do wonders in the past. Maybe it can again."*

## Stravinsky's Phrase

● In his review (November) of a recent Columbia release entitled "The Spectacular Sound of Stravinsky," Paul Kresh quotes me as having described Stravinsky's *Scherzo Fantastique* as being indebted "to Mendelssohn by way of Tchaikovsky." I must admit that I wish I could indeed take credit for this phrase, but, as my liner notes for the recording make clear, it was written not by me but by Stravinsky himself.

PHILLIP RAMEY  
Baden-Baden, Germany

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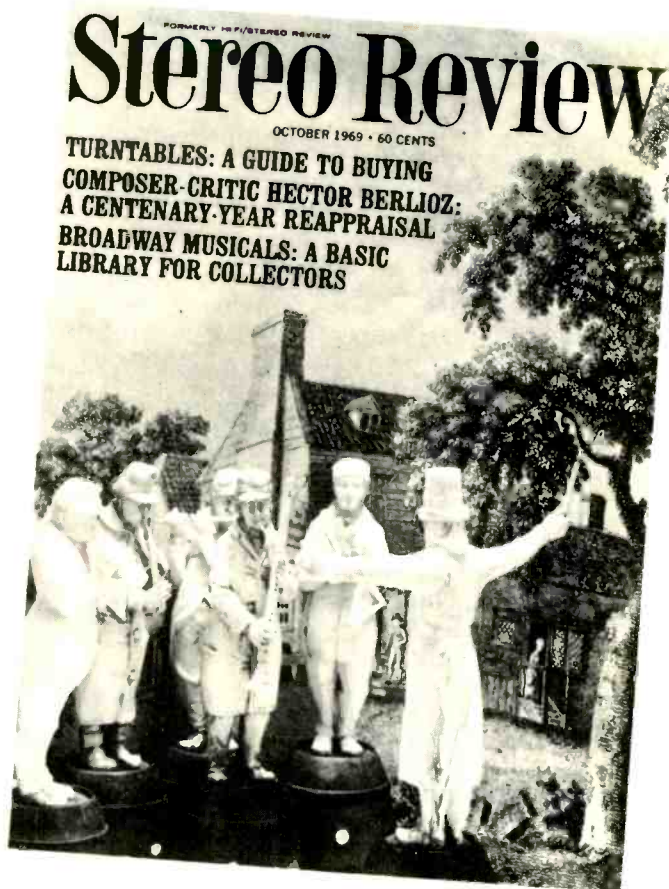
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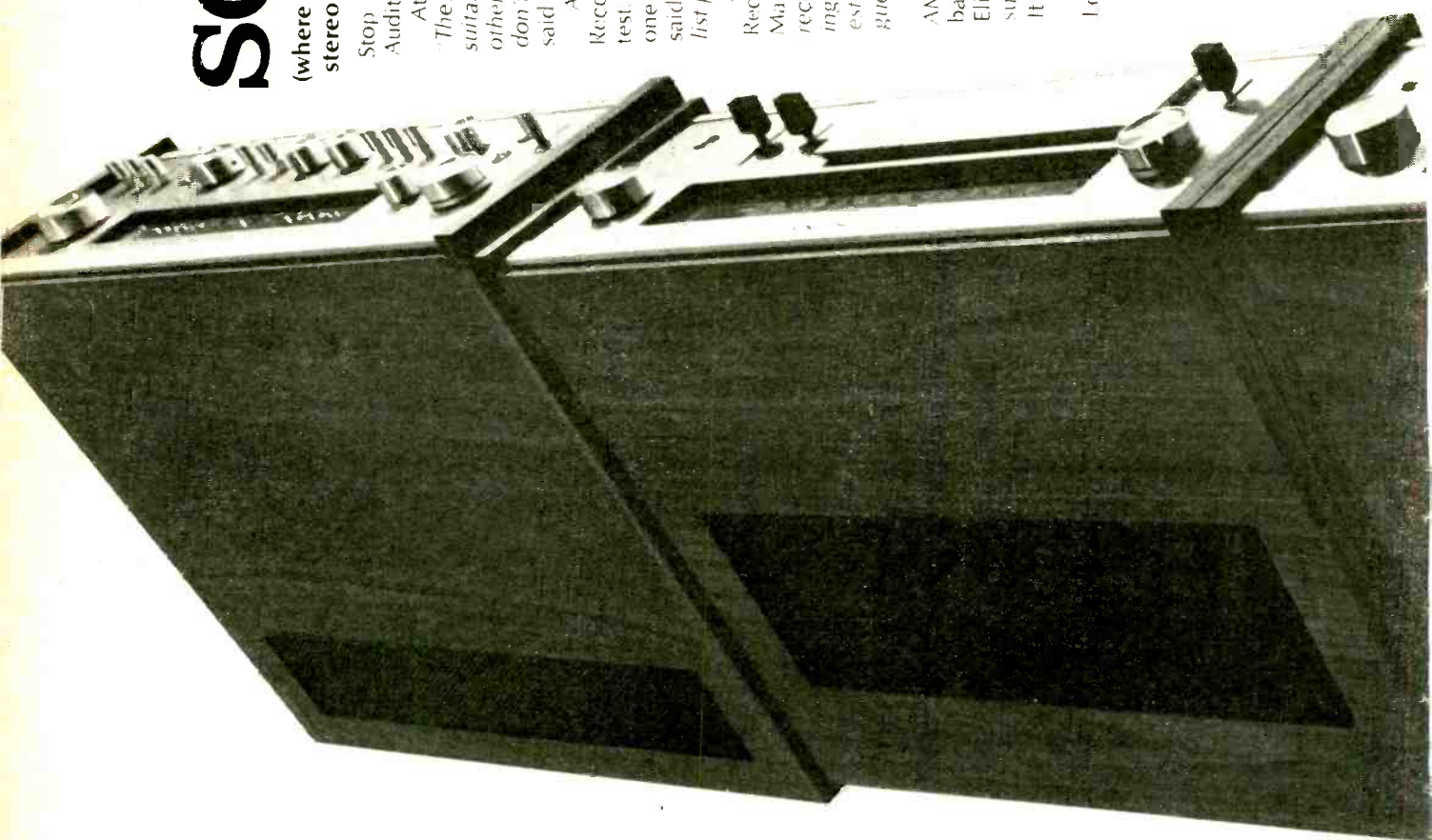
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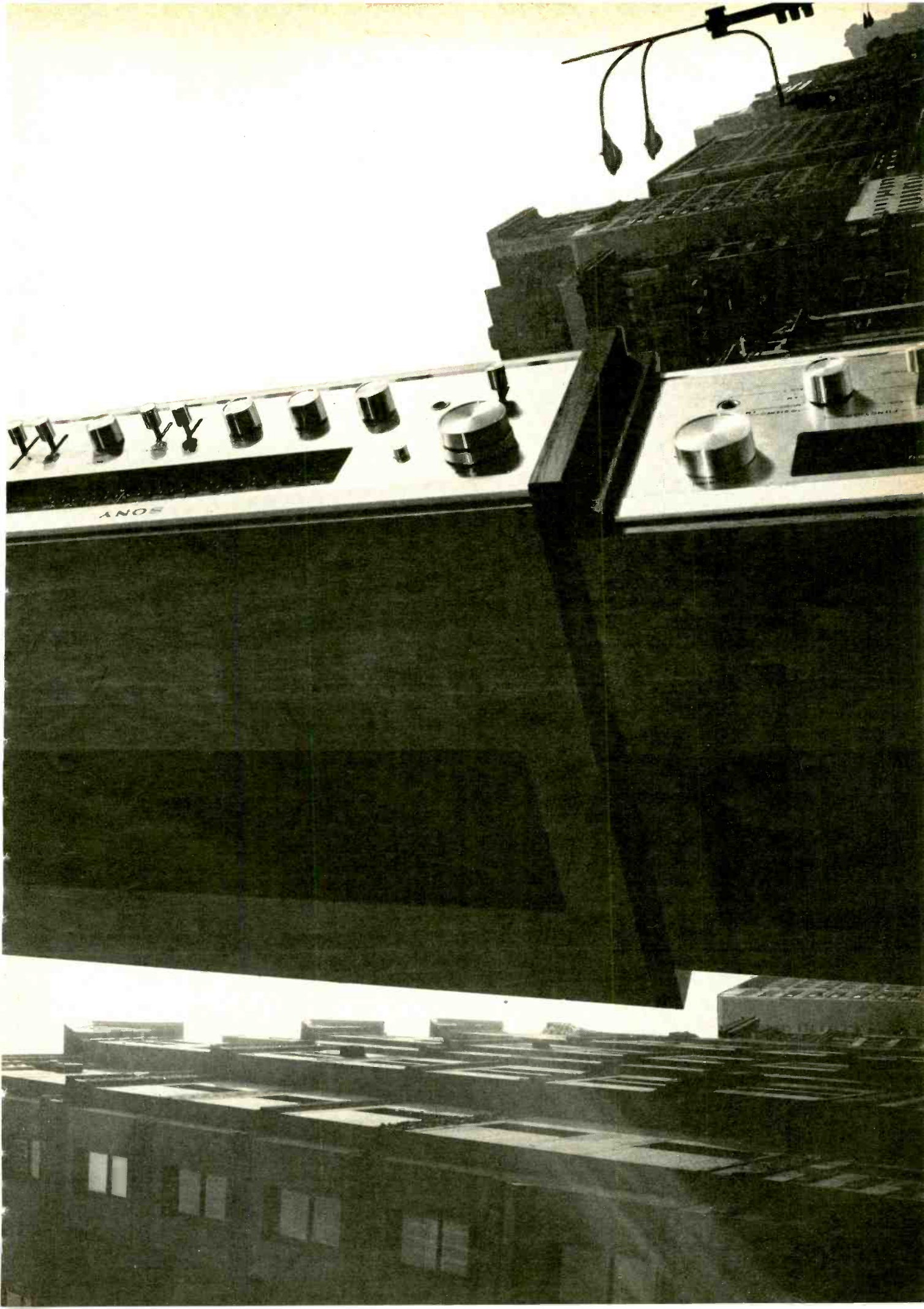
At \$279.50, Sony STR-6050 FM Stereo FM-AM Receiver. Hirsch-Houck Laboratories tells it all in the May, 1969 issue of STEREO REVIEW: "When we received the Sony STR-6050 Stereo receiver for testing, we did not know its price. We listened to it and estimated its price from its general performance. Our guess was about \$120 higher than its actual price."

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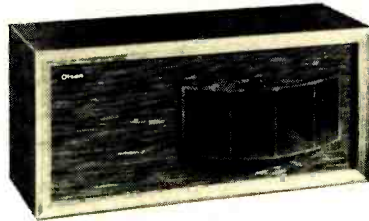
A ROUNDUP OF THE LATEST HIGH-FIDELITY EQUIPMENT



● **Lafayette's** new RK-210 cassette player/recorder is designed for installation in automobiles with standard 12-volt negative-ground electrical systems. The stereo-playback/mono-recorder unit loads from the front, starting automatically when the cassette is inserted. At the end of the tape the transport stops and the cassette is ejected. Power output is rated at 20 watts peak per channel. There is an automatic level control for recording, and an a.c. bias system. Controls include fast forward and rewind, manual stop and cassette eject, and record buttons, as well as balance, volume, and tone controls. Price, including remote-control microphone and suction-cup stand, mounting bracket, and hardware, is \$99.95.

Circle 146 on reader service card

● **Olson** has just brought out the Model S-24, a three-way speaker system with a 12-inch high-compliance woofer and horn-loaded mid-range and high-frequency compression drivers. Frequency response is 25 to 22,000 Hz, power-



handling capability is 50 watts, and the nominal impedance is 8 ohms. The multi-cellular mid-range horn is 19 inches wide; the width of the tweeter horn is 3 inches. There are individual controls for mid- and high-frequency levels. The cabinet measures 30 x 14 x 11 inches, and has a walnut finish. Price: \$199.99.

Circle 147 on reader service card



● **Shure** has expanded its line of Unisphere B microphones to include the Model 588, a unidirectional (cardioid) microphone with a frequency response of 80 to 13,000 Hz. The cartridge of the microphone is shock-mounted to reduce mechanical vibration and handling noise, and a built-in filter lessens its sensitivity to wind and explosive breath sounds. The Model 588 has an on/off switch and comes with a 20-foot detachable cable, Cannon-type connector, and a swivel mike-stand adapter. It is available in three versions: high impedance (Model 588SA); high impedance with "C" series connector (Model 588SAC); and low impedance (Model 588SB). All three are fitted with chrome-plated all-metal cases and can be used indoors and outdoors. Price of the Models 588SA and 588SB is \$60; of the Model 588SAC, \$62.

Circle 148 on reader service card

● **Fisher's** new 450-T AM/stereo FM receiver incorporates an automatic FM tuning device called "Autoscan" that can be operated at the receiver's front panel or through a remote-control device on the end of a 20-foot cable. Two pushbuttons control the Autoscan function: the first, when pressed, causes the tuner to sweep the FM band repeatedly

from bottom to top, stopping briefly at each station strong enough to lock in; the second button advances the tuner one station at a time. These buttons are duplicated on the remote-control unit. A third front-panel pushbutton cancels the Autoscan function for manual FM (and AM) tuning.

The 450-T has a continuous-power output of 55 watts per channel into 8 ohms with both channels driven. The frequency response is 20 to 25,000 Hz  $\pm 2$  dB, and the power bandwidth is 10 to 30,000 Hz. Harmonic distortion is 0.5 per cent, and IM distortion is 0.8 per cent, both at rated power output. The signal-to-noise ratio is 60 dB at the phono input and 65 dB at the high-level inputs. The receiver's FM section has a sensitivity of 2 microvolts, a



capture ratio of 2.5 dB, 45-dB selectivity, and image rejection of 55 dB. The AM section has a sensitivity of 10 microvolts. The 450-T has volume and balance controls, and separate ganged bass and treble controls for each channel. The selector knob has positions for phono, AM, FM, and two auxiliary inputs. There are pushbuttons for tape monitor, mono mode, loudness, and main and remote speakers; other pushbuttons activate the FM muting and AFC and attenuate FM stations strong enough to overload the tuner. A signal-strength tuning meter, a separate FM frequency indicator for the Autoscan function, and a stereo headphone jack complete the front-panel arrangement. The receiver measures 15½ x 4⅞ x 14¼ inches and weighs 24¾ pounds. Price, including remote-control unit: \$399.95. An optional cabinet clad in walnut-grain vinyl costs \$22.95.

Circle 149 on reader service card

● **Electro-Voice** has made available two free four-color pamphlets, one illustrating their line of component "raw" loudspeakers, and the other their speaker systems, receivers, tuners, and amplifiers. Specifications and physical descriptions for all the products are given. Also included are some guidelines for assembling a component system and answers to some frequently asked questions about stereo.

Circle 150 on reader service card



● **Robins'** new cassette-tape splicing kit (Model TS215) contains a metal splicing block, single-edged razor blade, and a supply of pre-cut splicing patches. The splicing block has guides for 45- and 90-degree cuts, and instructions for working with the tape without opening the cassette are included. The kit comes in a plastic case about the size of a deck of cards. Price: \$10.

Circle 151 on reader service card

● **Crown** has introduced the D-40 solid-state stereo power amplifier, designed for installation in a relay rack or beneath the electronics of a Crown tape recorder. The frequency response is 20 to 20,000 Hz  $\pm 0.1$  dB or 5 to 50,000 Hz  $\pm 1$  dB for output levels of up to 30 watts con-

(Continued on page 26)

# ESP automatic tape reverse.

# ESP automatic tape reverse.

**ESP Automatic Tape Reverse.** A special electronic sensory perception circuit indicates the absence of any recorded signal at the end of a tape and automatically reverses tape direction within ten seconds.

**ServoControl Motor.** Automatically corrects for speed variations and maintains precise timing accuracy. Vari-speed feature of motor can be adjusted up or down to match musical pitch of tape playback to any piano.

**Non-Magnetizing Record Head.** Head magnetization build-up—the most common cause of tape hiss—has been eliminated by an exclusive Sony circuit, preventing any transient surge of bias current to the record head.

**Instant Tape Threading.** Retractable pinch rollers permit simple one-hand threading. Other features: Four-track Stereo, Stereo and Monophonic recording and playback. Also records in reverse direction. Three speeds. Two VU meters. Stereo headphone jack. And more.

**Noise-Suppressor Switch.** Special filter eliminates undesirable hiss that may exist on older prerecorded tapes.

**Scrape Flutter Filter.** Special precision idler mechanism located between erase and record/playback heads eliminates tape modulation distortion. This feature formerly found only on professional studio equipment.

**FACTORY AUTHORIZED**  
**SALE**  
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 AT ANY SONY/SUPERSCOPE DEALER!

**Sony Model 560D.** Priced under \$349.50. Also available: The Sony Model 560 Tape System with stereo control center, stereo pre-amplifier and stereo amplifier, microphones, and lid-integrated full-range stereo extension speakers for less than \$449.50. For your free copy of our latest tape recorder catalog, please write to Mr. Phillips, Sony/Superscope, Inc., 8144 Vineland Avenue, Sun Valley, California 91352.

**SONY SUPERSCOPE** The Authority in Stereo

You never heard it so good

# NEW PRODUCTS

## A ROUNDUP OF THE LATEST HIGH-FIDELITY EQUIPMENT

tinuous power per channel into 8-ohm loads (both channels driven). Harmonic distortion is less than 0.1 per cent and IM distortion less than 0.3 per cent at full rated output. The damping factor is greater than 200 below 1,000 Hz with 8-ohm loads, and the signal-to-noise ratio is 100 dB. On the front panel are separate level controls for each channel, power switch, pilot light, and headphone jack.



There are two rear-panel phone-jack outputs per channel, and inputs for phono or phone plugs. Overload protection is afforded by four d.c. power-supply fuses, an a.c. line fuse, and a limited-energy power supply. The D-10's anodized aluminum case measures 19 x 1 $\frac{3}{4}$  x 7 $\frac{3}{4}$  inches; the amplifier weighs 8 $\frac{1}{4}$  pounds. Price: \$199. The optional walnut cabinet shown costs \$29.

Circle 152 on reader service card



● **Roberts** has introduced the Model 1730, a two-speed (7 $\frac{1}{2}$  and 3 $\frac{3}{4}$  ips), quarter-track, two-head, stereo tape recorder with speakers built into its detachable carrying-case lid. The machine accommodates 7-inch reels and has an automatic shutoff activated by a tension arm. Two levers control the transport function, with a record-interlock button and a third lever for PAUSE. There are dual recording-level meters, and volume and tone controls for each channel are effective in both record and playback modes. Rocker switches select the tracks to be recorded, transfer a recording from one track to another (sound-on-sound), and turn the unit off and on. A three-position speaker switch can also connect the front-panel microphone inputs directly to the playback amplifiers for public-address purposes. The Model 1730 has in addition a front-panel headphone jack, high-level inputs, and outputs for external speakers.

Frequency response is 40 to 17,000 Hz  $\pm$ 3 dB at 7 $\frac{1}{2}$  ips. Wow and flutter are less than 0.18 per cent at 7 $\frac{1}{2}$  ips and 0.25 per cent at 3 $\frac{3}{4}$  ips. The signal-to-noise ratio is better than 48 dB at 7 $\frac{1}{2}$  ips. The power amplifiers are rated at a combined output of 30 watts peak power, and are protected by automatic-reset circuit breakers. Each half of the recorder's cover contains a 9-inch dual-cone elliptical speaker. The Model 1730 with speakers measures 15 $\frac{1}{4}$  x 15 $\frac{1}{4}$  x 11 $\frac{5}{8}$  inches and weighs 28 pounds. Price: \$259.95.

Circle 153 on reader service card

● **Heath's** new AR-29 AM/stereo FM receiver kit makes use of plug-in printed circuit boards to facilitate construction. Amplifier section output is 35 watts (continuous) per channel into 8 ohms, both channels driven, with under 0.25 per cent harmonic distortion and 0.2 per cent intermodulation distortion. The signal-to-noise ratio at the phono input is 65 dB. The FM-tuner section incorporates integrated circuits (IC's), field-effect transistors (FET's), and fixed inductance/capacitance i.f. filters (instead of i.f. transformers). FM sensitivity is 1.8 microvolts, capture

ratio is 1.5 dB, selectivity is greater than 70 dB, and image rejection is 90 dB. There are front-panel tuning meters that indicate signal strength and channel center.

After the receiver is assembled, internally located switches and test probes permit the builder to check the unit's operation and make necessary adjustments on the tuner section. Readings are observed on the signal-strength tuning meter, which is switched into the test circuit for these



procedures. The front panel has slider-type controls for volume, balance, bass, and treble, and pushbuttons for program sources (phono, tape, auxiliary, AM, and FM) and functions such as blend, tape monitor, FM muting, loudness, mono mode, tone-control by-pass, and main or remote speakers. A back-panel slide switch connects the remote-speaker terminals to serve instead as a center-speaker output. There is a stereo broadcast indicator as well as a front-panel headphone jack. The dimensions of the unit are 16 $\frac{3}{4}$  x 5 $\frac{1}{8}$  x 14 $\frac{1}{2}$  inches. The AR-29 is available only in kit form and costs \$285. An optional oiled pecan cabinet is \$19.95.

Circle 154 on reader service card



● **Rectilinear** is marketing the Model X, a three-way air-suspension speaker system with a 10-inch woofer, a 5-inch dual-cone mid-range, and a 2 $\frac{1}{2}$ -inch tweeter. The crossover frequency between the woofer and mid-range speaker is unusually low (100 Hz) to minimize distortions in the upper bass and mid-range contributed to by the mass of the woofer. The mid-range/tweeter crossover is at 8,000 Hz. The overall frequency response of the Rectilinear X is

30 to 20,000 Hz  $\pm$ 4 dB. It has a nominal impedance of 4 ohms, and a minimum amplifier power of 35 continuous watts per channel is recommended. On the back of the speaker are controls to adjust mid-range and tweeter levels, and binding posts for amplifier connection that will also accept banana plugs. The cabinet, of oiled walnut, measures 25 x 14 x 10 $\frac{3}{4}$  inches. Price: \$199.

Circle 155 on reader service card



● **Radio Shack** has introduced an inexpensive stereo headset dubbed the Nova 10. Each earpiece contains a 2-inch dynamic transducer, and is fitted with a cushion of polyurethane covered in vinyl. The headphones have a frequency response of 50 to 15,000 Hz and an impedance rating of 8 ohms. A single cable from one of

the earpieces connects the headphones to an amplifier or receiver. The headband is adjustable. Price: \$7.95.

Circle 156 on reader service card

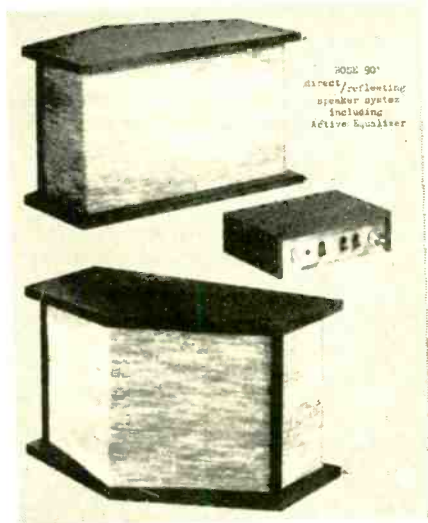
# The rave reviews keep coming ...

from the **AMERICAN record guide**, December 1969

## SOUND IDEAS

An Equipment Review

By LARRY ZIDE



**Bose 901 Speaker System**

**T**HERE IS a great deal of advance interest in this report—and not without reason, as you will see.

Bose is a relatively new company, and the 901 is its one and only product. This is a "system" in every sense of the word, because the model number actually includes two speaker units plus an electronic control that goes between your preamp and amp. (It can also be hooked up to the tape monitoring circuits, and will provide switching for a tape recorder in addition to fulfilling its own primary functions. More about these presently.)

The two speaker enclosures are marked for left and right channels. At first glance you might think that they are meant for corner placement only, though this is hardly the case. They are not very large—only about 19" wide across the flat front and 13" deep.

Yet inside each box are nine small high-quality speakers! Eight face the rear, via the two faces of the pointed side. The ninth faces forward, in the upper left of the left speaker and upper right of the right speaker. The frequency spectrum

and strength are divided among the speakers so that each gets fundamentally the same. The enclosure is intended to be free-standing, some distance from a wall. The eight rear speakers act as dispersers, serving mostly to reflect sound from the wall. Only the ninth or forward speaker localizes sound, in particular for the poorly-reflected highs. The net effect is intended to be an impression of wide sound dispersion over a broad plane (as in a concert hall) which nevertheless preserves the localizing information of stereo.

It works!

The Bose 901 is, indeed, one of the finest speaker systems it has ever been my pleasure to hear. I have lived with it now for several months, so that I am quite sure of what I say. I have long believed in the value of wide sound dispersion, and this system amply provides it.

Dispersion notwithstanding, it is the sound itself that remains paramount. The 901 is characteristically smooth. Everything is simply *there*. At high frequencies the ear indeed tells you that the

frequency is there, but you do not have any "beaming" effect as with direct radiators. The bass is smooth down to my room's resonance at 34 Hz, with a smooth rolloff below. And there is useful output to about 25 Hz, which is plenty low enough.

In part the 901 achieves its excellent bass response by means of a boost circuit in the control box. This places an enormous strain on a power amplifier of marginal power. And 60 watts may prove to be marginal! I would say that to use the Bose 901 at its full potential demands an amplifier that can provide at least 50 or 60 watts at 50 Hz and below. Less than that will cause you to hear some audible bass distortion (caused by the amplifier clipping) at very high listening levels in large rooms. In any case I think that so fine a speaker can be simply wasted on amplifiers that can provide only 20-25 watts per channel.

The control box provides a useful degree of speaker tuning. It does serve to compensate the speaker against room acoustics, but it will do more. If you have a bright (or dull) cartridge and a tape recorder that is flat, they will not sound alike with equally good material. The high-frequency control can be used to (subtly) boost or cut highs in such a way as to equalize a bright cartridge. I have used this to compare more accurately the relative sound of cartridges, and it is effective.

But back to the sonic quality per se. I would have expected that all this reflected sound might have a bad effect on the sharpness of transients. Not so. The 901 is quite crisp in its attacks. When the music stops, so does the speaker.

But you really have to hear music from the best sources (such as master tapes) to appreciate all the virtues of this extraordinary system. True, at a price of \$476.00 for the pair its virtues may not be for everyone. And perhaps I have failed (I suspect that I *have* failed) to give a clear picture of its special qualities. I urge that you listen for yourself. I think you will have to agree that Bose has, in a single giant step, produced one of the finest speaker systems ever made.

You can hear the difference now.

THE **BOSE** CORP.

East Natick Industrial Park, Natick, Massachusetts 01760

*If you're  
the man  
we think  
you are,*

*this is the  
camera you  
should own.*



You enjoy owning fine things—matched, premium quality high fidelity components, for example. When you buy something, price is secondary to value. In your own way, you live a pretty interesting life, and because you do, we think you'll be interested in our camera.

It's the Honeywell Pentax Spotmatic, an uncommonly good 35mm single-lens reflex. So good, it's the world's best-selling fine camera.

The Spotmatic is compact, lightweight, and a joy to handle. It features uncannily precise through-the-lens full-format exposure control, superb optics, brilliant human engineering, and magnificent workmanship. The result is a camera that produces professional-quality pictures, yet it's remarkably easy to use.

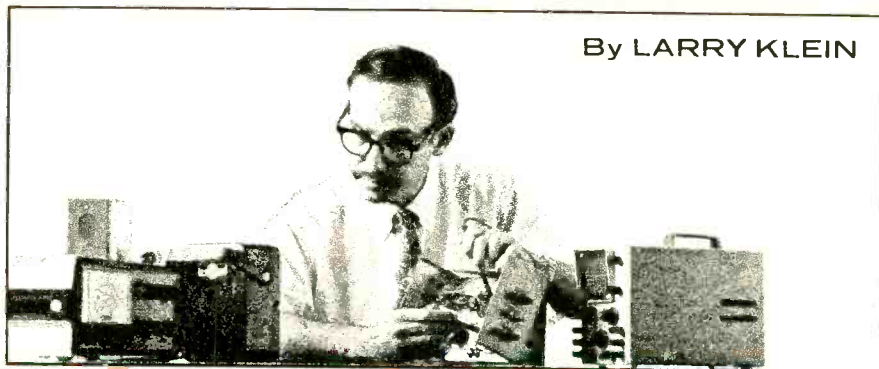
With a great Super-Takumar f/1.4 lens, the Spotmatic costs about \$300, depending upon accessories. See it soon at your Honeywell Pentax dealer's, or mail the coupon for complete literature.

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CIRCLE NO. 30 ON READER SERVICE CARD



By LARRY KLEIN

## AUDIO QUESTIONS & ANSWERS

### Prerecorded-Tape Quality

**Q.** Since joining a national tape club I have become disillusioned with the quality of prerecorded tapes. Not one of the tapes I have purchased comes up to the performance of the disc version. Either the hiss behind the music is high, or the fidelity on one channel is low, or print-through and cross-channel interference are present. It is the opinion of a local dealer here that this is in the nature of the beast. I would be interested in your comments.

KENNETH A. PATRICK  
Carbondale, Ill.

**A.** If I had received your letter five years ago, I would have agreed with you on almost every point. However, for the past two or three years I've been sampling three or four new releases a month from the Ampex catalog, both in the pops and classical fields. I can state that the tapes, when played back on my system, are on the average at least as high (if not higher) in fidelity as the discs.

I suspect a large part of your dissatisfaction with tape playback results from some problem with your recorder. Both high hiss levels and cross-channel interference could be originating in your equipment. In regard to "built-in" print-through and crosstalk, I find them less common on prerecorded tape than pre- and post-echo on phonograph records.

I would be interested in hearing from other readers on this matter to learn if their findings in the prerecorded tape area correspond to Mr. Patrick's experience or mine.

### Left-Channel Frequency Loss

**Q.** I have encountered an odd problem on a few of my prerecorded tapes. There is a periodic loss of high-frequency response on my left stereo channel. I thought the playback-head gap for that one channel might have been dirty and I cleaned the heads, but this did not help. To further confuse the issue, both channels sound fine with the same tape when I play it in the reverse direction. And to confuse the issue even further, a friend whose machine cost perhaps less than half of what mine did

gets perfect playback of the same tape in both directions. Does all this make sense?

MICHAEL ORLOW  
Beverly Hills, Calif.

**A.** The odds are that if you examine the prerecorded tapes that have a loss of high frequencies in one channel you will find that one of the outer edges of the tape has ripples or some other physical defect. This prevents the left channel, which is on track 1 (closest to the edge of the tape) from making firm contact with the playback gap. And this in turn causes the loss of high-frequency response. When you turn the tape over to play it in the other direction, track 4 is now in contact with the left-channel gap, and that edge of the tape apparently does make good contact with the head.

I would guess that your friend's machine has pressure pads and your machine does not. On his machine the tape edge with the ripples in it gets pressed into firmer contact with the heads. The test of my theory would be to press one of the defective tapes firmly against the head (using a cotton swab or something similar) while it is playing to see if your high-frequency response is restored.

I don't know what may have caused the problem with those particular reels of tape, but they are not salvageable. The best thing you can do if you wish to save the material recorded on the tapes is to play them on your friend's machine and dub them back onto yours.

### Speaker Comparisons with Music

**Q.** When comparing speakers in a dealer's showroom, at what point in the music should you switch from one speaker to another?

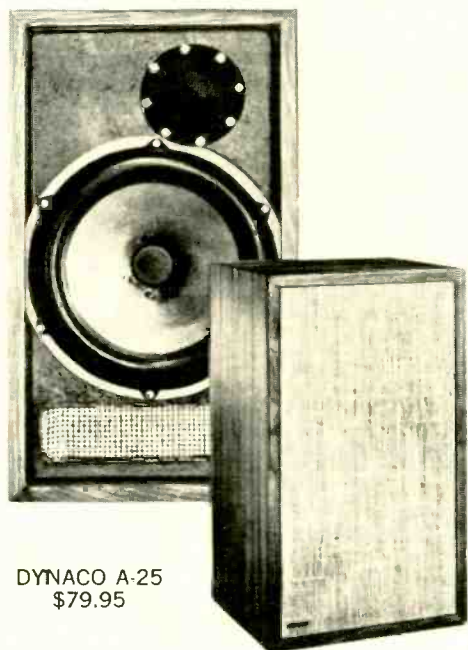
DAVID BIRNBAUM  
Los Angeles, Calif.

**A.** The natural inclination is, of course, to switch when the music changes themes, immediately after crescendos, or even with the beat, but a little thought will show why this should be avoided. The best time to switch is in the middle of a passage and not with the beat of the music. In other words,

(Continued on page 32)

**"... (the Dynaco A-25's) are quite probably the best buy in high fidelity today."**

The Stereophile Magazine.



DYNACO A-25  
\$79.95

Dynaco designed the A-25 loudspeaker system to have the most accurate reproduction of any speaker available, regardless of price, yet at a low cost to the consumer. Here's what two of the most respected publications say about the results of our efforts.

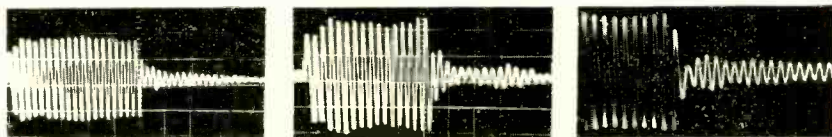
**The Stereophile, Vol. 2, No. 9**

"... (when) some really deep stuff came along ... what came out of the A-25's simply defied belief, for they went deeper even than two of our standard systems ... We were certainly not prepared to find these piddling little Dyna systems going flat down to 35 Hz and rattling windows at a hair below 30 Hz! ... these A-25's are better than anything else we've ever encountered for less than \$200 each ..."

**Julian Hirsch in Stereo Review, June, 1969**

"... the Dynaco had a remarkably neutral quality. Many speakers have response irregularities that ... leave no doubt in the listener's mind that he is listening to a speaker. The A-25 had less of this coloration than most speakers we have heard, regardless of price ... nothing we have tested had a better overall transient response ... Not the least of the A-25's attraction is its low price of \$79.95.

"The excellent overall transient response of the Dynaco A-25 speaker system is shown by the tone-burst response photos at (left to right) 600, 2,000 and 10,000 Hz." (Stereo Review)



Send for literature or pick some up at your dealer where you can also hear the A-25

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# We believe in bass.

## Fisher introduces four new bookshelf speakers, each with the largest, most sophisticated woofer in its class.

Good bass is like good health. If you have it, everything else will work out somehow. If you don't have it, everything else is irrelevant.

Because bass is literally the foundation of music. It gives the music structural support and body. If you can't hear the bass line, you're missing half the music. And if a speaker has inadequate bass, it's an inadequate speaker, no matter how good the mid-range or treble happens to be.

In designing bookshelf speakers, especially, the bass reproducer is considerably more than half the battle. Big, powerful woofers need elbow room, whereas the mid-range and tweeter units operate the same way in a compact enclosure as in the largest cabinet.

That's why, even though we're very proud of the advanced mid-range and treble drivers in our new line of bookshelf systems, we're even prouder of the woofers. They're just a bit bigger and better than you had the right to expect even in such sophisticated speakers.

The XP-9C is by far the most compact system ever to incorporate a 15-inch woofer. The XP-7B and XP-66B have 12-inch woofers, instead of

the 10-inchers you'd normally find in their class. And the size and price of the XP-60B would seem to call for an 8-inch woofer, but we give you a 10-inch unit instead. All for the love of bass. (Believe us, it took some engineering.)

What's more, the cones, surrounds, spiders and voice coils of these new woofers reflect the most up-to-date concepts on the subject. In fact, the special construction of the surrounds is the main reason why the bookshelf-size enclosures can provide good loading down to the lowest bass frequencies. (We feel that sooner or later everybody else will be making woofers our way. But Fisher likes to do things sooner rather than later.)

In case you're interested in improving your stereo system with a pair of these new speakers, here's a useful suggestion:

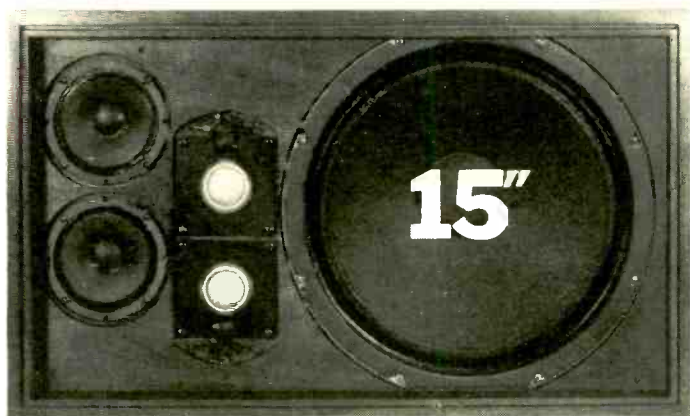
Choose your turntable or record changer carefully. Our woofers respond impartially to the lowest musical bass or turntable rumble.

(For more information, plus a free copy of the Fisher Handbook 1969 edition, an authoritative 72-page reference guide to hi-fi and stereo, use coupon on page 119.)

## The Fisher<sup>®</sup>



# Just look at the size of those woofers.



## The new Fisher XP-9C four-way bookshelf speaker with five drivers, \$199.95.

The XP-9C is the only speaker system to incorporate a 15-inch woofer in an enclosure measuring only 27½" x 16¼" x 13" deep. Plus two 5" mid-range speakers and two 1½" dome-type tweeters (one for the lower treble, one for the highest frequencies). Crossovers at 500, 1200 and 5000 Hz. Frequency response from 28 to 22,000 Hz.



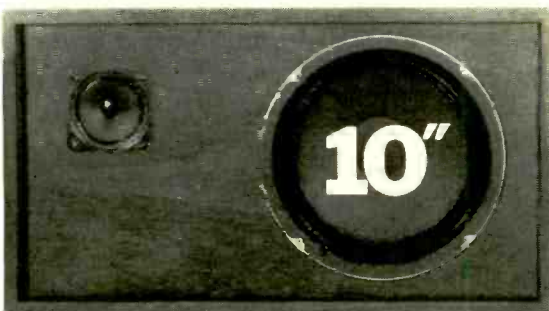
## The new Fisher XP-7B four-way bookshelf speaker with five drivers, \$149.95.\*

In addition to its massive woofer with butyl rubber surround with butyl rubber surround, the XP-7B has a 5¾" lower mid-range and a 5¾" upper-mid-range driver, plus two 3" tweeters. Crossovers at 350, 800 and 3500 Hz. Frequency response from 30 to 20,000 Hz. Cabinet size 24½" x 14" x 11⅞" deep.



## The new Fisher XP-66B three-way bookshelf speaker with three drivers, \$99.95\*

The 12-inch woofer of the XP-66B crosses over to a 5" mid-range driver at 500 Hz, which in turn crosses over to a 3" tweeter at 1000 Hz. The result is outstandingly smooth response from 32 to 20,000 Hz. Cabinet size 24⅞" x 13⅞" x 11⅞" deep.



## The new Fisher XP-60B two-way bookshelf speaker with two drivers, \$79.95.

The XP-60B has a crossover point of 1000 Hz between the high-efficiency 10-inch woofer and the wide-dispersion 3" tweeter. Frequency response from 35 to 20,000 Hz, outstanding for a modestly priced speaker. Cabinet size 23" x 13" x 10" deep.

\*Also available with wood-grain instead of cloth grille, \$10 extra. (Model K instead of B.)

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# Ferroggraphy...

the highest state of the tape recording art

*Ferroggraph, Great Britain's leading producer of quality tape recorders, has added a new word to the language. With the introduction of the Ferroggraph Series Seven, a new standard of excellence has been achieved.*



## Ferroggraph series 7

### FEATURE HIGHLIGHTS:

**VARIABLE SPEED** for wind and rewind. Eliminates distortion-producing tape stretch. Ideal for indexing and editing.

**FINGERTIP BRAKE CONTROLS** for each reel on top deck for convenient and rapid adjustments.

**ADJUSTABLE REEL HEIGHTS** eliminate annoying tape scraping and squealing. Absolute silent operation.

**BIAS ADJUSTMENT** on top deck. Conveniently allows different grades of tapes to be used with optimum results.

**TWIN VU METERS** for monitoring source, tape, bias, comparison of input and output.

**FRONT DECK OUTPUT LEVEL AND RECORDING CONTROLS.** Greater flexibility in recording from multiple sources on one track.

Now add — solid state with FET front end . . . 3 precision motors, no belts (1 synchronous capstan and 2 induction) . . . 3 speeds . . . 3 heads . . . echo, multiplay, re-record, sound with sound . . . click-free recording . . . remote control Start/Stop . . . slur-free starts — and you're beginning to understand what Ferroggraphy is all about.

The Ferroggraph Series Seven is available in a choice of walnut cabinet, carrying case or chassis only. 2 and 4-track stereo and mono models. With and without amplifiers and speakers. You're probably beginning to get some interesting ideas by now. Why not take them to your Ferroggraph dealer. He'll demonstrate them for you.

ANOTHER ELPA  QUALITY PRODUCT

ELPA MARKETING INDUSTRIES, INC., New Hyde Park, N.Y. 11040

*insofar as it is possible, you want to hear exactly the same material being reproduced by each of the speakers that you are evaluating. (In the August 1969 issue, I discussed at length techniques for judging speaker quality.)*

### Quarter-track to Half-track

**Q.** I am planning to convert my four-track stereo recorder to two-track stereo so I can edit my tapes and get a better signal-to-noise ratio. Can I just replace the quarter-track heads with equivalent half-track heads, or will special adjustments be necessary?

BRUCE BARTLETT  
Wooster, Ohio

**A.** From a practical point of view, there are several things wrong with your plan. First of all, it is possible to edit tapes made on a four-track machine. To edit four-track tapes that have been recorded in both directions, simply use another machine to make a single-direction copy of your dual-direction tape before editing. If you are making your own recordings from scratch, all you need do is tape in only one direction with your machine. The editing will then be no more difficult than if you were using a half-track machine.

The second question you raise, that of signal-to-noise ratio, also needs some clarification. If all things were equal—if you had two identical machines, one with half-track heads and the other with quarter-track heads—the half-track head would give you a better signal-to-noise ratio by approximately 3 dB because more magnetic flux from the tape impinges on a half-track head gap and hence the head puts out more voltage. However, if you have a quarter-track machine whose signal-to-noise ratio is already good enough for the noise to be inaudible under normal record/playback circumstances, then replacing the quarter-track head with a half-track head seems pointless. True, you might achieve a measurable improvement, but almost surely you won't get an audible one. If, on the other hand, the signal-to-noise ratio of your present machine is bad (because of noisy electronics), the odds are that the improvement achieved by changing to a half-track head will still not result in a machine that is as good as some other quarter-track machine. And one last point: changing to half-track heads is no simple plug-in replacement job. It may require changes in bias and equalization in addition to the mechanical complexities of head alignment.

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

←CIRCLE NO. 23 ON READER SERVICE CARD

# WHEN YOU ENGINEER A BREAKTHROUGH IN SOUND REPRODUCTION AS INCREDIBLE AS THIS, YOU DON'T RECORD A PING PONG GAME

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**RATED X FOR EXCITEMENT:** Wedding Bell Blues/Smile a Little Smile for Me/Holly, Holy, Is That All There Is/Jingle Jangle/Heaven Knows/Cherry Hill Park . . . and more

**IMAGES:** Lay, Lady, Lay/Leaving on a Jet Plane/Sounds of Silence/Alice's Restaurant/Eli's Coming/Jennifer Junifer/Lady Madonna/Proud Mary . . . and more

**MAINSTREAM**  
  
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Here's the brilliant realization of sound, beyond your fondest dream. The new Pioneer SX-990 solid state AM-FM multiplex stereo receiver was designed with you in mind. Thoroughly flexible, you can plan a complete stereo system around it. Rated according to the Institute of High Fidelity standards (as all Pioneer units are), it contains top quality circuitry plus many refinements

found only in much more expensive units. Versatile, it offers: 2 phono, tape monitor, microphone, auxiliary and main amplifier inputs. Outputs for two pairs of speakers make it ideal as a power source for any fine stereo system. Elegantly styled in an oiled walnut cabinet, it's the perfect complement to the most discriminating decor. Hear it at your local Pioneer dealer. Only \$299.95

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CIRCLE NO. 46 ON READER SERVICE CARD

By HANS H. FANTEL



## AUDIO BASICS

### REAR-PANEL CONTROLS

SOME audio fans, beguiled by the array of knobs and switches on the front panel of their amplifiers or receivers, pay scant attention to the controls located on the rear. Occasionally these adjustments are ignored altogether, with the result that the user gets less than the best possible performance from his equipment. Rear-panel controls, in general, are intended to be set only once and then left in that position. Their relative inaccessibility, therefore, is no disadvantage. In fact, some of these controls are not switch- or knob-operated, but have slotted shafts that must be turned with a screwdriver. This prevents their being accidentally dislocated once they are adjusted.

The most common rear-panel control is a switch or knob for setting the sensitivity of the phono input: this matches the input characteristics of the phono preamplifier to the strength of the signal put out by the cartridge. Cartridges, depending on make and model, differ in their outputs. A high-output magnetic cartridge could overload the preamplifier input stage of your transistorized receiver or amplifier, which would result in distortion during loud passages. But if the phono-sensitivity switch is put into the HIGH position (*i.e.*, the position intended for a high-output cartridge), a resistance is added to the signal path to prevent possible overloading and distortion. The literature supplied by the manufacturers of your equipment should give the information you need to make this adjustment properly. If this is for some reason unavailable, set the switch so that the position of the volume control is high for your preferred listening level, but not high enough to introduce preamplifier noise (hiss). Only if you are not getting enough volume even at a fairly advanced setting of the volume control should you set the rear-panel phono-sensitivity switch to LOW. (*Note:* HIGH and LOW in this context refer to the output of the cartridge, not the sensitivity of the input stage.)

Another control occasionally found on the rear panels of receivers is a tuner-level adjustment, which should be set to match the sound level from the tuner section to that from your record player for a given setting of the volume control. This eliminates the annoyance of abrupt volume changes when switching from one program source to another, and also helps the loudness control do its job properly.

Some receivers also have an FM-muting adjustment to select the degree to which FM interstation noise is suppressed when the front-panel muting switch is activated. Since total suppression of background noise may discriminate against weak stations, causing them to be attenuated along with the background noise, a workable compromise for a given receiving location can be effected through this control. Another rear-panel FM control sometimes encountered is a switch for choosing between antenna-input impedances of 300 or 75 ohms, so that 75-ohm coaxial antenna lead-in can be used without a separate matching transformer (balun). Occasionally one also finds a local-distant antenna switch which, in the "local" position, prevents strong signals from nearby stations from overloading the input stage and thus causing the same station to appear at different points on the tuning dial.

MARCH 1970

# A Major Breakthrough In Sound Reproduction...

## THE RABCO SL-8



### ACCLAIMED BY EXPERTS...

"Without question, the Rabco arm does what it is supposed to do, and does it nicely. ...minimized record and stylus wear, superb reproduction."

Audio Magazine

"Extremely well engineered...unprecedented low tracking force, no skating effects, minimum groove wear, and minimum stylus wear. ...ruggedly constructed: after months of continuous use the SL-8 remains as responsive and foolproof as when first installed."

Hi Fidelity Magazine

### THE ONLY STRAIGHT LINE SERVO TONE ARM

# RABCO

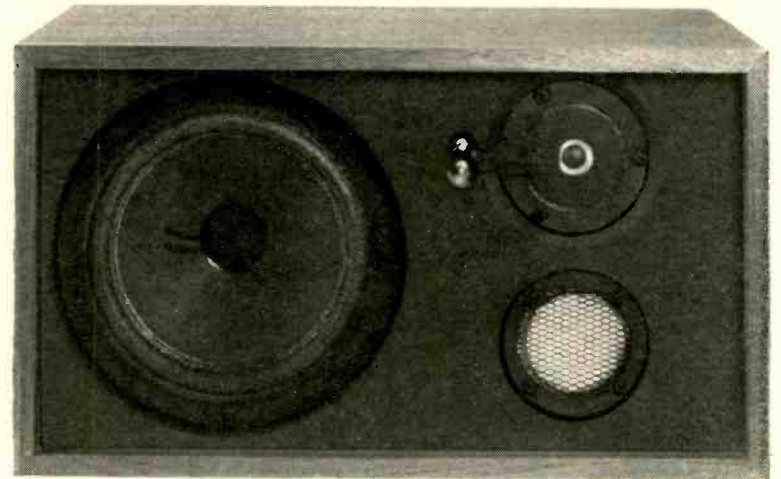
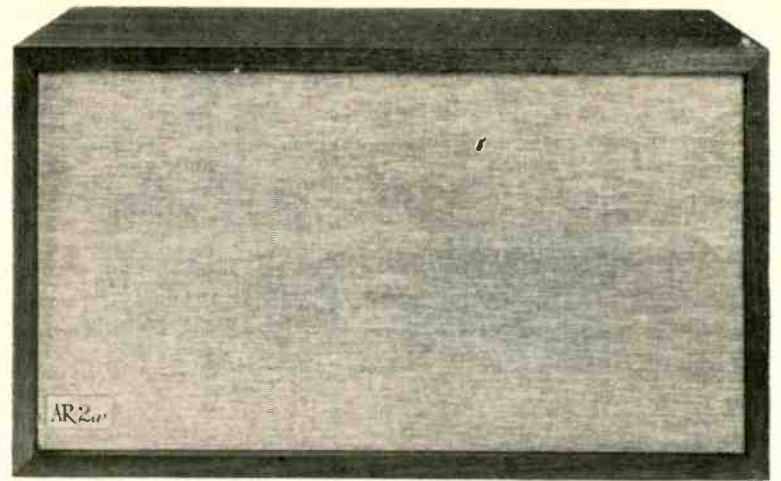
11937 TECH ROAD,

SILVER SPRING, MARYLAND 20904

CIRCLE NO. 44 ON READER SERVICE CARD

# The AR-2aX: an evolutionary new speaker system.

1970 AR-2aX



1964 AR-2aX



1959 AR-2a



1958 AR-2

The AR-2 series of speaker systems made by Acoustic Research has long been considered a standard of high-fidelity performance where cost requirements made technical compromise necessary. The best speaker system in the series, the AR-2aX, was the result of a series of refinements of the original AR-2. The most important such change has probably been the conversion of the older unit to a three-way system.

Now, the AR-2aX has been changed to incorporate the same two speakers as are used in the AR-5 for reproduction of the lowest and highest frequencies (the AR-2aX midrange speaker remains the same). Both of the new speakers are among those most recently designed at Acoustic Research.

The high-frequency unit is the same miniature hemispherical device as is used in the AR-5 and AR-3a, and is only 3/4-inch in diameter. It is the best high-frequency speaker we know how to make. The low-frequency speaker cone uses a newly developed material and process of manufacture which make its absorption of high frequencies very high, suppressing a form of coloration frequently found in conventional cones its size. The circular suspension ring around the cone is also of a new material, silent and highly stable. The voice-coil is a new high-temperature design, triple-insulated and wound on a form of Dupont Nomex.

We believe that the AR-2aX is now equal or superior to any commercially produced speaker system except the AR-5 and AR-3a. We base this judgment on its lack of distortion, wide bandwidth, reliability and uniformity of both on-axis and total energy radiation.

Detailed measured performance data for the AR-2aX is available on request, as is the new AR catalog.



**Acoustic Research, Inc.**

24 Thorndike Street, Cambridge, Massachusetts 02141

CIRCLE NO. 2 ON READER SERVICE CARD

# TECHNICAL TALK

By JULIAN D. HIRSCH



## ● SPECIFICATIONS 10—TONE-ARM TRACKING:

The task of a tone arm is to hold the cartridge in a fixed position relative to the record (at any given instant) so that the stylus can be deflected by the undulations of the groove wall and produce from the cartridge a corresponding electrical audio signal. The correct cartridge orientation in respect to the record surface has the stylus assembly tangent to the arc formed by the record groove. (Normally this means that the cartridge body is also tangent to the groove.) Only when such tangency exists can lateral—as opposed to vertical—groove modulation generate a correct electrical analog of the recorded signal. If the stylus is not tangent to the arc formed by the record groove a *tracking error* exists, and certain amounts of second-harmonic distortion of the signal recorded on the disc will appear in the electrical output of the cartridge.

The only type of arm that can completely eliminate tracking error is an arm designed to carry the cartridge along a record radius so that the stylus always remains tangent to the groove. The only radial arms to appear in recent years are the relatively expensive offerings of Marantz and Rabco. The vast majority of record players still use pivoted tone arms.

A straight arm that is pivoted at one end can have correct tangency at only one point on a record. However, by offsetting the cartridge at an angle to the line joining the pivot and the stylus tip, and locating the arm so that the arc traversed by the stylus extends beyond (overhangs) the record center by the correct amount, tracking error can be reduced to zero at *two* points on the record. And the longer the arm, the smaller the maximum tracking error will be at other points. There is an optimum and fairly critical relationship between arm length, offset angle, and overhang. When it is correct, there is minimum tracking-angle-error distortion.

It should be noted that minimum *distortion* is the criterion, rather than minimum tracking-angle error. Although tracking error causes distortion, the two do not have a one-to-one relationship. The second-harmonic distortion produced by tracking error is proportional to the velocity of the groove modulation and the degree of tracking error, and inversely proportional to the turntable speed and the radial distance from the center of the disc. For a fixed

turntable speed and recorded signal level, the distortion is directly proportional to  $\alpha/r$ , which is the tracking-angle error in degrees per inch of radius. This means that a 3-degree error at a 6-inch radius (the outer edge of an LP record) produces the same amount of distortion as a 1.5-degree error near the inner grooves, where the radial distance might be 3 inches. It is quite common for musical recordings to reach their highest levels near the end of a performance, which coincides with the end of the disc. It is therefore especially important to have a low tracking-angle error at the inner grooves.

H-H Labs measures tracking-angle error at disc radii from 2 to 6 inches, and for each measurement divides the angular error by the radius in inches. The largest figure obtained is the maximum tracking-angle error in degrees per inch of radius, which is the figure given in our reports. The measurement is made with a special tone-arm protractor that slips over the turntable spindle. A movable arm on the protractor is aligned parallel with the cartridge axis (or the axis of the plug-in shell, if this is more convenient) and the error is read directly from the protractor scale. Depending as it does on a visual estimate of the correct protractor setting, this method is subject to human error. By repeating a measurement several times we can come up with a figure that we estimate to be accurate

within 0.5 degree, and which is repeatable to better than that figure.

How important is the distortion resulting from tracking-angle error? In respect to audibility, most of the time I would say that it is not significant when compared with the other distortions present in the recording/playback process. This is

certainly to the credit of the generally excellent state of tone-arm design. Modern arms, including those used on automatic record players, have errors that rarely exceed 0.7 degree per inch at the worst point and are much better than that over most of the record surface.

Assuming an average recorded level of 4 cm/sec, a tracking-angle error of 0.7 degree per inch will produce 3.5 per cent second-harmonic distortion. Although this seems high compared with typical amplifier distortion figures, the other distortions arising from stylus and groove geometry—and other factors in the disc recording and playback process—seem to mask it quite well. The

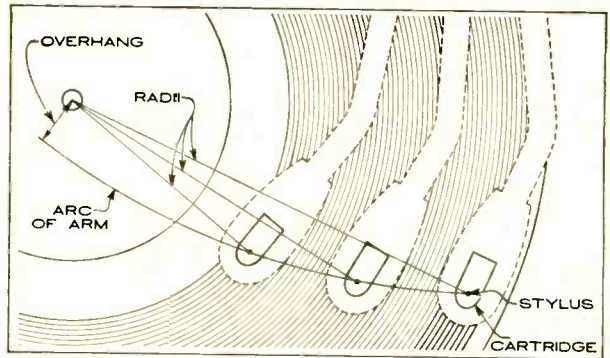
### TESTED THIS MONTH

●  
**Shure V-15 Type II (Improved)  
Phono Cartridge  
Advent Speaker System  
Garrard SL-95B Automatic Turntable**

situation is further ameliorated by the fact that the tracking-angle-error distortion is practically pure second harmonic, which is relatively inoffensive to the ear.

I have confined the foregoing discussion to tracking-error distortion; however, there are many other properties of a tone arm that are not so easily measured. Some of these will be discussed in next month's column.

*A phono cartridge mounted in a conventional pivoted tone arm is shown at three disc radii. Any deviation from tangency (tracking-angle error) will result in distortion that will be particularly severe at the inner grooves. (Diagram is not to scale.)*



## ≈ EQUIPMENT TEST REPORTS ≈

By Hirsch-Houck Laboratories

### SHURE V-15 TYPE II (IMPROVED) PHONO CARTRIDGE



● PROGRESS in high fidelity, as in most fields, comes in a gradual, evolutionary fashion rather than by dramatic "breakthroughs." A very good case in point is the development of the Shure V-15 series of phono cartridges, beginning with the original V-15 of several years ago. The V-15 was a real and impressive advance over previously available cartridges. Of course, competition soon appeared in the form of several cartridges with closely comparable tracking ability.

The next step was the V-15 Type II, somewhat restyled and with even greater tracking ability. (Shure coined the term "trackability" to describe the ability of the V-15 Type II to play difficult passages without mistracking.) For a time, it too was accepted as representing the state of the art in cartridge performance, but once again competing cartridges appeared with correspondingly improved performance characteristics.

Shure has now released a further improved version of the V-15 series, bearing the somewhat cumbersome designation "V-15 Type II (Improved)." It is identical in appearance to the V-15 Type II, except that the name Shure appears in red instead of black type on the swing-away stylus guard. According to Shure, improvement has been made in tracking ability for the bass and the mid-frequency range below about 2 kHz. The V-15 Type II is rated to track a recorded velocity of 30 cm/sec in the 800 to 5,000-Hz range. The improved model can handle a level about 2 dB higher below 1,000 Hz, corresponding to a maximum velocity of 38 cm/sec in the region where piano, bass drum, and organ pedal passages severely tax any cartridge.

The practical advantage of this improvement is the ability to track most records at 0.75 gram and even heavily modulated records at 1 gram (the V-15 Type II sometimes required 1.25 or 1.5 grams). Although many cartridges are claimed to be able to operate at 0.75 gram, it has been our experience that most require over 1 gram to cope with high-velocity recordings.

We tested the improved Shure V-15 Type II as if it were a completely new cartridge. Only after all tests were complete did we refer to our original data on the previous

V-15 Type II. It then appeared that Shure had, without fanfare, made a few other improvements, for the new cartridge showed several other differences when compared with the earlier version.

Whereas the original V-15 Type II had a slight peak in the 15-kHz region, the new model had no trace of a peak or major resonance anywhere in the region from 10 to 20,000 Hz. The overall frequency response, using the CBS STR-100 test record, was within  $\pm 1.5$  dB on one channel and  $\pm 2.5$  dB on the other channel from 40 to 20,000 Hz. Record variations may be responsible for much of the difference between channels.

Stereo channel separation proved to be even better than that of the already excellent V-15 Type II. It was typically better than 30 dB below 3 to 4 kHz, about 20 dB at 10 kHz, and 8 to 10 dB at 20 kHz. Tone-burst response, using the STEREO REVIEW SR-12 test record, was perfect up to the highest frequencies, showing some irregularity just below 20 kHz.

The cartridge tracked the heavy bass bands on the Cook Series 60 test record at 0.75 gram, and the 30 cm/sec, 1,000 Hz bands of the Fairchild 101 test record at 1 gram. A few other cartridges we have tested have been able to do this, but all of them showed some distortion of the output waveform that was not eliminated by using a higher tracking force. Not so with the V-15 Type II (Improved), which produced a visually perfect sine wave—the first cartridge we have tested that has done so.

The IM distortion, checked with the RCA 12-5-39 test record, was markedly less than we measured with the V-15 Type II. Most cartridges have fairly low distortion up to some critical velocity, which usually falls between 10 and 20 cm/sec, but then they "break" sharply at higher velocities when they can no longer follow the groove undulations. The V-15 Type II (Improved), on the other hand, had a distortion characteristic that increased gradually above 10 cm/sec, reaching 6 per cent at 27.1 cm/sec. The absence of sudden mistracking at high velocities implies a freedom from "shattering" sounds under extreme conditions, and this was confirmed by our listening tests. Incidentally, reducing the tracking force to 0.75 gram caused a noticeable increase in IM distortion over most of the high-velocity range, but no sudden loss of tracking. We would suggest using 1 gram, however. At that force, one can be confident that any unpleasant distortion must be either in the record itself or in some other part of the system.

The output of the V-15 Type II (Improved) was 3.7 millivolts at 3.54 cm/sec, about 3 dB higher than that of

*(Continued on page 40)*



# “The finest loudspeakers I’ve ever listened to, regardless of size, type or price.”

That’s how Ronald M. Benrey, electronics editor of *Popular Science*, described a pair of **Rectilinear III** speaker systems in the May 1968 issue of his magazine, in an article on “The Stereo System I Wish I Owned.”

Mr. Benrey went on to justify his ranking of the **Rectilinear III**’s:

“They produce beautiful bass tones without boom, accurate midrange tones without a trace of coloration, and crystal-clear treble tones without a hint of harshness. And they do it at any volume, including ‘window-rattling’ sound levels.”

Of course, one expert’s opinion may differ considerably from another’s. But here’s what Julian D. Hirsch wrote in the “Equipment Test Reports” of *Stereo Review*, December 1967:

“The **Rectilinear III** ranks as one of the most natural-sounding speaker systems I have ever used in my home. Over a period of several months, we have had the opportunity to compare it with a number of other speakers. We have found speakers that can outpoint the **Rectilinear III** on any individual characteristics—frequency range, smoothness, distortion, efficiency, dispersion, or transient response. However... none of the speakers combine *all* of these properties in such desirable proportions as the **Rectilinear III**.”

Summing up his test report, Mr. Hirsch concluded: “In our opinion, we have never heard better sound reproduction in our home, from any speaker of any size or price.”

Of course, both Mr. Benrey and Mr. Hirsch write for the readers of popular,

large-circulation magazines. But here’s what Larry Zide wrote for the more specialized audience of *The American Record Guide* (“Sound Ideas” column, October 1968):

“The transient response of the speaker is superb... the overall quality is extreme in its fidelity to ‘live’ music. The bass is solid and firm, the mid-range is clear and neutral, and highs are bell-like in their cleanliness.

“It all comes down to this: there are only a handful of speakers that I find completely satisfactory... I have had these **Rectilinear III** units for a month

now. Lately I have found myself listening to them just for the pleasure of it. They are among the very best speakers on the market today.”

Of course, all of the opinions above appeared in publications that accept advertising. But here’s what *Buyer’s Guide* magazine wrote in their August 1968 issue, just in case you’re more inclined to trust a consumer review without ads:

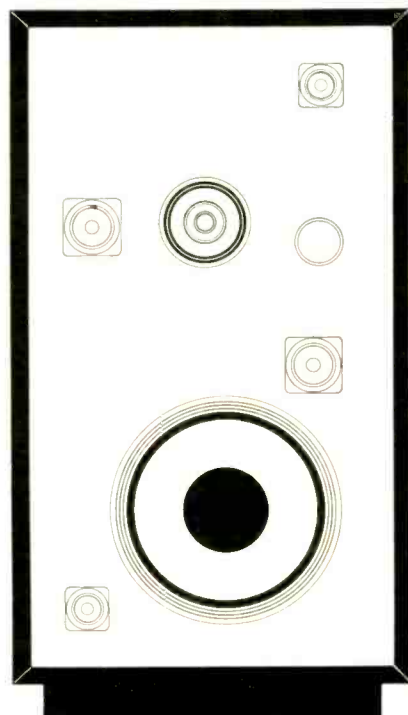
“**Rectilinear III**... has had tremendous impact on the hi-fi industry... This speaker’s virtue is the fact that it is the first and only full-range dynamic speaker system that possesses sound quality which is directly comparable to electrostatic speakers.

“... Flute and violin concertos as well as string quartet were reproduced with honest clarity... Piano and organ music were effortlessly reproduced in a manner that suggested the instruments were being performed live. Jazz and rock music were unpretentious and true sounding...”

To such unanimity from such varied sources we need only add the dimensions and price of the **Rectilinear III**: 35” by 18” by 12” deep, \$279.00 in oiled walnut.

[For further information, see your audio dealer or write to Rectilinear Research Corp., 107 Bruckner Blvd., Bronx, N. Y. 10454. Canada: H. Roy Gray Co. Ltd., 14 Laidlaw Blvd., Markham, Ont. Overseas: Royal Sound Co., 409 N. Main St., Freeport, N. Y. 11520.]

## Rectilinear III



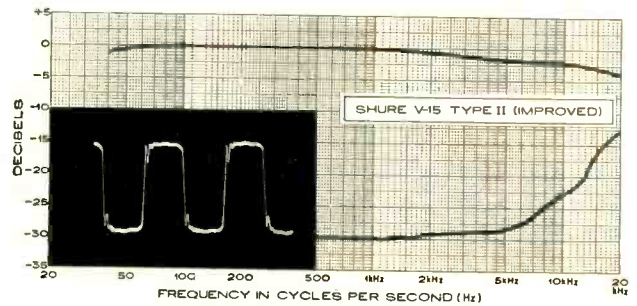
CIRCLE NO. 48 ON READER SERVICE CARD

## How to Interpret the Curves

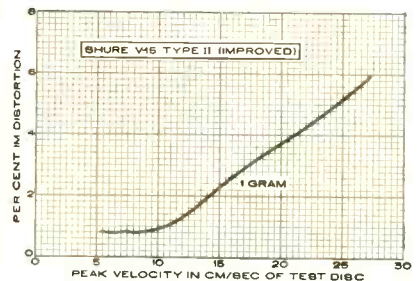
THE upper curve in the frequency response and separation graph represents the *averaged* frequency response of the cartridge's right and left channels. The lower curve, which starts at 500 Hz, represents the *averaged* separation between channels. The amount of separation at any frequency is indicated by the vertical distance between the upper and lower curves, and is expressed in decibels.

Inset at the lower left of the frequency-response graph is an oscilloscope photograph of the cartridge's response to a 1,000-Hz square wave on a test record. The shape of the reproduced wave is an indication of a cartridge's high- and low-frequency response and resonances.

Note that the distortion figures shown in the distortion-*vs.*-recorded-velocity graph are not directly comparable, in terms of audible effect, with distortion figures obtained on other components. The vast majority of the program material on discs has velocities well below 15 cm/sec and rarely, if ever, hits 25 to 30 cm/sec. The curve is therefore useful as a means of comparing cartridges, but not as an indicator of absolute distortion.



*Note: the frequency-response curves shown above for the V-15 Type II (Improved) cartridge should not be compared at higher frequencies with the curves (which were taken with a defective test record) shown in the cartridge reports in the July 1969 issue.*



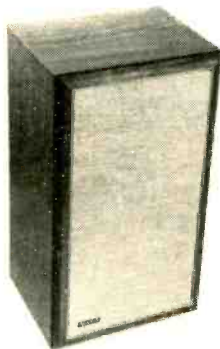
the V-15 Type II. Its hum shielding is essentially the same (the cartridge body is unchanged) and is better than average for magnetic cartridges. As for its sound, the Shure V-15 Type II (Improved) is as neutral a cartridge as we have heard. It was always unstrained, effortless, and a delight to listen to. In our tracking-ability test (using the Shure "Audio Obstacle Course" record), it was clearly superior to the V-15 Type II in tracking the highest levels of the piano hands, and showed signs of mistracking only on

the maximum level of orchestral bells (as has every cartridge we have tried). The "trackability" score for the V-15 Type II (Improved) is by a comfortable margin the best we have measured to date.

One of the best things about the improved V-15 Type II is that its price remains unchanged at \$67.50. Owners of older V-15 Type II cartridges can convert them to the latest version by installing a new stylus assembly at \$27.

**For more information, circle 157 on reader service card**

## ADVENT SPEAKER SYSTEM



● ALTHOUGH the Advent Corporation is new to the high-fidelity scene, its president is well known to anyone who has followed audio developments during the past fifteen years. Henry Kloss, a co-founder of Acoustic Research and later of KLH, is back with what promises to be an unusually diversified line of audio components. To no one's surprise, one of the first Advent products is a speaker system. It is more evolutionary than revolutionary in design, incorporating new materials and processes rather than new principles. The Advent speaker (it has no model number) is a rather large bookshelf-style unit measuring 25½ x 14¼ x 11½ inches, and is suitable for use on the floor or on a bookshelf. It's a two-way system, with a newly designed woofer that has an effective cone diameter of 7½ inches, although its overall diameter would usually cause it to be classified as a 10-inch speaker. The cone surround

(outer suspension) is a specially processed polyurethane, quite different from the rubber-like compounds used with most speakers. The woofer's smallish diameter did not impair its low-frequency performance in the least, as our tests subsequently proved.

The tweeter is a direct radiator with a phenolic-resin cone 2 inches in diameter, also designed specially for this system. A three-position toggle switch in the rear of the cabinet selects normal highs, reduced highs, or extended highs, to suit one's taste. The crossover frequency is nominally 1,000 Hz and the speaker impedance is 8 ohms.

Our frequency-response measuring technique, involving as it does the use of a normal "live" room, is not able to resolve the fine detail in a speaker's response curve. In fact, the minor irregularities we observed in the response of the Advent speaker could have been caused to a great degree by external effects. Averaging the outputs of eight microphones, we obtained a frequency-response curve that was within ±6 dB from 30 to 15,000 Hz. Impressive though this is, it does not adequately describe the speaker's response. The lows, whose smoothness cannot really be determined with accuracy in an acoustically live room, remained strong and clean all the way down to 20 Hz with very low distortion. This is a noteworthy achievement for any speaker system, and nothing less than remarkable for one with a smallish woofer. Without a doubt, the Advent is one of the smoothest and widest-range speaker systems we have had the pleasure of testing.

The efficiency of the Advent speaker is moderately low,

*(Continued on page 44)*

It's kind of a dumb-looking thing, but the ear is still the best listening device around. Which should tell you something about the shape of a Yamaha speaker.

True, the ear receives sound and a speaker reproduces it. But the basic principles of physics and design are essentially the same. There is a place in the middle through which the sound travels. Surrounding it are planes of

varying dimensions. There is no symmetry.

This is because sound is not symmetrical. It bends. So symmetrical shapes—ears or speakers—will confine sound to an area that won't let it bend naturally. (Cup your ear and see how directional and different things sound.)

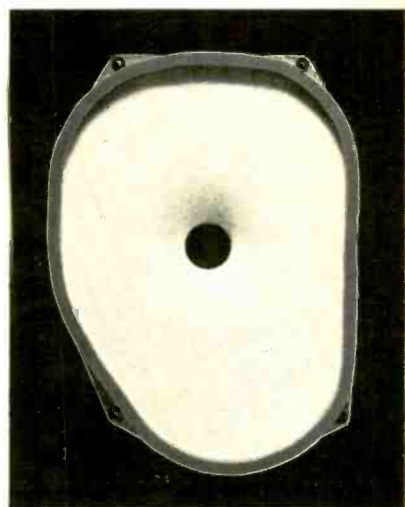
The irregular shape of a Yamaha speaker gives sound waves of different length a place to go. Long waves go to the long parts, medium

waves to the medium parts and so on.

The result is a sound as close to natural as you've heard. Freer, fuller, more omnidirectional.

Listen to what natural sound is all about. If you're not convinced then, well, maybe you are wearing the wrong kind of ears.

**Either we're right  
about the shape of our speakers,  
or you're wearing the wrong kind of ears.**



 **YAMAHA**

YAMAHA INTERNATIONAL CORP. Audio Products Division  
7733 Telegraph Road, Montebello, Calif. 90640

# ROBERTS JAPAN-

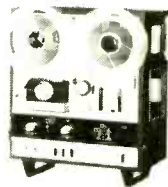
日本

"Welcome  
to Japan"

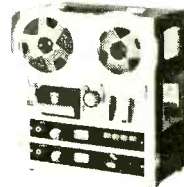
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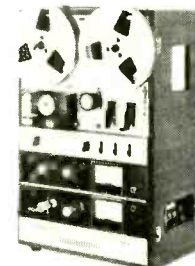
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**1—ROBERTS 1725-8L III**  
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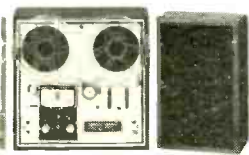
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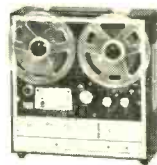
2—ROBERTS 1725W-III... the tape recorder component system in walnut furniture; 2 wide-range Acoustic Suspension speakers in genuine walnut; 18,000-cycle range; 4-speed option; 4-track stereo and monaural record and play.



2—ROBERTS 1720... 20-watt, 15,000-cycle audio featuring detachable speakers for full stereo separation; sound-with-sound; 2 speeds; separate tone and volume controls; automatic shut-off.



10—ROBERTS 450... 3-head tape deck for Record, Play, Erase; 2 speeds; automatic stop; sound-with-sound; built-in tape cleaner; 2 VU meters; instant pause; handsome wood-grained cabinet; dust cover.



20—ROBERTS 1719... 20-watt, 15,000-cycle stereo recorder with built-in speakers; sound-with-sound; 2 speeds and optional 15 ips; tone and volume controls each channel; automatic shut-off; lightweight.

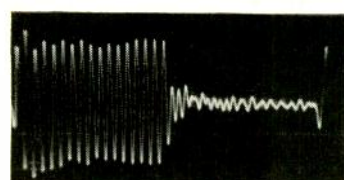
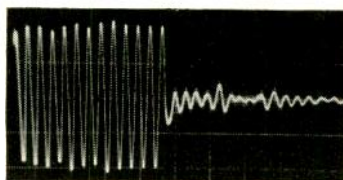
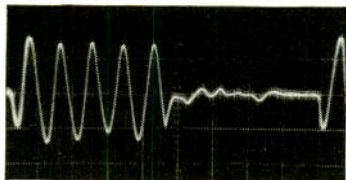
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Oscilloscope photos of tone bursts at (from left to right) 120, 320, and 9,000 Hz show the Advent speaker's uniformly excellent response.



in keeping with its acoustic-suspension design. With a signal driving the speaker to a 10-watt output level, the harmonic distortion was under 5 per cent down to 45 Hz, and reached its maximum of only 9 per cent at 25 Hz. The tone-burst response was excellent throughout, ranking with the best we have seen from any speaker. We preferred to operate the Advent speaker with the maximum high-frequency level setting.

In listening tests it had the essential quality of some of the other fine acoustic-suspension speakers for which its designer was also in part responsible. Its sonic character was very smooth, balanced, and easy to listen to. Advent feels that its speaker can compete with any three-way

acoustic-suspension system. We were able to compare it with several others, priced between \$100 and \$250, and we tend to agree. Some more expensive systems, in our view, are slightly better at the extreme high-frequency end, but the sonic differences are small, the price differences large.

In any event, the extreme low-bass reproduction, which is one of the most expensive characteristics to build into a speaker system, sets the Advent speaker apart from anything else in its price class. In this respect it can only be compared to the best acoustic-suspension speakers selling for twice its price—or more. The Advent loudspeaker is priced at \$112.

**For more information, circle 158 on reader service card**

### GARRARD SL-95B AUTOMATIC TURNTABLE



● THE Garrard SL-95B automatic turntable is the modified current version of the popular SL-95, reported on in *STEREO REVIEW* last April. At a casual glance the two appear to be identical, but a careful comparison reveals some minor differences along with the similarities in their control functions and styling.

The SL-95B features the Garrard Synchro-Lab motor, which combines the constant speed of a synchronous motor with the high starting torque of an induction motor. The 11½-inch platter, cast of nonferrous metal, weighs about 3 pounds and is carefully balanced. It is idler driven and has a single knob that selects the playing speed (33½, 45, and 78 rpm) and arm-indexing position simultaneously. There are three 33½-rpm positions on the knob that permit discs of 7, 10, or 12-inch diameter to be played automatically. At 45 and 78 rpm, the arm-indexing point is automatically set for 7-inch and 12-inch sizes, respectively. Odd sizes can be played manually.

The SL-95B operating controls consist of three levers, replacing the two rotary controls of the SL-95. The AUTO lever initiates the automatic change or play cycle when the appropriate spindle has been inserted in the turntable center hole. It can be moved to STOP at any time, which returns the arm to its rest and shuts off the motor. If the lever is moved to START, any record on the turntable will be replayed from the beginning.

The MANUAL lever merely switches the motor on or off. The arm can then be raised and lowered with the cueing control, and is positioned over the record by hand. It can be returned to rest at any time, and the motor shut off manually. If the record is allowed to play to the end, the unit shuts off and the arm returns to its rest as in automatic play. A short spindle that rotates with the record is used during manual single-record play. The CUEING lever lifts the pickup from the record at any time, either in manual or automatic play. The lifting action is rather abrupt,

so the lever should be operated gently. The lowering action is heavily damped, so that the pickup floats down slowly to the record surface.

The Garrard SL-95B was smooth and quiet in operation, and required only ten seconds for a record-change cycle. Our chief—and minor—criticism of its design relates to its tone-arm finger lift, a short straight plastic piece extending from the arm. It is difficult to grasp, and a curved or hooked shape would be preferable.

The measured performance of the Garrard SL-95B was much the same as that of the SL-95. Rumble was -34 dB (vertical plus lateral), and -37 dB in the lateral plane only. Flutter was an excellent 0.03 per cent at all speeds, which is essentially the residual level on our test record. Wow was 0.1 per cent. Operating speed was very slightly fast at 45 rpm, correspondingly slow at 78 rpm, and exact at 33½ rpm. The speeds were unaffected by line-voltage changes over a wide range.

The retractable record-support post of the SL-95 has been replaced by a fixed post of similar design in the SL-95B. The wood and aluminum arm is essentially unchanged, but now has a tracking-force scale built into its top, reading from 0 to 5 grams. The adjustment wheel has click stops at ¼-gram intervals. Like its predecessor, the SL-95B uses a lever with a sliding weight for applying anti-skating force. It is calibrated in grams to correspond to the tracking force when spherical styli are used. An elliptical stylus requires more anti-skating correction, so the latest models will have a separate elliptical scale.

The tracking-force calibration was quite precise; within 0.05 gram for all settings up to 4 grams with the arm initially balanced according to instructions. Using a Shure V-15 Type II cartridge (elliptical), it was necessary to set the anti-skating to about 2.5 grams with a 1-gram tracking force in order to obtain proper skating correction. Tracking error was low over most of the record, but rose to over 1 degree per inch of radius at radii of 2.5 inches or less. Since there is no means of adjusting stylus overhang, the tracking error will unavoidably be affected by differences in cartridge-mounting dimensions.

At a time when most automatic turntable prices are soaring, it is encouraging to note that the price of the SL-95B is unchanged from that of the SL-95 (\$129.50). A number of different bases are available, ranging in price from \$6.50 to \$19.95. A dust cover that fits all bases is \$6.50.

**For more information, circle 159 on reader service card**

# Citation is back.



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## TECHNICAL SPECIFICATIONS AND FEATURES FOR CITATION TWELVE POWER AMPLIFIER

- Continuous Power Output:** • 120 watts, RMS, both channels driven simultaneously @ less than 0.2% THD, 20-20,000 Hertz @ 8 ohms.
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- Damping Factor:** • 40:1.
- Frequency Response:** • 1-70KHZ,  $\pm 0.5$  db @ normal power level. Less than  $\frac{1}{2}$  Hertz—100KHZ,  $\pm 1$  db @ normal listening level.
- Power Bandwidth:** • 5-35,000 Hertz.
- Phase Shift:** • Less than 5 degrees at 20 Hertz.
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- Dimensions:** •  $5\frac{7}{16}$ " H x  $12\frac{3}{16}$ " W x  $12\frac{3}{4}$ " D (complete with metal cage).
- Weight:** • 50 pounds.
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- Outstanding Features:** • Two individual power supplies deliver superb regulation for absolute stability and extended low frequency response. Handling of transients is effortless at any power level.

- Thermal cutouts remove power from output stage when heat build-up exceeds 80 degrees C. Series-type limiting relays protect amplifier from short circuits. Reset automatically once short is removed.
- Absolutely stable with any type of speaker system.

The Citation Twelve is available as a factory wired and tested amplifier or as a simple-to-construct kit. No special technical or mechanical skills are required. Instructions are complete and easy to follow. See and hear the Citation Twelve soon. We think you will agree it represents a remarkable breakthrough in high fidelity.

For complete technical information, write to Harman-Kardon, Inc., 55 Ames Court, Plainview, N.Y. 11803, Dept. SR3.

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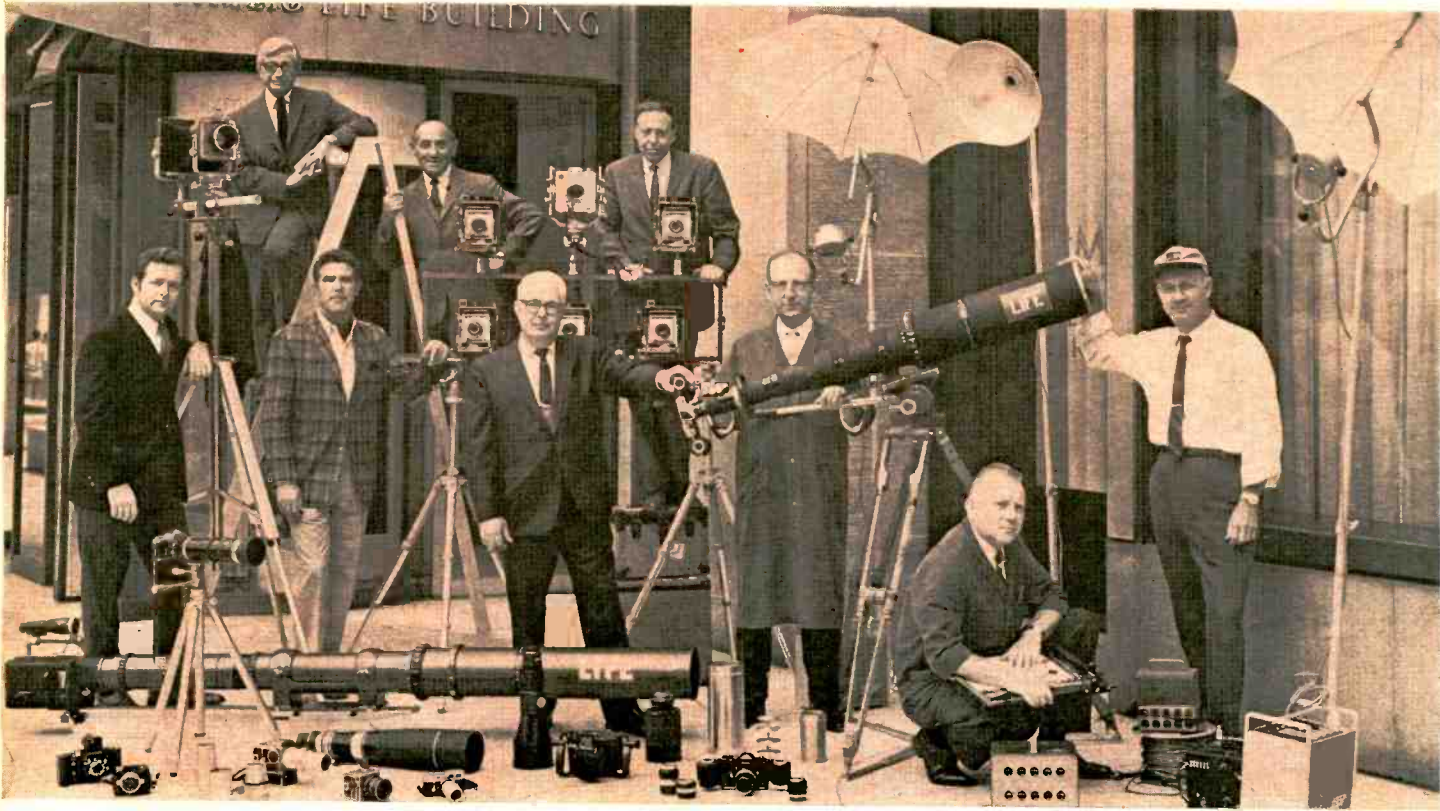
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## LIFE magazine's masters of photography want to help you develop your talent for taking—and making—great pictures

For the past 30 years, LIFE Magazine has featured the work of the best photographers and photo technicians in the world. Now LIFE has enlisted them to teach you everything they know so that you too can produce great pictures. They've put all their theories, techniques and trade secrets into one exclusive "course-between-covers"—the LIFE Library of Photography.

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The Editors of the LIFE Library of Photography have pored over archives, old albums and records to bring you hundreds of the most memorable pictures ever taken. Ranging from Mathew Brady and Atget, through Steiglitz, Cartier-Bresson and Karsh, to Avedon and Eisenstadt, this gallery shows you the genius of photography at every stage of its evolution. It demonstrates not only what the latest equipment can do to increase the possibilities in a photograph—it also shows you how a superb picture can be taken with the simplest kind of camera.

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Each of these famous photographs is accompanied by an analysis: how the picture was conceived, the special effects used and why, as well as other points of interest. Understanding how these men succeeded so brilliantly, you'll be better able to develop your own style, your own sense of what makes an unforgettable picture.

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Send the attached, postage-paid reply form for Volume I, and we'll enclose with it the 80-page *Photographer's Handbook*, a take-it-with-you manual for immediate guidance. This, too, is yours to enjoy for a 10-day trial—and yours to keep free with your decision to buy Volume I.

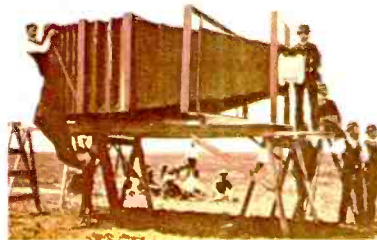
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# Library of Photography



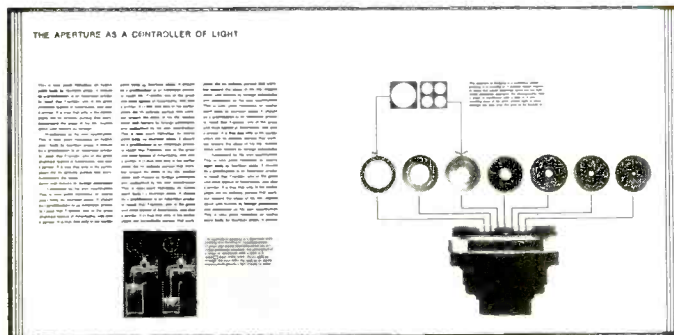
Caught by a narrow-angle lens, the sun seems breathtakingly close.



This giant camera was built by a railroad to make a single, detailed photo of an entire luxury train. It was never used again.



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Andreas Feininger, photo-journalist.



The camera enabled man to see for the first time this extraordinary view of his planet.

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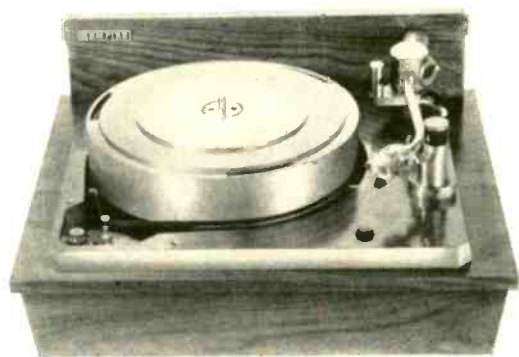
The only record playback system  
engineered for stereo cartridges  
that can track as low as 0.1 gram.



# NEW TROUBADOR MODEL 598

A turntable system designed exclusively for the new low-tracking-force cartridges that won't wear out your records, this unbelievable record playback device exceeds every National Association of Broadcasters specification for professional playback equipment.

1. This extraordinary Troubador system features the Empire 990—world's most perfect playback arm. Built to last with rugged precision foolproof adjustments. A m friction measures a minute 1 milligram. A tone arm that applies no more drag than a feather held lightly against a record groove.
2. Arm fully stereo balanced—front as well as rear of pivots.
3. Sealed instrument ball-bearing races for horizontal as well as vertical motion.
4. Stylus force dialed with calibrated clock mainspring—more accurate than any commercially available pressure gauge.
5. Lowest fundamental resonance of any arm, an inaudible 6 Hz, makes it impossible to induce acoustic feedback in the system even when you turn up the gain and bass.



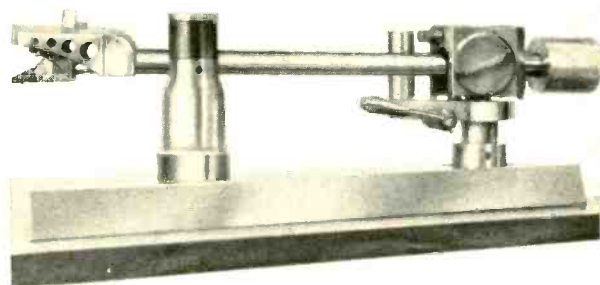
11. World's finest turntable motor, hysteresis synchronous type, self cooling, high torque with inside-out rotor; reaches full speed in less than 1/3 of a revolution and locks in on AC line frequency; maintains speed accuracy with zero error. Built-in strobe disc and pitch control.
12. Flexible belt drive precision ground to  $\pm .0001$  in. tolerance.
13. 12-inch turntable platter and 4-inch-thick balanced drive flywheel—most massive ever used in a home system.
14. Microhoned oilite bearings and lapped chrome steel shafts machined as individually matched pairs—no production-line tolerances.



## TECHNICAL SPECIFICATIONS

Empire 598 turntable  
 3 Speeds—33 1/3, 45, 78 rpm  
 Push-button power control  
 Built-in 45 rpm spindle  
 Overall dimensions (with base and dust cover) 17 1/2" W x 15 1/8" D x 8" H

Dimensions (without base and dust cover): Width 16", Depth 13 1/2"  
 Height above mounting surface: 3 1/4"  
 Depth required below base plate 3 1/2"  
 Swiss ground gold finish



6. Empire's exclusive Dyna Lift automatically lifts the arm off the record at the end of the music.
7. Micrometer calibrated anti-skating adjustment can be set exactly to match any operating force for conical or elliptical styli. Eliminates uneven record or stylus wear.
8. Instant cartridge demount and interchange.
9. In-line stylus-to-pivot axis. No warp, wow or cosine-error distortion.
10. 5-wire circuit eliminates ground loops.



15. Lowest rumble of any turntable tested—90 DB (RRL). Wow and flutter almost unmeasurable .01%.
16. Customized record mat holds records by outer rim. The playing grooves never touch the mat on any size record.
17. Empire's exclusive pneumatic suspension combines pistons and stretched springs. You can dance, jump or rock without bouncing the stylus off the record. Tracks the world's finest cartridges as low as .1 gram.
18. Dead center cueing control—tone arm floats down or lifts up from a record surface bathed in light. Pick out the exact selection you want—even in a darkened room.



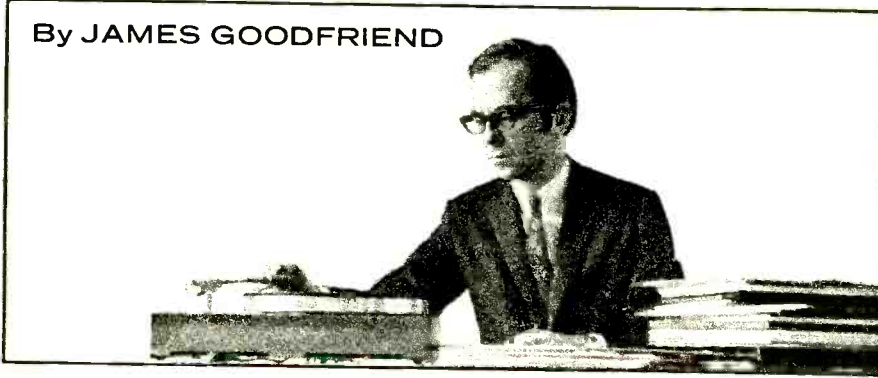
Troubador 598 playback system - \$199.95  
Less base and cover.  
 Satin walnut base and Plexiglass cover combination, \$34.95  
 990 playback arm also available separately, \$74.95

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CIRCLE NO. 21 ON READER SERVICE CARD

By JAMES GOODFRIEND



## GOING ON RECORD

### MUSICAL VALUES IN QUESTION

I THINK there has never been an age so confused as ours about musical values. Whether it is a case of purposeful or of accidental confusion I no longer know. I no longer know what to think when the president of one of our larger record companies can say to an assemblage of people in the record industry, in answer to a question about the declining sales of classical music in this country, words like: "Classical music? What is a classic? Twenty years from now [insert the name of any appropriate pop musician] may be called a classic."

I do not lack respect for pop music. But I find it almost incomprehensible that the president of a record company can enunciate such a basic confusion about the commodity to which his business life is tied. I cannot, for the life of me, decide if record-company management has become so far abstracted from the "product" with which it is involved that it no longer understands what the product is, or if, on the other hand, the confusion is not one from which this executive suffers, but one he wishes to instill in us. I am not happy about either alternative.

There has probably always been some confusion of commercial success with artistic excellence. But the straightforward confusions of the past pale before the complex misstatements of value continually assaulting us today, to say nothing of their acceptance by the public. One wonders about both seller and buyer: is it innocence or cynicism?

The form of the confusion is simple. It is the assignment of one sort of value to a person or thing because he or it has proved to have another sort of value. A certain (large) number of copies of a record are sold, proving that the record has a commercial value—but the record receives an award for *artistic* excellence. Again, a songwriter and arranger builds an estimable and successful career for himself in the light music field—but is honored by being asked to serve as *cultural* adviser to the United States Government. Competence or success in one field is confused with competence or

success in another. The form is simple, but its ramifications are not.

Consider for a moment the phenomenon of the Moog synthesizer. It is, I have been assured by *buyers* of the records as well as marketers, a "breakthrough" in musical technology, an amazing new sound source for composers to draw on, a new musical instrument of unprecedented capabilities. It may be all that or it may not. We have no way of knowing, for the records that are supposed to prove it offer nothing but hoked-up arrangements of dead men's music. The records sell, and the "breakthrough" may even be real, but the two have nothing to do with each other. The value assigned is simply not there. And the statement on a record jacket by Glenn Gould to the effect that the performance on the synthesizer of Bach's Fourth Brandenburg Concerto is the finest performance of that piece he has heard either on record or in concert says far more about what has happened to Mr. Gould in the past few years than it says about the music or the synthesizer.

CONSIDER another phenomenon, even more complex and probably far more important: the rejection of classical music by what might be called the student generation (at least in age) of the Sixties. Several months ago I wrote a column pointing out the causal relation of this rejection to the declining sales of classical records and the responsibility of the record companies for the situation. Among the responses I received were several from members of the Sixties generation whose theme was, in essence: "No one forced me to buy rock rather than classical music; it was my own free decision. Classical music has no relevance today."

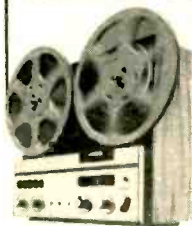
Relevance is a value of a sort. It is certainly the value at the root of the confusion that declares certain songs good or better than others simply because of the opinions or views expressed in the song, without regard to such matters as melody, harmony, rhythm, or even the literary quality of the lyrics (in

passing we might recall that this has been the Soviet standard of music criticism for years). But relevance to a life style or a world view is not an *artistic* value. A real work of art, in its creation, must be of its time, but once achieved it is for *any* time. And so, saying that it is not of this time and therefore not *for* this time (not relevant) is another confusion of values. It is a confusion brought on by a lack of exposure to honest-to-God works of art. And that brings us to the "free will" part of the matter and the innocence, or the lack of innocence, of the confusions.

Arthur Danto, Professor of Philosophy at Columbia University, recently published an article comparing student attitudes toward moral principles in the Fifties (skeptical) with those of the Sixties (dogmatic). Among the many brilliant insights was one that pointed out that the attitudes of a large portion of the Sixties generation had resulted from the internalization and avowal of an image originally foisted upon it by commercial interests as part of a huge marketing plan. The rising generation was seen to be a market, items of consumption were designed for it, and they successfully reached it (with sizable expenditures for advertising and promotion, needless to say). Since, in the minds of the marketers, what is popular and widely salable is equated with what is good, the products were "good." But the consumers, because they believed they had chosen those particular products of their own free will from among all that the world had to offer, also believed that the products were "good": "I choose only what is good, and therefore what I have chosen is good simply because I have chosen it."

Danto points out that the students' moral attitudes (whether commendable or not *in themselves*) were chosen in the same know-nothing way. We are here concerned not with moral attitudes but with aesthetic ones. And, paralleling Danto, we are not concerned whether or not the aesthetic attitudes are *in themselves* commendable, or whether the aesthetic products are *in themselves* good. The point at issue is the confusion of values that determines why those attitudes are held: "I listen only to what is good and therefore what I listen to is good simply because I listen to it." But who pays for the radio time?

It might be salutary for all of us to ponder for a time the degree to which our aesthetic attitudes are manipulated, as well as the degree to which we are abetting the manipulation by acquiescing in the purposeful or accidental confusions and misstatements of value that permeate our life. It is time to call a spade a spade, and object loudly when someone tries to sell it to us as an excavating machine—or a work of art.



## EQUIPMENT TEST REPORTS

By Hirsch-Houck Laboratories

### REVOX A77 TAPE RECORDER

● It is a pleasure to report that the widely acclaimed, but no longer available, Revox G-36 Mk III tape recorder has actually been surpassed in performance by Revox's new Model A77. The A77 has fully solid-state electronics, a bias-oscillator frequency of 120 kHz (as opposed to 70 kHz for the G-36), and a new electronic motor-speed control. The A77 model we tested is a three-motor, four-track, two-speed recorder; however, it is substantially lighter and smaller than its predecessor.

The Revox A77 has its operating controls grouped into separate recording and playback areas. On the playback side are two rotary switches with concentric knobs. One switch establishes the playback mode—stereo, either channel through both outputs, or both channels combined for mono. Playback level is controlled by the concentric knob. The other switch connects either the signal input or the output of the playback amplifiers to the output jacks in the rear. Two playback-equalization characteristics are provided; NAB or IEC (for European tape recordings). The recording equalization is to the NAB standards. The knob concentric with this switch is a playback channel-balance control.

On the right side of the recorder panel are two VU meters with real VU-meter characteristics. Adjacent to each is a red button of the push-on, push-off type. Depressing either channel's button alone records both inputs on that channel. If both buttons are depressed, a stereo recording is made. These supplement a record-interlock button, providing a double safety against accidental tape erasure. Recording levels may be set up before the tape is put into motion. When the recorder is in operation in the recording mode, the selected channel's VU meter (or meters) is illuminated.

Under each meter is a recording input-selector switch, with a concentric recording-level control. There are inputs for high- and low-impedance microphones (with front-panel jacks in parallel with rear phono connectors), radio (via a rear DIN connector), and auxiliary inputs with connectors in the rear. In addition, each switch has a position for recording the output of that channel combined with any additional source onto the other channel.

The transport mechanism is operated by a row of five pushbuttons, activating solenoids to control fast speeds, stop, play, and recording. A connector in the rear permits the use of an accessory remote-control unit for these functions. The tape speeds (7½ and 3¾ ips) are selected by a switch that also controls a.c. power to the recorder. Each speed setting has two switch positions that set the tape tension to optimum values for 10½-inch or smaller reels.

The servo-controlled drive system of the Revox A77 is unique and effective. The tape-drive capstan is powered by an eddy-current motor that delivers a high torque, free of the pulsations that are inevitable with any motor having a pole structure. The speed of this motor can be adjusted by varying a d.c. control voltage, with relatively little torque variation. The motor has a built-in tone generator that produces an a.c. signal whose frequency is proportional to motor speed. This signal is amplified, limited, and applied to a discriminator, whose d.c. output is proportional to speed. This is further amplified and used to correct the motor speed. The change between 7½ and 3¾ ips is accomplished electronically by shifting the resonant frequency of the discriminator circuit. The chief advantages

of this technique are independence from power-line voltage and frequency variations, as well as reduced flutter. Flutter of the A77 motor is inherently so low that the capstan can be driven directly from the motor shaft instead of through a separate belt-driven flywheel. According to the manufacturer, line voltage fluctuations of ±20 per cent cause a speed change of only ±0.05 per cent, and a change in the a.c. line frequency of 50 to 60 Hz causes a speed change of less than 0.05 per cent. Thus, the Revox A77 is a truly universal machine, capable of operating from 110 volts to 240 volts, 50 to 60 Hz, by adjustment of a switch in the rear of the recorder.

When the full-width head cover is swung down, two more pushbuttons are revealed. One cuts off the signal to external speakers, and the other switches off the power to the reel motors. This is for convenience in editing. When the reel motors are turned off, and the recorder placed in a fast-speed mode, the reels may be turned by hand with the tape in contact with the playback head. At the desired point, the tape may be lifted from the heads and placed in the tape splicing guide which is molded into the fixed portion of the head cover. The only problem with this arrangement is the possibility that one may spill tape by forgetting to turn on the reel motors before placing the machine back into normal operation.

We stated that the A77 surpassed the older G-36 in performance. This is best illustrated by its phenomenally flat record/playback frequency response, measured with Scotch 203 tape, for which the machine's bias was adjusted. At 7½ ips, the response was within +0.5, -2.0 dB from 20 to 20,000 Hz. This has never been equalled by any other recorder we have tested. Perhaps even more impressive is the response at 3¾ ips, which was +2.5, -5.5 dB from 20 to 20,000 Hz. The high end falls off smoothly and is perfectly usable all the way to 20,000 Hz. The NAB playback response, with the Ampex 31321-04 test tape, was +1.5, -0.5 dB from 50 to 15,000 Hz.

The signal-to-noise ratio was very good, 51 dB at 7½ ips and 48.5 dB at 3¾ ips, referred to a 0-VU recording level. Noting that the distortion at 0 VU was a mere 0.65 per cent, we increased the recording level until the distortion reached approximately 3 per cent, which occurred at +10 VU for the higher tape speed and +9 VU for the lower speed. At these levels, the signal-to-noise ratio was 59 dB at 7½ ips and 54.5 dB at 3¾ ips, figures that closely approach true professional performance.

The transport worked smoothly and with complete silence. Except for the turning of the reels, one could not tell the machine was operating from a distance greater than about 12 inches. Wow was 0.01 per cent (actually the residual inherent in our instruments) and flutter was 0.09 per cent at 3¾ ips and 0.07 per cent at 7½ ips. In fast speeds, 1,800 feet of tape was handled in about 90 seconds, and the machine could be brought to a stop in about 2 seconds.

The Revox A77 is housed in a teak cabinet with a fold-away carrying handle. It is one of the handsomest, as well as best-performing, tape recorders we have seen. We have never seen a recorder that could match the performance of the Revox A77 in all respects, and very few that even come close. It sounds as good as it tests, which speaks for itself. The Revox A77 is offered in a variety of configurations. It is available with either half- or quarter-track heads, in either the teak cabinet or a portable carrying case. The price of the deck in a wood base is \$569; the deck with built-in power amplifiers is \$599.

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BOOK REVIEW

## "THOSE FABULOUS PHILADELPHIANS"

Reviewed by Henry Pleasants

**L**EOPOLD Stokowski left Philadelphia and the great orchestra he had created there, the "fabulous Philadelphians" of the title of Herbert Kupferberg's new book, in 1911. I left the Philadelphia *Evening Bulletin*, whose music critic I had been since 1930, in 1942. Having read Kupferberg's account of the orchestra's history in the intervening years, I am left, as reporter if not as critic, with the impression that I haven't missed much.

No disparagement intended, I hasten to add, of Eugene Ormandy and the orchestra whose unique character and virtuosity he has maintained so skillfully and faithfully. Rather the contrary. During three decades when conductors have tended increasingly to shun the responsibilities and loyalties of permanent association with any one orchestra, Ormandy has remained a Philadelphian, living in Philadelphia and presiding over the destiny of an orchestra which has become, with the retirements and replacements of each sea-

son, more and more his own instrument.

But as one who was brought up musically in Stokowski's Philadelphia and under Philadelphia's Stokowski, and as one who, as critic and specialist reporter, experienced the high and sometimes sordid drama of Stokowski's last years with the orchestra, I find the chronology of success since 1941 pretty bland, and even the tensions of a sequence of labor disputes, by comparison, tawdry.

I appreciate Kupferberg's—and Ormandy's—problem. Anyone who has tried his hand at historical narrative knows that some individuals make better copy than others. And few in musical history have made better copy than Stokowski. Liszt, perhaps, or Wagner. But neither of them, I suspect, could match Stokowski's virtuosity in consistently coming up with the newsworthy word and the newsworthy deed.

Kupferberg recounts vividly and, on the whole, accurately, the chronicle of those nearly thirty years beginning with Stokowski's arrival from Cincinnati in 1912 to take over an orchestra then a mere twelve years old. He has caught the flavor

of the times, the character of the city, and the impact upon it of this shrewd, gifted, imaginative, ambitious, charming (when he chose to be), handsome, vain, and sometimes ruthless young Englishman.

The familiar anecdotes, most of them true, are trotted out, and they are told so well that a knowledgeable reader is tempted to chime in with some of his own. I missed any reference to Stokowski's agility in repartee, and remembered how once, when I had suggested, in a notice, that his reading of the Tchaikovsky Fifth had started in where the composer had left off, he told a youth-concert audience a few evenings later: "Some people say that we put more into a composition than is there. This is not at all true. It's simply that we get more out of it than other orchestras do."

The author is chary of critical comment, and I find this unfortunate, for such comment as we get is acute and well informed. Although, for example, he doesn't come right out and say so, his final assessment of Stokowski, including the post-Philadelphia years, betrays an awareness that Stokowski, as a conductor, developed an orchestra rather than a technique in the conventional sense. It took him a quarter of a century to establish it, and he has never been able to achieve quite the same kind of thing with any other orchestra.

**I**F what I have written suggests that the book should have been called "The Fabulous Stokowski," it is simply because Stokowski, of all the Philadelphians, has been by far the most fabulous. The rest is there, including an accurate and sympathetic account of the orchestra's founding and an equally accurate, if less probing, account of Ormandy's patient handling of the difficult and delicate years of overlap, transition, and succession.

Kupferberg, it seems to me, appreciates Ormandy as musician and conductor less profoundly than he has appreciated Stokowski. It may be because Ormandy's musicianship, as also his stewardship, has been less spectacular, certainly less flamboyant, and, God knows, less troublesome. In the end, however, the orchestra as it plays today is the definitive testimony of Ormandy's accomplishment.

I was especially delighted with Kupferberg's emphasis on what the orchestra owes to the fact that, since 1912, it has had only two musical directors. That is why it has so much character. And it is something to be pondered at a time when other orchestras, serving as way stations for the conductorial jet set, are beginning to have about as much character as an airport.

But I wish he might have remembered the headline writer (of the New York *Daily News*, I think it was) who, on that Monday in 1945 when Stokowski married Gloria Vanderbilt, achieved: *Sic Transit Gloria Monday!*

*Those Fabulous Philadelphians*, by Herbert Kupferberg, Scribner's, New York (1969) \$7.95.



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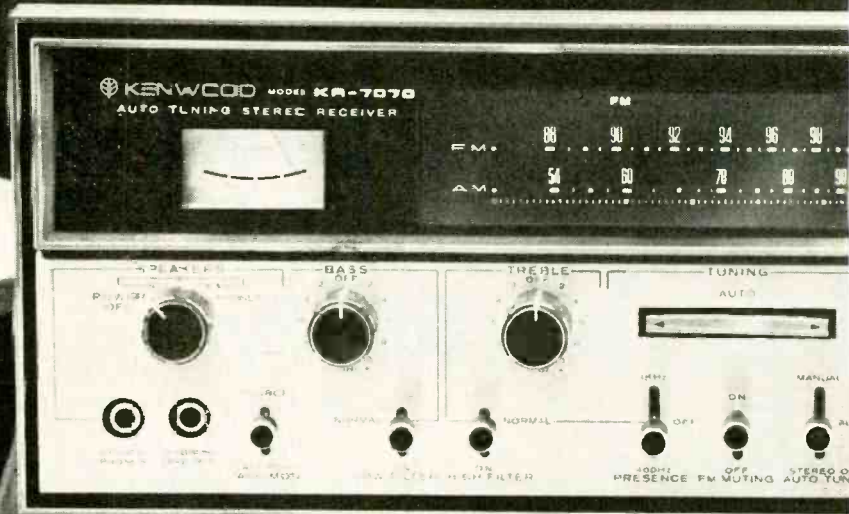
Benjamin Electronic Sound Corp., Farmingdale, N.Y. 11735, a division of Instrument Systems Corporation.

## Miracord 50H



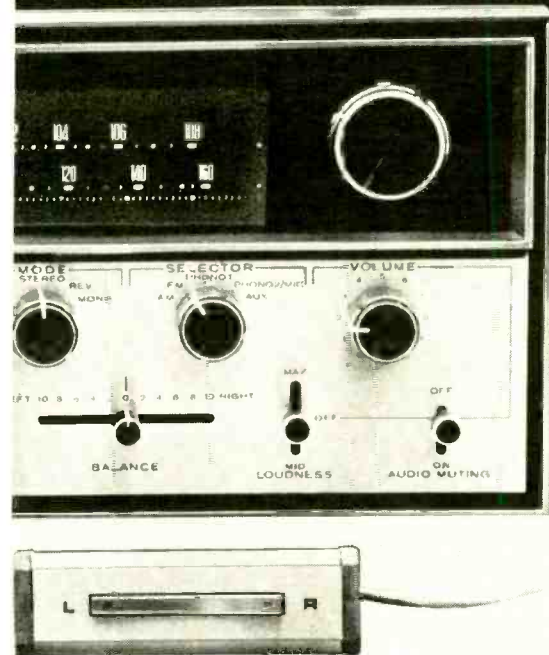
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|                              |   |
|------------------------------|---|
| Frequency Response           | 12 Hz to 40,000 Hz $\pm$ 1.5 dB                                   |
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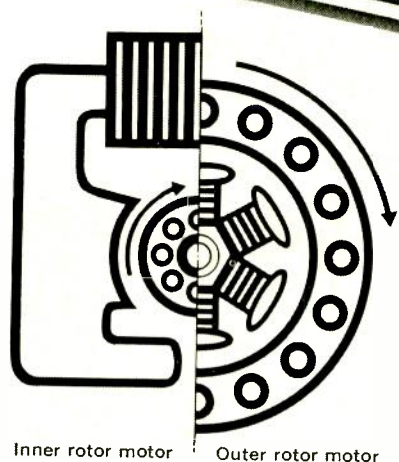
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BRUNNEN ARCHIVE



Wagner's villa  
at Tribschen on  
Lake Lucerne

## WAGNER'S *Siegfried Idyll*

**D**URING the summer of 1864 Richard Wagner and Cosima von Bülow fell in love, conceived a child, and realized that their lives were linked inseparably. At fifty-one, Wagner was twice her age; she, the daughter of Franz Liszt, was a married woman and the mother of two as well. On the 10th of April, 1865, the first of the children of Wagner and Cosima—a daughter named Isolde—was born. Cosima's husband, the pianist and conductor Hans von Bülow, was officially considered the father of the child until a 1914 court judgment in Bayreuth caught up with the facts.

In the early phase of their relationship, Cosima attempted to keep up appearances. Though she and the three children lived with Wagner in Munich, she periodically rejoined her husband. But on Easter Sunday, 1866, Wagner and Cosima found a villa at Tribschen, on Lake Lucerne. There they installed themselves together and there they spent an idyllic six years; it was at Tribschen that Wagner completed *Die Meistersinger* and *Siegfried* and most of *Götterdämmerung*. In February, 1867, Cosima bore Wagner another daughter, Eva; in June, 1869, a third child and first son arrived. The name they gave him was perhaps inevitable—Siegfried. Finally, after Bülow divorced Cosima in July of 1870, Wagner and Cosima were joined in marriage on the 25th of August of the same year.

During this period Wagner enjoyed the greatest personal serenity he was ever to know. He wrote to a friend:

She [Cosima] has defied every disapprobation and taken upon herself every condemnation. She has borne to me a wonderfully beautiful and vigorous boy, whom I could boldly call Siegfried; he is now growing, together with my work, and gives me a new, long life, which at last has attained a meaning.

In November, 1870, Wagner wrote to another friend:

My house is full of children, the children of my wife, but besides there blooms for me a splendid son, strong and beautiful, whom I dare call Siegfried Richard Wagner. Now think what I must feel, that this at last has fallen to my share. I am fifty-seven years old.

In that same month, Wagner was busy composing a new work especially for Cosima's forthcoming thirty-third birthday. It was a short orchestral piece utilizing thematic material from the third act of *Siegfried* interwoven with the folk song "*Schlaf, mein Kind, schlaf ein.*" It was to be a surprise for Cosima, and so preparations were made in secret: the parts were copied surreptitiously, musicians were engaged in Zürich, and rehearsals were held in the foyer of the old theater and at the Hotel du Lac in Lucerne. Finally, on Cosima's birthday—Christmas Day, 1870—the musicians gathered in the kitchen at Tribschen to tune their instruments. Quietly Wagner assembled them all on the staircase leading to the second-floor sleeping quarters, while he took up a position on the landing. Promptly at 7:30 in the morning he signalled for the music to begin. In her diary, Cosima recounted the event:



Among stereo versions of Wagner's *Siegfried Idyll* played by enlarged orchestral ensembles, Bruno Walter's (Columbia) is especially genial and satisfying; Otto Klemperer's performance of the original 16-instrument scoring (Angel) is loving. Rafael Kubelik's sensitive reading (DGG) is available in disc, reel-to-reel, and cassette form.

I can give you no idea, my children, about this day, nor about my feelings. I shall only tell you quite barely what happened: as I awoke, my ear caught a sound, which swelled fuller and fuller; no longer could I imagine myself to be dreaming: music was sounding, and such music! When it died away, Richard came into my room with the children and offered me the score of the symphonic birthday poem. I was in tears, but so was all the rest of the household. Richard had arranged his orchestra on the staircase, and thus was our Tribschen consecrated forever. . . . After the lunch the orchestra came into the house downstairs, and now the 'Idyl' was heard once again, to the profound emotion of us all.

On the title page of the manuscript Wagner wrote: "Tribschen Idyl, with Fidi's birthsong and orange sunrise, as symphonic birthday greeting from Richard to Cosima" ('Fidi' was Wagner's nickname for his son). And the "Tribschen Idyl" immediately came to occupy a special place in the Wagner family circle. It was never intended for the public market-place, and was only surrendered by Wagner for publication in February, 1878, during a period of "financial duress." The score has become known to the world as the *Siegfried Idyll*, but Wagner and Cosima always referred to it as the "Tribschen Idyl," and to the children it was known as the "staircase music."

**T**HE two major themes of the score are those which form the principal material in Brünnhilde's third-act scene in *Siegfried*, "Ewig war ich, ewig bin ich" and "O Siegfried, Herrlicher! Hort der Welt!" It has been shown that this material first appeared in Wagner's sketches during the fateful summer of 1864, when Cosima joined him and "all barriers between them were broken down." At that time the thematic material was being considered for some string quartets and trios that Wagner never completed. Though most often played these days by larger forces, it is worth noting that the original scoring of the *Siegfried Idyll* called for only sixteen instruments: flute, oboe, two clarinets, bassoon, two horns, trumpet, two first violins, two second violins, two violas, cello, and bass.

Over the years, the *Siegfried Idyll* has fared extremely well in recorded performances, beginning with two

notable versions in the Thirties by Arturo Toscanini and the New York Philharmonic and Bruno Walter and the Vienna Philharmonic. More recent versions by both conductors are still listed in the current catalog: Toscanini's (with the NBC Symphony Orchestra) is on the low-price RCA Victrola label (VIC 1247), and Walter's (with the Columbia Symphony) exists in three formats, a couple of two-disc albums and a single-disc coupling with other Wagner performances by this conductor (Columbia MS 6507). Walter's, in stereo, is by far the better-sounding performance; it is also, for me, the more easygoing and genial of the two, and hence the more satisfying.

Of the eleven other currently available recordings, I would select as most enjoyable those led by Daniel Barenboim (Angel S 36484); Wilhelm Furtwängler (Seraphim 6024, part of a two-disc set); Hans Knappertsbusch (Music Guild S 825); Rafael Kubelik (Deutsche Grammophon 136228); and Pierre Monteux (RCA Victrola VICS 1457). The last four are performances of great beauty and sensitivity, deeply responsive to the inner glow of the score. Barenboim offers a more carefully inflected and a generally slower performance than the others; indeed, some listeners may find his version calculated and precious, but that is a matter of individual taste.

My favorite of all the *Siegfried Idyll* performances, however, is Otto Klemperer's (Angel S 3626) with the Philharmonia Orchestra, using the original sixteen-instrument scoring to stunning effect: the individual strands of the texture stand out with the greatest clarity, and the intimacy of the music is heightened immeasurably. Klemperer delivers a tender and loving performance; the only hitch is that in order to get this recording, you also must purchase Klemperer's only varyingly successful version of Bruckner's Seventh Symphony, for the *Siegfried Idyll* is side four of that set. Clearly, Angel should also release the Klemperer *Siegfried Idyll* as one side of a single disc.

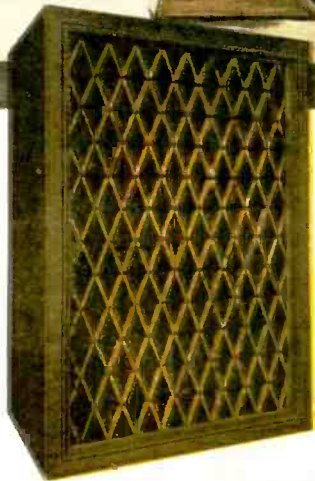
The tape collector is limited to the Kubelik performance, which is available both on reel-to-reel (L 6228, 7½ ips) and cassette (922028).

REPRINTS of the latest review of the complete "Basic Repertoire" are available without charge. Circle Number 160 on reader service card.

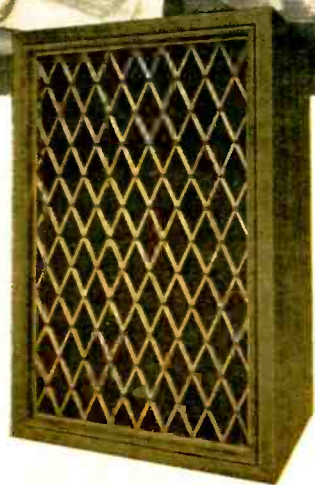


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| Price               | \$259.00   | \$215.00   |

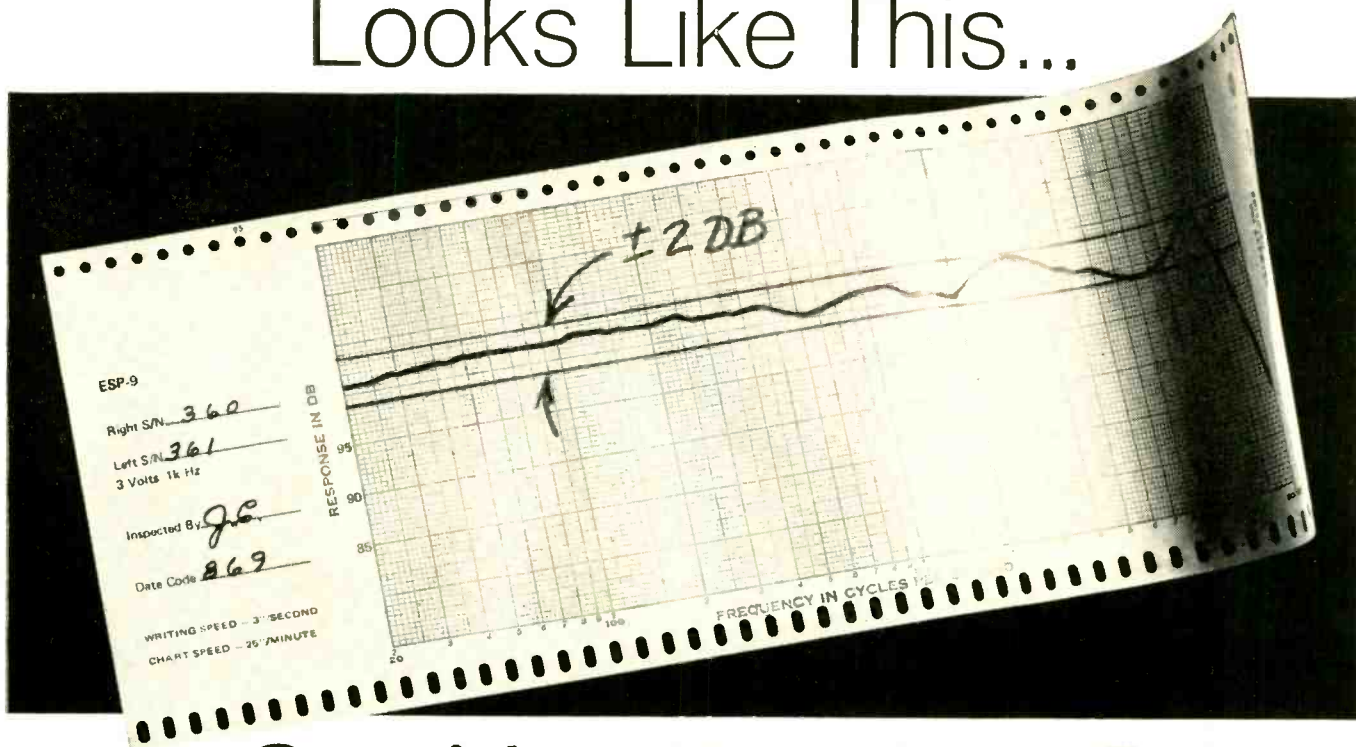
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The ESP-9 has a signal handling capacity of 10 volts at 30 Hz with good wave form versus 6 volts for the integrated ESP-6 introduced last year. This is made possible by increasing the size of the coupling transformers by a factor of 4 and mounting them in the E-9 Energizer external to the cup.

The E-9 Energizer offers the option of self-energizing for the bias supply, or energizing through the ac line; choice is made with a selector switch on the front panel. When energized through the ac line, very precise level measurements can be made. Thus the unit is ideal for audiometry, and for evaluating the spectral character of very low level noise in tape mastering machines and recording consoles.

### SPECIFICATIONS

Frequency Response Range, Typical: 15-15,000 Hz  $\pm 2$  db (10 octaves) 10-19,000 Hz  $\pm 5$  db. An individual, machine-run calibration curve accompanies each headset. Sensitivity: 90 db SPL at 1kHz  $\pm 1$  db referred to 0.0002 dynes/cm<sup>2</sup> with 1 volt at the input. Total Harmonic Distortion: Less than 1/2 of 1% at 110 db SPL. Isolation From External Noise: 40 db average through fluid-filled cushions provided as an integral part of the headset. Power Handling Capability: Maximum continuous program material should not exceed 10 volts (12 watts) as read by an ac VTVM; provides for transient peaks 14 db beyond the continuous level of 10 volts. Source Impedance: Designed to work from 4-16 ohm amplifier outputs. External Power Requirements: None, except when used for precise low level signal measurement, when external ac line can be selected by a front panel switch on the E-9 Energizer.

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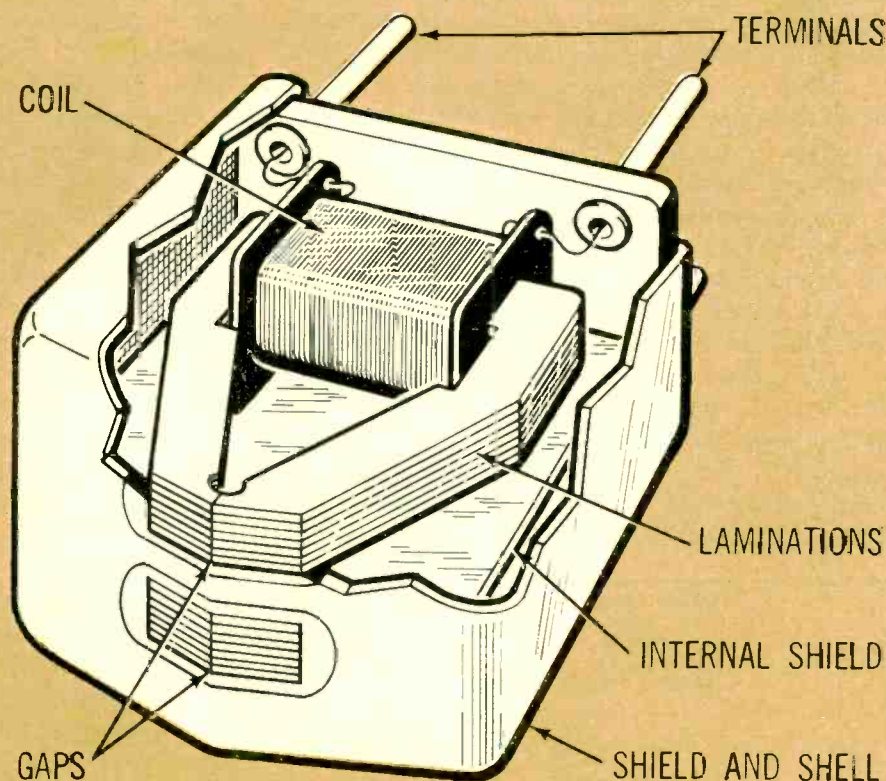
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*Fig. 1. Interior view of a stereo tape-recorder head. The head contains two coil and laminated-core assemblies (with associated terminals) for simultaneously recording or playing back two channels. Only one of these is visible here.*



# HOW THE TAPE RECORDER WORKS

A complete examination of technical theory and practice in tape-recording is a book-length proposition, but a short course in the fundamentals should be part of every audiophile's experience

**By Ralph Hodges**

THE record/playback process in tape recording may be invisible, but it does not follow that it is therefore difficult to understand. A tape-recorder head (Figure 1) can be thought of as a specialized electromagnet with a gap between its pole pieces so narrow as to be practically invisible. In the case of the recording head, the electric audio signal is sent through its coil to produce a magnetic field that changes in strength and polarity from moment to moment according to the equivalent variations in the audio signal. The tiny gap between the poles is filled with non-magnetic material which the expanding and collapsing magnetic fields produced in the head by the signal must bridge. The metallic-oxide particles on the tape passing across the head offer a path for these fields, and consequently receive a magnetic im-

print that is a counterpart of the electrical audio signal.

By way of example, suppose that the sound to be recorded is a simple "pure" tone, without harmonics. The microphone converts this sound into an electrical signal that can be diagrammed as a sine wave (Figure 2). This wave form shows how the signal's current varies in strength and direction over a period of time, the length of the time depending upon the frequency of the signal. The portion of the curve above the horizontal line represents current strength in one direction as it increases, reaches a maximum, and then decreases. As the curve passes below the horizontal line, the current reverses its flow and follows the same sequence of increase and decrease in the opposite direction. The solid portion of the curve shows the alternating signal going through one complete cycle of change; in the dotted portion the signal is beginning a second identical cycle. The magnetic field produced across the gap of the recording head waxes

when the current is strong, wanes when it is weak, and reverses in polarity whenever the current reverses its direction.

Now the tape enters the picture: in passing across the head gap its oxide particles are plunged briefly into the oscillating magnetic field and come away magnetized by the last part of the field to which they are exposed. (In other words, the oxide particles receive their final magnetic imprint at the trailing edge of the head gap.) Let us examine how this process would work with the sine wave of Figure 2. At first there is no current and no magnetic field, so the particles of oxide passing the head gap at that moment are not magnetized. As a steadily increasing current begins to flow in the head's coil, the head gap is magnetized and magnetizes the tape correspondingly until, at the peak of the curve, a strong magnetic field (with the "north" pole, let us say, oriented toward the left on the tape) is imprinted on the oxide. Then the current subsides once more to zero, and with it the strength of the magnetizing field. The process is repeated for the half-cycle below the horizontal line, with the difference that the magnetic poles of the head reverse when the current reverses. At the lowest point of the curve (strongest current in the reverse direction), a second strong field is imprinted on the tape, with the south pole oriented as the preceding north pole was (to the left).

When several cycles of the signal have been recorded, the oxide coating on the tape has become, in effect, a series of miniature bar magnets arranged north pole to north pole and south pole to south pole along the tape's length. Now, what happens when the recorded tape is passed across the playback head? (In many tape recorders a single head is used for both recording and playback. More expensive machines tend to have separate heads for these two functions, since somewhat improved performance can usually be realized with heads designed especially for each particular function.) The playback head receives no electrical signal; instead, it *generates* an electrical signal through its interaction with the magnetic

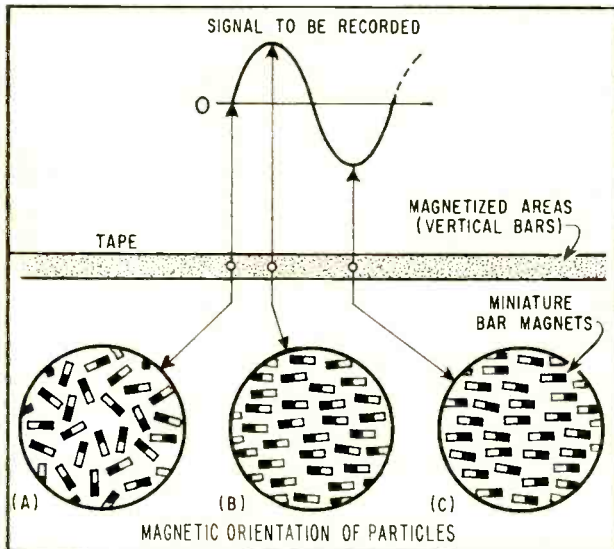
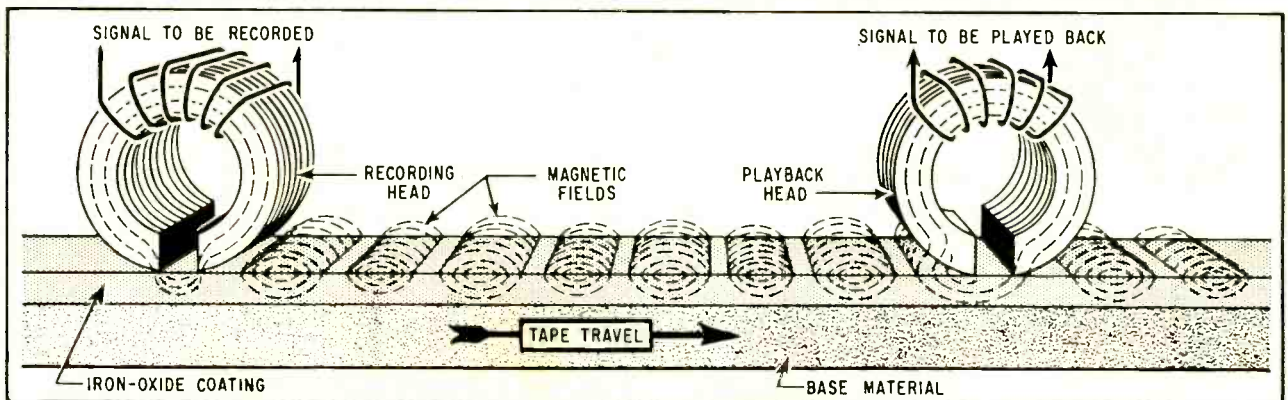


Figure 2. A sine-wave signal recorded on tape consists of areas of varying magnetic flux imprinted on the tape's oxide particles. (A) At zero voltage the magnetic orientation is random. (B) At maximum positive voltage all north poles point to left. (C) At maximum negative voltage all south poles point to left.

Figure 3. Schematic view of the tape-recording process. The tape encounters the record head, which lays down a magnetic pattern corresponding to the audio signal being recorded. The playback head picks up the magnetic pulses and reconverts them to audio.



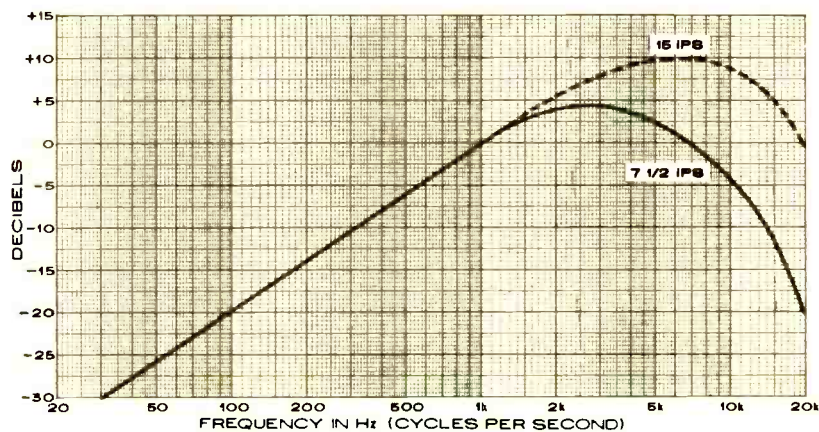


Figure 4. Combined record- and playback-head losses of frequency response before equalization. The low-frequency losses are inherent in the playback process. High-frequency losses occur mainly during recording, and are not as great for the higher tape speeds.

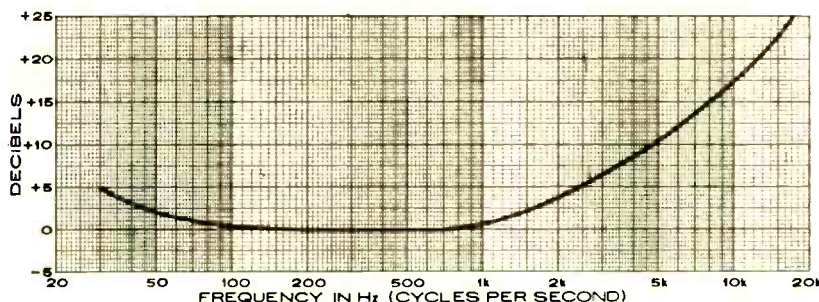


Figure 5. The equalization applied to the signal before it is recorded typically resembles a curve such as the one at left. The precise frequency correction used depends on the specific characteristics of the recording head.

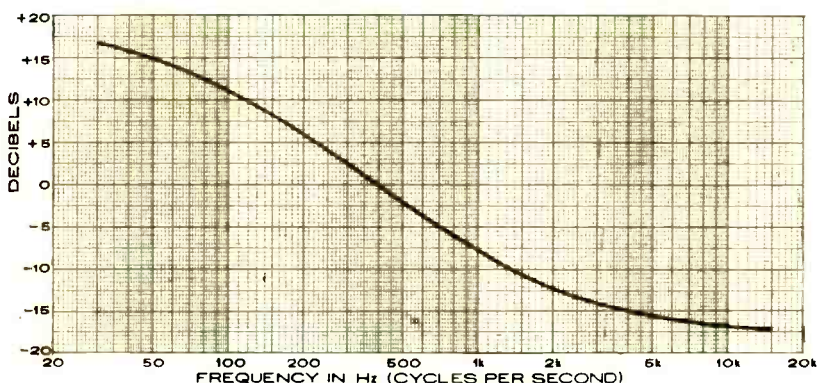


Figure 6. The standard NAB playback equalization curve used in virtually all home tape recorders. The curve is standardized so that tapes recorded on other machines (and pre-recorded tapes as well) will play back correctly on yours.

signal on the tape. Just as, in the recording process, the tape's oxide provided a magnetic path for the recording head, the playback head provides a magnetic path for the magnets that have been recorded on the tape. The playback head is magnetized according to the strength and polarity of magnetization of the oxide particles passing its gap at any particular moment. Since these conditions vary along the length of the recorded tape, the magnetic field impinging on the head also varies—it builds up, collapses, and reverses polarity for each cycle of recorded signal. When such an oscillating magnetic field exists in an iron core around which a coil of wire is wound, a similarly oscillating voltage is induced in the coil. And, with certain modifications, this voltage is a replica of the original electrical audio signal. The entire record and playback sequence is illustrated in Figure 3.

This, in brief and in theory, is how the record/playback process in a tape recorder is carried out. In practice there are complications. To go back a bit, remember that

the duration of a single cycle of an audio signal depends upon its frequency. In terms of our sine wave, duration is indicated by the length of horizontal line the wave takes up (the wavelength). Low frequencies have long wavelengths, high frequencies have short. What this means is that, during recording, magnetic poles imprinted on the tape are spaced more closely (and thus the magnets are shorter) for high frequencies than for low frequencies. For complicated technical reasons, some high-frequency losses are inherent in the recording process. These can be ameliorated somewhat by using a higher tape speed, better heads, better tapes, and so forth, but a certain amount of high-frequency equalization is still required to fully compensate for these losses.

The playback process also introduces some losses that are frequency-dependent. The voltage induced in the playback-head's coil corresponds not only to the strength of the magnetic field imposed upon the head, but also to the rate of the field's oscillation. For high frequencies

the rate is rapid; it is less so for low frequencies. As a consequence, the playback head's response to a recorded signal falls off in a uniform fashion the lower the signal's frequency becomes.

The effect of high- and low-frequency losses in the record/playback process is diagramed in Figure 4. The straight-line portion shows the low-frequency roll-off of the playback-head's response. The curved lines near the top of the graph represent high-frequency losses that take place during the recording process for two different tape speeds. All these losses are compensated for by "equalization" circuits in a tape recorder's recording and playback preamplifiers. Figure 5 shows a typical equalization curve for a recording preamplifier. Recording equalization is ideally matched to the characteristics of the recording head in a particular machine and the characteristics of the tape to be used in it. Playback equalization (Figure 6), however, is standardized by the National Association of Broadcasters (NAB) so that tapes recorded on one machine will play back with flat frequency response on any other standard machine.

Equalization also serves another function beyond frequency compensation. There is a certain amount of noise inherent in the tape record/playback process that manifests itself as hiss. By boosting the high frequencies before the noise is introduced (Figure 5), and cutting them back along with the noise during playback (Figure 6), a tape machine realizes a much improved signal-to-noise ratio.

There is one final aspect to tape recording that is a bit more complicated to describe. As a recording medium, magnetic tape has two basic limitations. First, the oxide can be magnetized only to a certain degree. The condition that exists when a section of tape has been fully magnetized is called "saturation." No further application of magnetizing force, no matter how strong, will magnetize the tape significantly more. The tape's second limitation is more serious. A very weak magnetizing force will have practically no effect on the tape, and a slightly stronger one will affect it only slightly. In effect, tape does not magnetize linearly. But magnetic tape can provide reasonable fidelity only when it can be magnetized in proportion to the strength of the magnetizing force (the signal). Referring to Figure 2, it is evident that the signal goes through its zero value—and therefore the nonlinear portion of the tape's magnetic response—at the beginning, middle, and end of each cycle. The universally accepted solution to the problem of avoiding these zero values is the application of a high-frequency (50,000 to 200,000 Hz) "bias" signal to the tape along with the signal to be recorded. The bias signal is generated by an oscillator within the recorder and is usually applied by the recording head simultaneously with the audio signal. Although all tape recorders employ bias, there is no general agreement as to exactly how it

achieves its beneficial results. But the addition of bias, in effect, keeps the audio signal out of the nonlinear portions of the tape's magnetic-response curve. (See Figure 7.)

The amount of bias current fed to the recording head is a matter of critical importance. The signal used in a tape recorder's erase head to clear the tape of previously imprinted magnetic patterns is a much stronger version of this same bias signal. It "erases" the tape by re-recording it with its own strong signal, which the tape cannot retain because of its tendency to self-demagnetization. Even the relatively weak bias current fed to the recording head along with the signal has some "erase" capability. The high frequencies are the first to be affected, with the result that they are partially erased even while they are being recorded. This "bias erasure," another factor responsible for high-frequency recording losses, must be carefully controlled through equalization and selection of the proper bias signal strength. Different types of tape have different oxide formulations with different magnetic properties, and there is a specific strength of bias signal that is optimum for each. Manufacturers of inexpensive tape recorders rarely specify the type of tape for which their machines are biased, but the makers of high-performance machines almost always do. Some expensive recorders provide facilities for adjusting and metering the bias signal. It only remains to be said

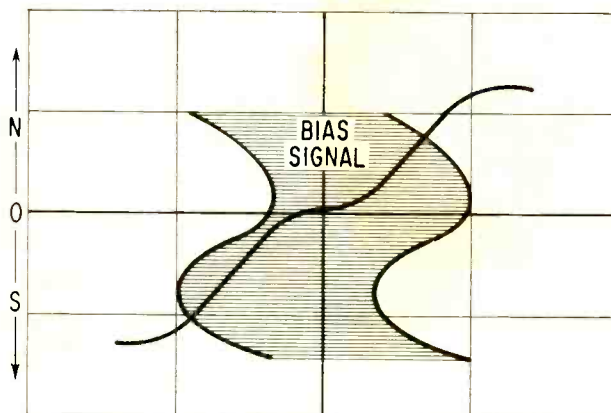


Figure 7. The effect of the bias signal is difficult to show graphically. Recording tape becomes extremely nonlinear as the magnetizing force approaches zero. The bias signal raises the audio signal above the nonlinear response area of the tape.

that the manufacturer's instructions should be followed in choosing a type of tape if optimum results (in respect to high-frequency response and signal-to-noise ratio) are to be achieved.

Fortunately, most of the considerations and complications discussed above are the responsibility of the design engineer. The tape recorder you own—if properly cared for—will probably demonstrate the designer's ingenuity most unobtrusively by performing satisfactorily and reliably for many years to come.

# THE CASSETTE QUESTION

Four candid views by "professional" users plus  
some impudent cartoon commentary by



Rodriguez

THE tiny tape cassette came into my life about a year ago, and it has wrought some interesting changes in my habits, both as writer and listener. Equipped with a Sony TC-50 subminiature recorder with built-in microphone for dictation and interviews, a Sony TC-125 stereo cassette tape-deck hooked up to my amplifier (both with automatic-level-control circuits for recording), I have talked out drafts of articles, interviewed celebrities, transferred music (especially from fragile old 78's) and the spoken word from records and reel-to-reel tapes, put together homemade music tracks for 8-mm. movies, and listened, mostly with delight, to the results.

Even in the months that have passed since I took up with the cassette, there have been remarkable improvements in both sound and general efficiency. The new 120's, which play for one hour per side, are less likely to get stuck or roar than their forebears were. The hiss level has been reduced, although I still get some when transferring sound from reels to cassettes, even when I employ the built-in noise suppressor on the Sony deck. Immediate replay on a cassette of a passage just taped from a reel-to-reel or disc source is a little disappointing to sharp ears, but overall fidelity and freedom from wow, considering the speed, is nonetheless astonishing.

The sound quality on prerecorded commercial cassettes seems, to my ears, to get better almost with each passing week. And for the devotee of the spoken word, it is a real convenience to be able to remove a cassette, or simply press the stop button, and resume where you left off whenever you wish. On the other hand, cassettes so far do not have bands, as records do, and tracking down an individual movement of a symphony or a single poem is difficult unless you're the methodical type who keeps track of the numbers on the digital counter that comes with most table-top equipment. Best of all, there is the luxury of taking music along with you on trips without the considerable extra luggage weight a portable phonograph entails. The only thing that's hard to do so far with a cassette is edit the tape (though there are splicers on the market), but this is still a con-

venience format, and its fine-art aspects may be expected to develop further the closer it comes to reel-to-reel and disc sound quality. —Paul Kresh

MY experience with cassette equipment to date—at least in comparison with some enthusiasts—has been limited. My wife, who teaches art and design at the New Canaan, Connecticut, High School, has found a small Admiral battery-powered record/playback machine very handy in classroom situations of all kinds, especially in recording and playing back lectures and discussions. For myself, I purchased two Panasonic RF 7270 record/playback machines with AM/FM radio, plus provision for operation on battery or a.c. power source, and these have proved dandy for off-the-air reference recording, not to mention the live recording of meetings. And my youngest daughter, who is studying at the State Arts and Crafts School in Stockholm, has boned up on her Swedish via cassettes that I dubbed from the four-disc Conversa-Phone "Modern Method Swedish Course."

I have also done some preliminary sampling of prerecorded cassettes via a Norelco Model 2500 stereo playback deck feeding into my regular listening equipment (Harman Kardon Citation plus Wharfedale-cum-Pickering electrostatic speakers). I find that prerecorded cassettes in their present state are fine for listening when the program material is relatively noncritical in respect to extended frequency and dynamic range, and signal-to-noise ratio—that is, most entertainment music and speech. But until such time as chromium-dioxide (or some other formulation) tape becomes the rule for the cassette format, thereby providing the necessary extended frequency range and low noise level, I am not keen on prerecorded cassettes as a home playback medium for the *critical* listener. Convenience uses outside the home, however, are quite another thing: for travel and use in one's vacation home, where one doesn't want to be burdened with lugging discs or even reel-to-reel tapes back and forth, they are very useful.

In my capacity as head of the Rodgers and Hammerstein Archives of Recorded Sound at the New York Public Library, I have been present at a number of librarians' meetings where potential cassette applications have come under discussion, in particular their possible use in school and university libraries where large numbers of music-history students may want access to the same recording of a given work. The use of multiple cassette dubs from the disc original for on-premises listening would not only lengthen the life of the library's disc original, but would appear to represent an improvement over reel-to-reel playback under such conditions. The end result of such discussion has usually been a recommendation to wait, pending the availability of playback equipment with heavy-duty motors that can stand up under the constant wear and tear imposed by conditions of school and library use.

My one beef about cassette equipment (as of now) is that some cassette cartridges have a tendency to become stuck during the record or playback process—I have lost a number of air-check and live recordings in this fashion. Clearly, the tape stock that goes into either a blank or prerecorded cassette must be cut to very fine tolerances if this is to be avoided. Also, cassette tape must be protected from exposure to excessive moisture (travelers beware) or deformation will result.

Under ideal conditions—the availability of chromium-dioxide tape and more rugged drive mechanisms—the cassette seems to be in a position to offer substantial improvement over other tape listening media for home use (notwithstanding the problems attendant on packaging program notes for prerecorded cassettes of serious listening fare!). Its basic simplicity of operation would also seem to put the cassette into a seriously competitive position *vis-à-vis* the disc.



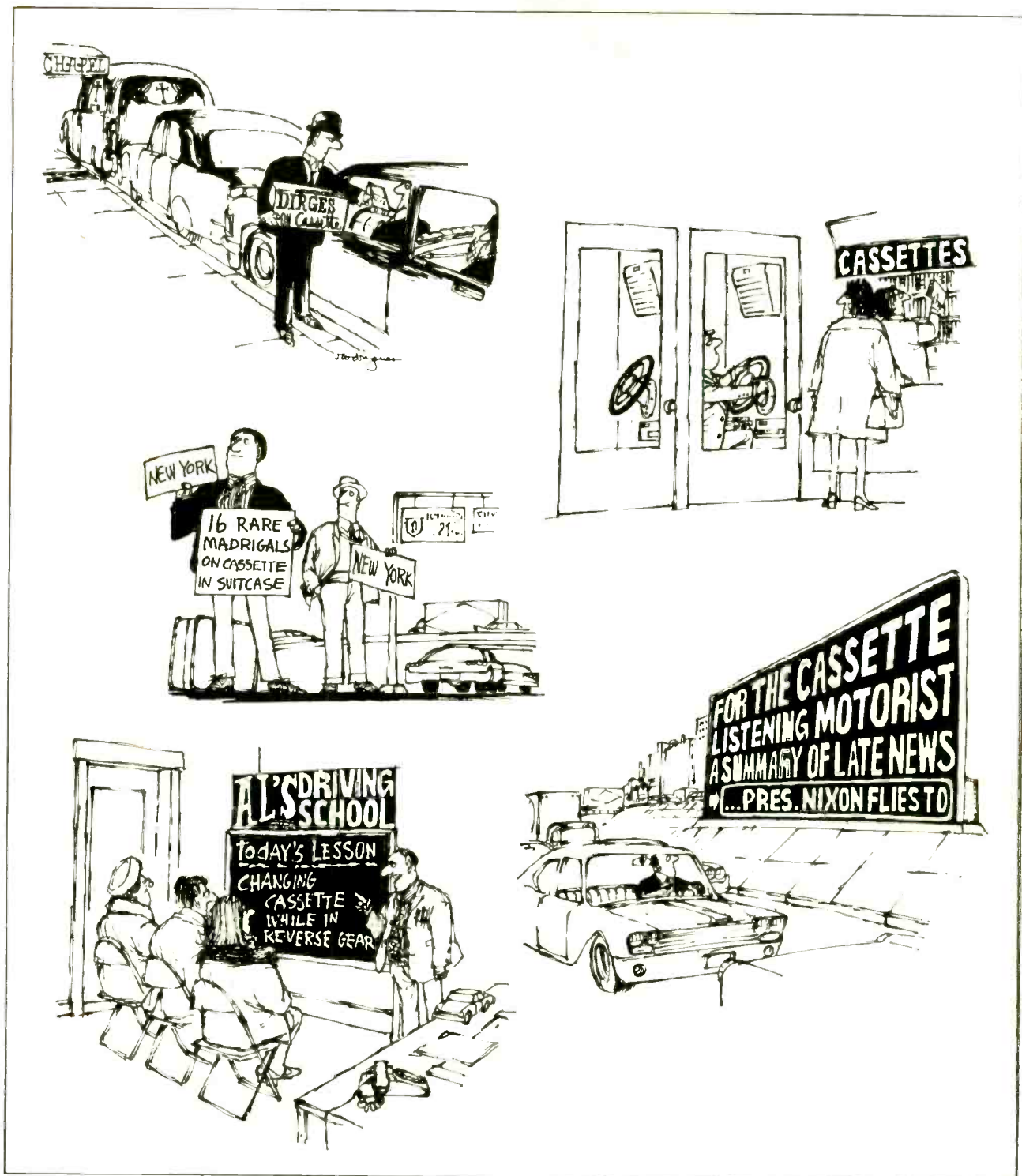
However, one big question remains, and it will not go away: how long will it be before yet another record/playback system comes on the market that will render *all* current playback systems obsolete? Say, a system that employs a stationary information storage/retrieval medium with electronic scanning and with none of the problems of motion or physical deformation that have plagued every record/playback medium from Edison's first cylinders to the latest magnetic tapes? Perhaps the Seventies will see such a development. —David Hall

READERS who remember my report on my personal experiences with tape cassettes ("The Cassette at Home and Abroad," STEREO REVIEW, March 1969) will know that I have considerable enthusiasm for this relatively new sound medium. The cassette's extraordinary ease and flexibility in handling makes it a natural for those who despair of ever mastering the mechanics of the open-reel format—you simply shove the plastic cassette in, and it plays. When you come to the end of the first pair of tracks, it takes only a few seconds to reverse for the other pair. Generally speaking, you don't have tape snarls, and even when they do occur, one can unravel and rewind with the end of a lead pencil without too much trouble. Fast-forward and rewind are quick, you can record on cassettes from whatever source you like, and, finally, the small plastic boxes take up very little room on a shelf.

What about the sound? I would not at this stage of the cassette art claim that reproduction is comparable to the best discs or open-reel tapes. The slow 17/8-ips speed results on occasion in a constricted-sounding upper mid-range in loud passages, burbling clarinet notes, and a glassy, shallow piano tone. These less-than-ideal characteristics were typical of the earlier prerecorded cassettes, but I note now that a greater and greater number of the newer cassettes, particularly recent DGG and Angel releases, have eliminated these faults to a large degree.

There remains, however, something of a problem in quality control: one channel may have severely attenuated highs, for example, or, on occasion, dropouts—in the case of a *Symphonie Fantastique* I have, the signal died out altogether for the better part of the first movement. But such problems have to do with the mass production of prerecorded cassettes and not with the principle of the system itself, which is essentially valid.

As for the playback machines, I have discovered (sometimes the hard way) that the more costly of them are worth the additional expense. A cheap unit with an unreliable motor can make all music sound as though it's playing under water. And don't get caught, as I did recently, with an obscure brand: I bought a car unit which refused to work properly from the moment it was in-



stalled, was returned to the dealer, came back in a state that prevented the extrication of the cassette without a pair of pliers, and still refused to function without tremendous pitch fluctuation. The final blow came with the announcement that the company had ceased to manufacture the unit. It must also be added most emphatically that it is imperative, with car units, to get one that can be removed easily by the owner when the car is not

in use. Car tape players are the latest rage among automobile larcenists—I've already lost two.

The choice of repertoire on prerecorded cassettes is becoming more and more encouraging. DGG continues to be the leader with the largest number of available classical releases, but Angel is not too far behind. Vox has just joined in with a number of double-play items, including a very impressive-sounding Stockhausen col-

lection. Ampex has just issued several complete operas, which I have not yet heard, and Angel has quite a number of very fine operatic highlights cassettes, which I enjoy thoroughly. A large catalog of standard and esoteric classical items is available on the imported Philips line, though domestic Philips and Mercury are at the moment sitting tight after their initial releases. RCA and Columbia are now releasing cassettes as well, though their offerings are so far concentrating understandably on the most commercial repertoire—Van Cliburn's Tchaikovsky Concerto on the former, "Switched-On Bach" on the latter.

As for the cassette's future, my guess is that more and more music-lovers will eventually succumb to this convenient system. Sound quality is bound to improve, as are certain of the mechanical features. I am particularly delighted with what the system can do on the road, and it is also serviceable in the home, if not up to the quality of my disc and open-reel units. —Igor Kipnis

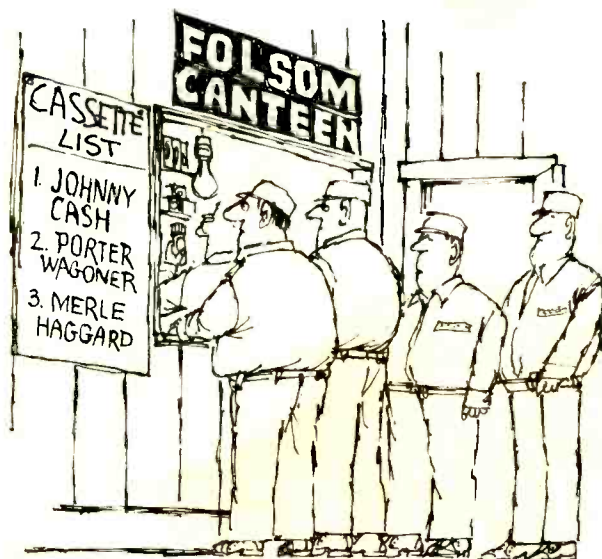
ALTHOUGH the tape cassette is not, as of now, the preferred playback medium for critical music listening, there can be no doubt about its potential. Among the suggested avenues of improvement, the tape itself is usually mentioned first. But radically new tape coatings—chromium dioxide, for example—are not the sole source of sonic salvation for the medium. A combination of factors, which would include improved (that is, quieter) electronics, improved mechanical design, and even better conventional ferric-oxide tapes (such as are now available under the TDK brand) can significantly improve performance. Further, two companies have recently announced the availability of a Dolby accessory (in the \$200 to \$300 price range) suitable for use with cassette machines. The Dolby device could result in perhaps an additional 6-dB improvement in signal-to-noise ratio on home-made cassette recordings, though such a device hooked up to a player won't help the noise level of a commercial prerecorded cassette. If the recording companies were to release prerecorded cassettes that are Dolby equalized, then the improvement would be dramatic. The problem is that a Dolby-equalized cassette (or disc) is not compatible—it could not be played back with reasonably flat response on equipment that did not include the Dolby compensator. It's understandable that no one would be happy about having two non-compatible cassette types on the market simultaneously.

Anyone who has done any dubbing onto cassettes finds quickly enough that their tapes play substantially louder than the commercially prerecorded tapes, and for that reason homemade tapes invariably have a superior signal-to-noise ratio. This comes about because of the technical difficulties of high-speed mass duplication.

The prerecorded cassette manufacturers still have a way to go before they can realize fully the potential quality of the cassette playback system. In this respect, one could say that the prerecorded cassette is at about the same place, sonically, that open-reel tapes were five or six years ago—except that the technical problems of the cassette format are tougher than they ever were for open-reel tape. Low noise and high-frequency response are extremely difficult to achieve when you have to contend with a track width of only 0.025 inch and a speed of 1 7/8 ips.

Over the past year or so I have not observed any substantial improvement in either sound or general performance in this medium. In fact, I've found that some of the new cassettes (particularly the C-120 and the C-90) are more likely to get stuck than some of the earlier ones. I know for a fact that at least one major tape producer goofed badly in respect to the mechanical engineering of his cassettes.

I spent much of last summer with a cassette player and a dozen or so cassettes in my beach bag. The cassette player was one of the under-\$30 mono-playback units manufactured by Philips and sold under the Ampex, Bell & Howell, and Norelco brand names. The sound from that little battery-operated player was surprisingly good—about on a level with that from a moderately priced portable FM radio—and it was of course every bit as portable as any radio. After many a pleasant mile of strolling along the beach with the surf as a soft background for Crosby, Stills & Nash, the Jefferson Airplane, or a potpourri of my own making, I will testify that cassettes are great for take-along music, either on the beach or in the car. But don't let anyone try to convince you that, even when played back on the best available equipment, they have attained the sonic quality of a good old-fashioned LP disc. —Larry Klein







INSTALLATION OF THE MONTH

## STRAIGHT-UP STEREO

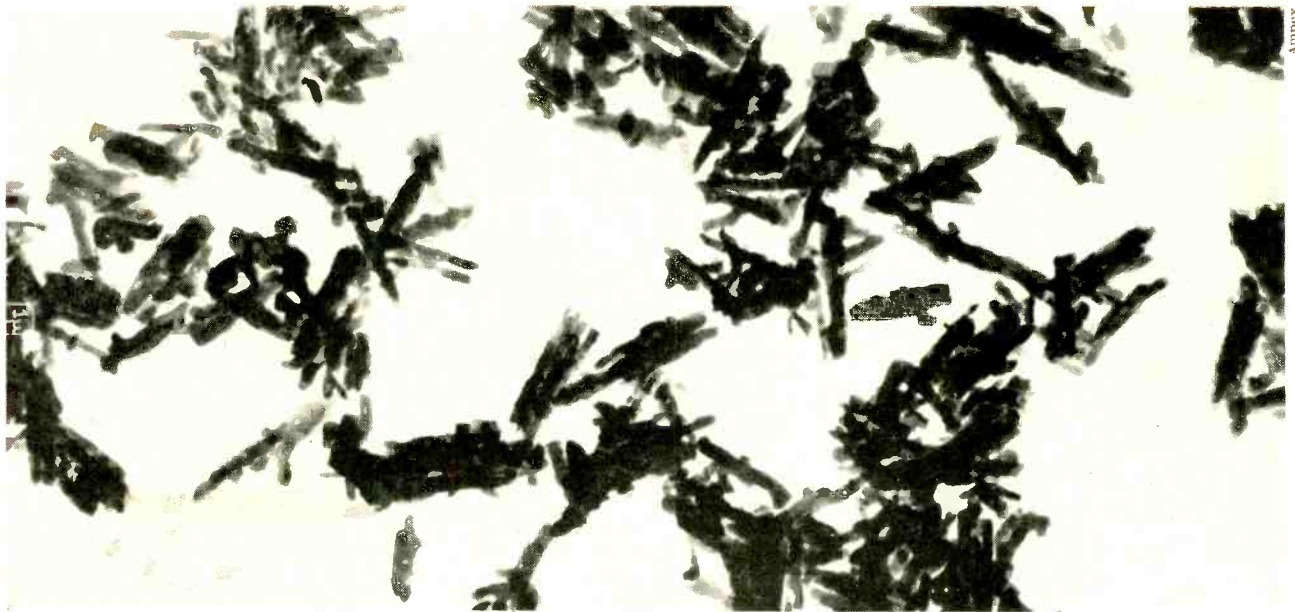
**I**F I may be permitted a touch of hackneyed and probably inappropriate levity, I would like to note that the problem of locating the components of a large stereo system in a small listening room has for some time been driving people up the wall. The wall in this case belongs to Victor J. Nelson of Sandy, Utah, and seems to have proved just the right place for him. In a single stroke Mr. Nelson has ranged his control components—along with a substantial collection of hard-cover books—at a comfortable eye level, and at the same time cleared enough floor space for a record cabinet and the two horn-loaded James B. Lansing C40 enclosures (with JBL 030 driver systems) that were his choice for loudspeakers.

The cabinets were constructed by Mr. Nelson himself, and everything but the speaker enclosures is of his own design. The layout is straightforward and symmetrical: bookcases on either side of the equipment cabinet, which serves as a central support and is in turn supported by the record cabinet beneath. The rectangular panel above the records is the front of a roll-out drawer in which is installed a Fairchild Model 412 turntable equipped with a

Rek-O-Kut tone arm and Shure M75E cartridge. The lowest tier of components consists of the C/M Laboratories CC-50S integrated amplifier and the uniquely styled Sony ST-80W AM/stereo FM tuner. The two tape decks are the Sony 250A and the Teac A-1200. To the right of the Sony deck are installed a master power switch and pilot lamps for the system. Another switch activates speakers elsewhere in the house. The slots above the Teac recorder provide ventilation. The mounting panel, clad in black Formica, is fitted with a piano-hinge strip along its left edge, so that it can be swung aside to expose the installation's wiring. The JBL driver systems in each speaker enclosure shown comprise a 15-inch D130 bass driver and an 075 ring-radiator tweeter with appropriate JBL crossover network.

Mr. Nelson is an instructor/coordinator with a Salt Lake City carpenter-apprentice program under joint regional-national sponsorship, and a long-time member of the Mormon Tabernacle Choir. When he relaxes, it is with choral and symphonic music, operas, and Broadway musicals.

—R. H.



*The oxide particles on a section of magnetic audio tape are here shown magnified 20,000 times.*

## **TAPE-RECORDER MAINTENANCE: THE KEY TO PERFORMANCE**

**TODAY'S FERRIC-OXIDE TAPE FORMULATIONS ARE NOT THE  
BEST IMAGINABLE, BUT YOUR RECORDER NEEDS PROPER  
CARE TO BRING OUT THE BEST THAT IS IN THEM**

**By W. R. Brock**

**J**UST AS man himself changes and evolves in many ways in response to the only partly understood challenges posed by ecology and culture, so too do certain aspects of his technology. And just as there are in man some elements, biological and psychological, that are (or appear to be) immutable, there are some basic chemical, mechanical, and physical realities in his machines that seem to be constant also. The magnetic recording process, for example, has been changing and evolving for twenty-odd years, yet the principal (and, in some ways, the weakest) link in it, the tape itself, has changed but little. The heads and electronics of recorders have developed to the point that the machines can accomplish feats of reproduction undreamed of a few short years ago, but the magnetic capabilities and the physical properties of the recording tape still set the ultimate limits of what can be achieved.

All manufacturers of magnetic tapes are faced with the same basic problems. The tolerances that must be met are among the most exacting for any mass-produced item. The plastic backing, for example, must be held within 10 per cent of the desired thickness throughout its entire area. Ten per cent may sound like a wide variance, but it amounts to a thickness deviation of only 0.0001 inch in the case of 1-mil tape and 0.00005

inch for 0.5-mil tape. (As a point of reference, 1 mil is approximately the thickness of the transparent wrapping on a package of cigarettes.) Slitting, the lengthwise cutting of the tape into 0.246-inch widths from 24-inch wide rolls, must be done with a maximum error of no more than  $\pm 0.002$  inch.

Monitoring and maintenance of the high-speed machinery that does the slitting are an engineer's nightmare, but they pale beside the problems of the coating process. The coating is the magnetic oxide material that is applied to the plastic backing. At the time of application, the coating has a wet consistency similar to that of fingernail polish, and it is perhaps five times as thick as the nominal 0.0004 inch of the finished coating of a 1.5-mil tape. Uniform and regulated drying is done in precisely controlled ovens to remove all moisture. This helps preclude cracking, coating flaws, or the formation of bubbles. Then the tape goes through the finishing and polishing processes—equally difficult, equally critical.

Independent research projects by many companies, both domestic and foreign, have, in general, come up with the same approach to coating formulas. The basic parameters are that the coating must be capable of being easily magnetized and demagnetized, be as nonabrasive

as possible (all magnetic coatings are abrasive to some degree), be long-lasting in respect to both wear and simple aging, and still fall within the economic reach of millions of users. The oxide used consists of gamma ferric oxide ( $Fe_2O_3$ ), chemically grown into tiny needle-shaped particles approximately 20 millionths of an inch long and one fourth this dimension in width. (As a point of reference, each "needle" is smaller than the particles found in cigarette smoke.) The ferric oxide is the magnetic vehicle of the coating. To the oxide powder is added many other ingredients: binders to hold the oxide to the plastic backing, plasticizers to give it flexibility, dispersants to prevent the particles from recombining, lubricants (silicones) to prevent adhesion between the layers of tape and minimize head wear, resin to toughen the coating, solvents to aid the binders, and fungicides to protect the tape from mildew. All these ingredients are milled together in special machines for periods of up to seven days before going into the coating mechanism that applies the mix to the backing material. Yet, despite the capabilities of all these ingredients, and despite exact adherence to the formulas and timing, some of the coating can rub off when the tape is played. Officially, this rub-off is called "oxide shed," but unofficially it has been called less clinical and far more subjective names.

**A**LL of this has important consequences for both amateur and professional recordist. Intimacy of head-to-tape contact is vitally important for good recording results. Most magnetic tapes will retain slightly more recording signal on the second, third, and fourth passes across the head than on the first because the oxide surface of the tape is polished by each pass across the recorder's heads, and a more intimate contact is therefore obtained on the later passes. Signal loss from poor head-to-tape con-

tact, called separation loss, is computed according to the formula

$$dB = \frac{54.5 D}{\lambda}$$

where dB = loss in decibels, D = separation distance in inches, and  $\lambda$  = wavelength of the recorded signal.

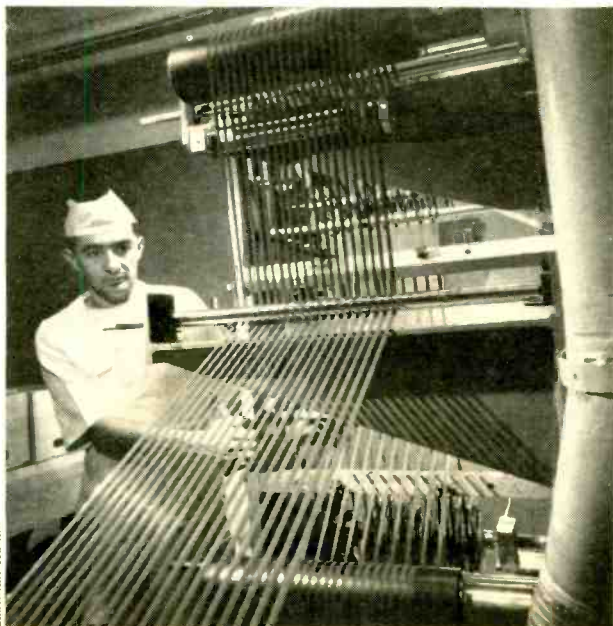
The wavelength of a signal on the tape is determined by dividing the tape speed in inches per second by the frequency in hertz. Even without doing the algebra, it can be seen that the high frequencies (*i.e.*, short wavelengths) are the first to suffer from separation loss. A 15,000-Hz signal at 7½ ips falls 2.2 dB when separated from the head gap by only 20 microinches, which is the length of an oxide particle. One mil of separation will attenuate the same signal by over 100 dB.

The more carefully the tape is polished during manufacture, the smaller the response improvement resulting from multiple passes across the head. Some tapes show no response change at all, while other poorly manufactured tapes the response change can amount to as much as 4 dB at mid-frequencies.

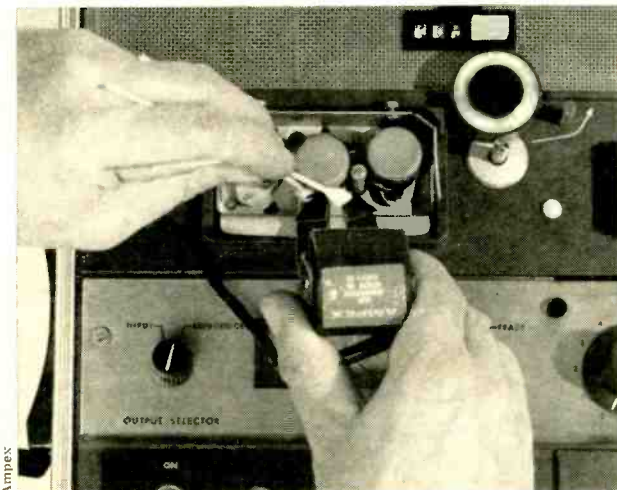
Tape polishing obviously should be done by the manufacturer on the machinery made for that purpose, and not by the audiophile on his recorder, since poorly polished tapes not only do not perform well, but in addition are prone to oxide shed and cause rapid head wear. Further, minute particles of the shed oxide block the head gaps, aggravating the separation problem even more. These obstructions in the magnetic path result in additional frequency losses. Head gaps are small, most of them between 100 and 300 microinches in width, but the longest dimension of an oxide particle is only 20 microinches. Many particles can lodge in a head gap and even cling there throughout the head demagnetization and cleaning process.

It has been determined that a "wet" demagnetizing

*The slitting process is the final step in tape manufacture. After the application and drying of the oxide coating, the master rolls are slit to fine tolerances before being wound on reels.*



*Wet demagnetizing is accomplished by soaking the tape-recorder head faces with a Q-Tip saturated in head-cleaning fluid while applying a head demagnetizer to the head gap at the same time.*



AMPEX

procedure is most effective in removing embedded oxide shed. Wet demagnetizing is best done by placing the machine in such a position that the head gaps are facing upward. Make some thin pads out of absorbent cotton small enough to fit over the faces of the heads, and saturate them with head-cleaning fluid. (Use a head-cleaning fluid specified by the manufacturer; the wrong head cleaner may damage the plastic parts of the heads.) Hold the pads in place on the face of the heads for two or three minutes. Care should be taken to keep excess fluid from running down into other parts of the recorder—use wads of paper toweling as protective shields. After soaking, and while the head is still wet, use a head demagnetizer over the entire face of the head with particular emphasis on the gap. When all heads have been wet demagnetized, follow up with normal cleaning and demagnetizing procedures. If your machine cannot conveniently be turned so that the heads are facing upwards, the gaps can be soaked by holding the pad or a wet Q-Tip on each face for a few minutes.

Surprisingly, running-speed regulation can sometimes be aided by wet demagnetizing as well. The capstans of good machines have a subtle roughness either knurled or sandblasted into their surfaces to aid them in gripping the tape and propelling it uniformly. Over a period of time, oxide shed can sometimes plug these tiny pores, making the capstan smooth, and causing speed irregularities. Wet demagnetization of the entire capstan surface will often correct this error in speed. If a recorder is old, I recommend two or three applications to break up oxide caking in head gaps and capstan pores. Clean the rubber pinch roller (also known as the capstan idler) with isopropyl alcohol or ethylene dichloride.

Of course, all cases of capstan slippage are not responsive to wet demagnetizing. If the above procedure does not help, first determine if the rubber pinch-roller pressure is within the range recommended by the manufacturer. Most recorders require a 4 to 5-pound idler pressure while running. Loop a string over the idler axle and pull on the string with a spring scale to check the tension. If it is adequate and slippage is still present, try this. Cut a strip of 150-grit emery cloth to a width approximating the length of the capstan shaft. Form the emery paper into a loop 3 or 4 inches in diameter, with the grit on the *inside* of the loop. Butt the ends together with masking tape or splicing tape on the outside of the loop (do not use cellophane tape—it can gum up any parts of the recorder that it touches). Set the loop over the capstan and put the machine in play at its highest speed. Allow the machine to run approximately 20 seconds (too long a running with this loop will tend to polish the capstan and eventually change its diameter). Repeat the procedure for the additional capstans on those machines having more than one capstan. Above all, avoid any contact of the emery

cloth with the heads, and clean everything when finished.

There are a few additional do's and don'ts that may be helpful in keeping your recorder in good condition. When using a head demagnetizer, never turn it on or off within two feet of the heads or tape reels. The surge currents in its coil (at the moment it is turned on or off) are very high, and these currents can magnetize a head to a very high degree. A carelessly handled head demagnetizer can also put magnetic "blips" on tape that will ruin what is already recorded, and the blips can be of such a high level that the erase head of your machine won't remove them. If you have occasion to use a soldering gun near a recorder, treat it as though it were a demagnetizer. The same cautions apply when using a bulk tape eraser. Turn the bulk eraser on before bringing the tape into its range and remove the tape before turning it off. The bare metal probes on many demagnetizers should be covered with liquid rubber or masking tape to avoid scratching the head faces.

A few recorders have switching arrangements that permit the recording amplifier to be switched in and out independently of the transport motion. Never switch these recorders out of the record mode while the transport is in motion unless it is specifically stated by the manufacturer that this is permissible. Surge currents can sometimes cause magnetization of the recording head beyond the ability of most head demagnetizers to remove it.

**W**HEN servicing your recorder, which should be a regular monthly procedure, clean and demagnetize the entire tape path. Look for shed oxide, and remove it even though it is not directly in the tape path. Remember, oxide is more finely pulverized than flour and can move from place to place very easily. If you are using a vacuum cleaner for cleaning, use only suction, so that foreign matter will not be blown into other parts of the recorder. Pressure pads should also be cleaned with a demagnetizer and a Q-Tip slightly dampened with water; chemicals might loosen the glue that holds the pressure pads in place. Pressure pads should be replaced when they have visibly changed shape or if they have developed a hard surface.

Research is continuing on better coatings for magnetic tapes and we are beginning to see signs of significant improvements on the horizon. But most of us will be using ferric-oxide tape for many years to come, and despite its shortcomings, it is still by far the most faithful reproducer of sound that our science has yet devised. And by applying what we know these tapes demand in respect to proper care of our machines, we can greatly improve our chances of getting the most out of them.

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# LABORATORY TESTS OF STANDARD-BRAND TAPES

By Craig Stark



**A**LTHOUGH magnetic recording was first demonstrated in the nineteenth century, only since the end of World War II has its potential begun to be realized. Improvements in recorder electronics, heads, and the magnetic tape itself have put behind us the era when even professional machines had to operate at 30 ips or faster to obtain a frequency response reasonably flat to 15,000 Hz. Today's audiophile, by contrast, can expect such performance at  $7\frac{1}{2}$  ips from almost all moderately priced "home" recorders, and several higher-price units will deliver it at  $3\frac{3}{4}$  ips.

But the same technological advances that have made this progress possible have spawned in their wake a profusion of tape types and brands, the very multiplicity of which is likely to bewilder the home recordist. Regular readers of STEREO REVIEW are probably prepared, by now, to reject recording tapes of obscure paternity, whose "white box" (or otherwise unknown label) represents the seller's disclaimer of responsibility. You have also probably read about the characteristics of various backing materials, and have been supplied with time-tables that correlate tape lengths with running times. But, as with other parts of the component chain, you have probably wanted to compare brand "A" with brand "B" and to get some quantitative measurements of the real differences between such tape types as "standard," "low-noise," "high output," and so forth.

To provide just such a basis for meaningful comparison, I have sampled a variety of the tapes available and measured their performance. Two sets of tests were made. The first series of tests was made with the recorder adjusted for the generally accepted reference tape, 3M Type 111. After this series was completed, the recorder was then "optimized" for *each* of the low-noise tapes; all the results are set forth in the accompanying table. "Optimizing" the machine consisted of adjusting the recording bias current and record equalization for the flattest possible record-playback frequency response with a given tape. To understand the differences between the tapes and to appreciate the real significance of the figures in the table, it is necessary to discuss some of the basic principles of the recording process itself.

If presented with a series of tones from 20 to 20,000 Hz, all recorded at the same level, an ideal playback head would *not* produce an equal output at all frequencies, but rather a voltage that doubled every time the frequency doubled. Since a 2:1 voltage ratio is 6 dB and a 2:1 frequency ratio is one musical octave, the ideal playback head is spoken of as exhibiting a 6-dB-per-octave slope. The reason for this phenomenon is that for recorded signals of equal strength, the voltage induced in a coil (such as a playback head) by a magnetic field (the tones on a recorded tape) is proportional to the rate of *change* in polarity. Thus, since a 1,000-Hz note changes from positive to negative twice as often as a 500-Hz signal of equal intensity, the playback head has twice as great an output at 1,000 Hz as at 500 Hz. To compensate for this inherent electromagnetic characteristic, a bass-boost/treble-cut circuit must be used to "equalize" response at all frequencies. In total, the bass boost and treble cut covers a range of 36 dB.

**T**HE twin causes responsible for the tremendous high-frequency compensations necessary in recording are the bias signal and the magnetic tape itself. In all modern recorders a constant ultrasonic tone called "bias" (anywhere between 50,000 and 200,000 Hz) is added to the audio signal being fed to the record head. The bias signal's strength is typically about ten times that of the audio signal. Up to a point, the greater the bias, the lower the distortion and the greater the amount of audio signal that can be recorded on the tape. The same bias current, however, when fed in larger amounts to the erase head, is used to *erase* previously recorded material. High frequencies are more easily erased than low frequencies since they don't penetrate as deeply into the oxide coating on the tape, and thus the bias signal needed to reduce distortion to acceptable limits tends also to erase the treble frequencies as they are recorded. For example, the same bias setting that produces maximum output at 1,000 Hz can result in a 14-dB loss at 15,000 Hz.

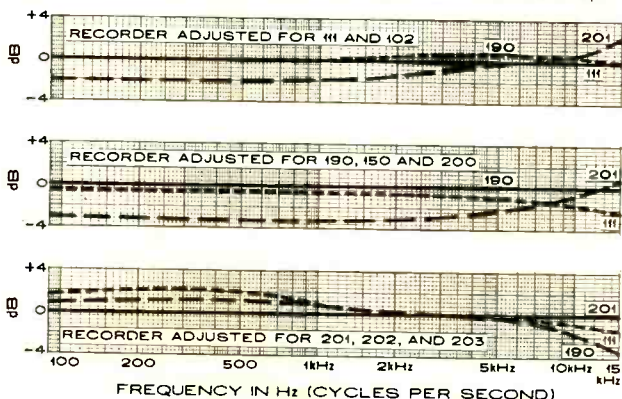
Bias erasure by the record head is not the only cause of high-end losses. The other principal factor is the

tendency of the recording tape to demagnetize itself when presented with high-frequency (short-wavelength) signals. Audio information is recorded on tape in the form of a series of bar magnets whose intensity varies with signal strength and whose north and south poles correspond to the positive and negative peaks of the audio waveform. For a given tape speed, then, the higher the frequency recorded, the greater is the number of magnets that occupy a given length of tape. The closer these sets of magnetized oxide particles are to each other (*i.e.*, the shorter the "wavelength" of the recording signal), the greater is the tendency of their opposite magnetic poles to neutralize each other, effectively reducing the recorded magnetic flux on the tape.

From even this brief discussion of problems faced in magnetic recording, it is clear that the desired qualities of wide frequency response, low distortion, and high signal-to-noise ratio often conflict. The treble boost applied during recording to overcome inherent high-end losses amplifies tape-recorder electronic noise (especially from a microphone preamplifier). There is also a limit to the level of the high frequencies that can be recorded without distortion (which is why frequency-response tests on recorders operating at 7½ ips are always made at a level 20 dB below 0 VU). Reducing the overall record level would permit even the boosted high frequencies to be recorded properly, but this would cause deterioration of the signal-to-noise ratio. Alternatively, the need for so much treble pre-emphasis during recording could be reduced by lowering the bias level, but this, in turn, would increase distortion. Thus, optimum adjustment of a recorder for a particular tape is always something of a compromise. Similarly, attempts to improve tape oxides usually are aimed at bettering performance in one area without serious deterioration in the others.

What, then, can be done to improve tape-oxide formulas? The most frequently successful approach has been through the development of the so-called "low-noise"

*The curves below, supplied by the 3M Company, compare frequency responses of three tapes with different oxide formulations on a recorder with bias and equalization set for (from top to bottom) standard tapes, extra-play tapes, and low-noise tapes.*



## INTERPRETING THE CHART

**T**HE first step in the test procedure was to adjust the recorder's bias and equalization for flat frequency response with 3M Type 111, the "reference" tape. As can be seen from the figures for 3M Type 111, its frequency response with the machine so adjusted did not deviate from flat by more than +0.3, -0 dB from 3,000 to 15,000 Hz. Then, retaining the same bias and equalization settings, all the tapes listed were tested for "virgin" noise, bias noise, signal output, distortion, and frequency response.

- **Virgin noise.** This is a measure of the noise on the tapes after being bulk erased, but before exposure to a recording signal. Essentially, virgin noise reflects the smoothness of the oxide coating. The greater the figure, the lower the noise level.

- **Bias noise.** This is the noise induced on the tapes with the tape machine in the record mode but with no audio signal being fed to the record head. The figures reflect each tape's response to the total noise introduced by the bias signal and recorder electronics during the record-playback process. Again, the greater the figure, the lower the noise level. A good bias-noise figure usually indicates uniform thickness in the oxide coating of the tape.

- **Signal output.** These figures are the tapes' responses to the same 400-Hz signal, and are, therefore, a measure of each tape's sensitivity at that frequency. In other words, the tape's signal output for a given strength of input signal. The instruments were calibrated so that the reference tape yielded a figure of 0 dB.

- **Distortion.** This indicates the relative signal "overload" points for the tapes tested—*i.e.*, the amount of 400-Hz signal that can be put on the tapes before magnetic saturation begins to occur (the 3 per cent distortion point). The higher the figure, the more "headroom" the tape has before overload.

- **Frequency response.** The figures given for six frequencies from 3,000 to 15,000 show each tape's response compared with the reference tape. (See Figure 1 for a graphic representation of several typical low-noise tapes' response *vs.* that of the reference tape.) As explained in the text, all other things being equal, a rising high-frequency response indicates a tape with a potentially better signal-to-noise ratio. (Note that since the low-frequency response of all the tapes rarely varied more than 0.5 dB from that of the standard tape, only the response figures for frequencies above 3,000 Hz are given.)

In the case of the five low-noise tapes, a second series of tests was performed with equalization and bias optimized for each tape in an attempt to reveal the tapes' full potential. This optimization usually involved 30 to 40 per cent greater attenuation of the high frequencies in the record equalization and a 10 to 20 per cent increase in the bias-signal strength. It again should be emphasized that the figures derived from these tests as listed in the table are not absolute, but reflect the *comparative* performance of the tapes on a particular machine. The actual figures will differ on other machines, but the rank order among the figures should remain the same.

**O**NE of the standouts in the tests was Sony SLH-180, called by its manufacturer a "low-noise, high-output" tape. This tape had a steeply rising high-frequency characteristic, and there was not enough attenuation available from the recorder's equalization circuits to compensate for it fully. Therefore, during the optimized frequency-response tests, the bias-signal level was set unusually high to provide the extra required high-frequency attenuation. The Sony tape should do wonders for slow-speed recording on home machines in respect to high-end response and noise level.

An unweighted comparative signal-to-noise ratio for the tapes tested can be derived by comparing the figures given for each tape in the second, third, and fourth columns of the table. For example, the standard 400-Hz output for 3M Type 111 is, of course, 0 dB. The figure in the next column shows that the

|  | Virgin Noise | Bias Noise | Standard 400-Hz output | 400-Hz input for 3% distortion | Frequency Response |       |       |        |        |        |
|--|--------------|------------|------------------------|--------------------------------|--------------------|-------|-------|--------|--------|--------|
|  |              |            |                        |                                | 3 kHz              | 5 kHz | 7 kHz | 10 kHz | 12 kHz | 15 kHz |
| <b>Standard Tapes</b>                                  |              |            |                        |                                |                    |       |       |        |        |        |
| Allied 15-8269; 1.5-mil acetate                        | -53.5        | -50.0a     | +0.9                   | +6.8                           | +0.3               | +0.2  | +0.2  | +0.3   | +0.4   | +0.7   |
| American (Bell & Howell) 12A; 1.5-mil acetate          | -54.0        | -52.2      | 0                      | +6.2                           | +0.4               | +0.2  | +0.3  | +0.2   | +0.4   | +0.6   |
| American (Bell & Howell) ST-12A; 1.5-mil acetate       | -55.1        | -53.1      | +0.6                   | +8.2                           | +1.5               | +2.2  | +2.6  | +3.4   | +4.0   | +4.9   |
| Ampex 341; 1-mil polyester                             | -54.0        | -51.7      | +0.9                   | +7.5                           | +1.0               | +1.2  | +1.6  | +1.9   | +2.0   | +2.6   |
| Audiotape 1251; 1.5-mil acetate                        | -53.0        | -50.1      | +0.8                   | +8.4                           | +1.2               | +1.9  | +2.4  | +3.1   | +3.6   | +4.7   |
| BASF SP 52; 1.5-mil PVC                                | -54.9        | -53.0      | -0.7                   | +9.0                           | +0.6               | +0.9  | +1.0  | +1.3   | +1.6   | +2.2   |
| Concert (Radio Shack) 44-755; 1.5-mil Mylar            | -53.2        | -51.2      | +0.6                   | +6.8                           | +1.0               | +1.6  | +1.9  | +2.5   | +2.8   | +3.6   |
| Irish 231; 1.5-mil polyester                           | -54.7        | -52.5      | +1.1                   | +7.7                           | +0.4               | +0.3  | 10.2  | +0.3   | +0.3   | +0.5   |
| Lafayette 28-0106; 1-mil Mylar                         | -54.3        | -52.0a     | +2.1                   | +9.8                           | +0.1a              | -0.1a | -0.4a | -0.3a  | -1.2a  | -0.1a  |
| 3M (Scotch) 111; 1.5-mil acetate                       | -53.8        | -51.7      | 0                      | +8.0                           | +0.3               | +0.2  | 0     | 0      | 0      | 0      |
| 3M (Scotch) 150; 1-mil polyester                       | -54.2        | -52.7      | +0.5                   | +7.2                           | -0.2               | -0.8  | -1.3  | -1.9   | -2.2   | -2.8   |
| Realistic (Radio Shack) 102-12; 1.5-mil Mylar          | -53.2        | -50.8      | +0.6                   | +7.2                           | +1.1               | +1.7  | +2.2  | +2.8   | +3.1   | +3.8   |
| Robins 15D7; 1.5-mil acetate                           | -54.8        | -52.2      | +0.2a                  | +9.0                           | -0.3a              | -1.0a | -1.6a | -1.6a  | -1.7a  | -1.6a  |
| Sony PR-150; 1-mil polyester                           | -54.5        | -52.9      | -1.2                   | +8.1                           | +0.7               | +0.8  | +0.7  | +0.8   | +0.9   | +0.8   |
| <b>Low-Print Tapes</b>                                 |              |            |                        |                                |                    |       |       |        |        |        |
| Audiotape 1251M; 1.5-mil acetate                       | -54.0        | -51.8      | -0.3                   | +8.1                           | +0.8               | +1.1  | +1.3  | +1.7   | +2.1   | +2.7   |
| Irish 274; 1-mil polyester                             | -55.5        | -54.2      | -1.5                   | +9.1                           | +1.3               | +2.0  | +2.7  | +3.6   | +4.4   | +5.7   |
| 3M (Scotch) 139; 1-mil polyester                       | -54.2        | -52.0      | +0.8                   | +7.7                           | +0.2               | 0     | -0.1  | -0.1   | -0.2   | -0.1   |
| <b>High-Output Tape</b>                                |              |            |                        |                                |                    |       |       |        |        |        |
| 3M (Scotch) 120; 1.5-mil acetate                       | -54.6        | -53.2      | +2.4                   | +11.5                          | -1.1               | -2.0  | -2.4  | -2.8   | -2.9   | -3.0   |
| <b>Low-Noise Tapes</b>                                 |              |            |                        |                                |                    |       |       |        |        |        |
| Ampex 344; 1-mil polyester                             | -55.0        | -53.3      | -1.2                   | +9.1                           | +1.4               | +2.2  | +2.9  | +3.9   | +4.6   | +5.7   |
|  |              | -53.3      | -1.2                   | +9.7                           | +0.5               | +0.5  | +0.3  | -0.1   | +0.2   | 0      |
| Audiotape 1257LN; 1.5-mil acetate                      | -55.7        | -54.1      | -1.9                   | +8.2                           | +1.7               | +2.6  | +3.0  | +4.1   | +4.9   | +6.0   |
|  |              | -54.0      | -1.7                   | +9.2                           | +0.6               | +0.7  | +0.4  | +0.1   | 0      | -0.1   |
| 3M (Scotch) 203; 1-mil Polyester                       | -55.3        | -54.1      | -0.9                   | +8.9                           | +1.3               | +2.0  | +2.6  | +3.4   | +3.9   | +4.7   |
|  |              | -54.1      | -1.1                   | +9.1                           | +0.6               | +0.7  | +0.6  | +0.2   | +0.1   | 0      |
| RCA 15ALN-12LT; 1.5-mil acetate                        | -55.3        | -53.9      | -0.9                   | +8.9                           | +1.4               | +2.4  | +3.0  | +3.8   | +4.4   | +5.4   |
|  |              | -53.6      | -0.9                   | +9.2                           | +0.7               | +0.7  | +0.6  | +0.1   | +0.1   | -0.1   |
| Sony SLH-180 (low-noise, high-output); 1-mil polyester | -55.6        | -53.3      | 0                      | +9.9                           | +2.0               | +3.2  | +4.3  | +5.7   | +6.5   | +7.9   |
|  |              | -53.3      | -0.3                   | +10.9                          | +0.8               | +0.9  | +0.7  | +0.2   | +0.2   | -0.1   |
| <b>Double-Play Tapes</b>                               |              |            |                        |                                |                    |       |       |        |        |        |
| Audiotape 2431T; 0.5-mil tempered Mylar                | -54.5        | -52.6      | +0.5                   | +8.0                           | +0.8               | +1.1  | +1.1  | +1.3   | +1.5   | +1.8   |
| BASF DP 26; 0.5-mil PVC                                | -54.1        | -52.8      | -1.5                   | +6.8                           | +1.4               | +2.0  | +2.7  | +3.6   | +4.1   | +5.2   |
| Irish 198; 0.5-mil polyester                           | -54.5        | -52.4      | +0.6                   | +8.0                           | +0.2               | +0.1  | 0a    | 0a     | -0.1a  | +0.3a  |
| Lafayette 28-0119; 0.5-mil tensilized Mylar            | -54.6        | -52.5      | -2.0                   | +6.2                           | +1.4               | +2.0  | +2.3  | +2.6   | +2.8   | +3.2   |
| Realistic (Radio Shack) 200 24T; 0.5-mil Mylar         | -54.5        | -53.1      | +0.4                   | +8.5                           | 0                  | -0.3  | -0.6  | -0.9   | -1.0   | -1.3   |
| 3M (Scotch) 200; 0.5-mil polyester                     | -54.3        | -52.1      | -0.1                   | +8.0                           | +0.1               | -0.3  | -0.9  | -1.5   | -1.8   | -2.8   |
| Sony PR 200; 0.5-mil polyester                         | -55.2        | -53.1      | -1.2                   | +9.8                           | +0.1               | -0.2  | -0.3  | -0.6   | -0.7   | -1.1   |
| <b>Triple-Play Tapes</b>                               |              |            |                        |                                |                    |       |       |        |        |        |
| American TP36MT; 0.5-mil tensilized Mylar              | -54.3        | -52.3      | -3.8                   | +7.2                           | +2.4a              | +3.4a | +4.1a | +4.9a  | +5.3a  | +6.2a  |
| Audiotape 3633T; 0.5-mil tempered Mylar                | -54.5        | -53.1      | -6.6                   | +9.0                           | +2.3               | +3.8  | +4.5  | +5.3   | +6.1   | +7.0   |
| BASF PES 18; 0.5-mil PVC                               | -53.9        | -51.4      | -4.2                   | +7.3                           | +2.0               | +3.1  | +3.8  | +4.5   | +4.9   | +5.7   |
| Irish 261; 0.5-mil polyester                           | -54.9        | -53.5      | -9.1                   | +7.8                           | +2.6               | +4.0  | +5.0  | +5.8   | +6.4   | +7.1   |

All measurements in decibels (dB). a=output varied, but within  $\pm 1$  dB (see text).

The second row of figures given for each of the low-noise tapes contains the results of tests made with the recorder's bias and equalization optimized for that particular tape, as explained in the text. The following tapes could not be tested because of unstable output or physical defects in the samples supplied: Allied 15-8271; Concert (Radio Shack) 44-1060; Lafayette 28-0101; 3M (Scotch) 139.

tape can take 8-dB more signal at that frequency before 3 per cent distortion occurs. By contrast, Audiotape 3633T, one of the very thin tapes, responds to the standard 400-Hz signal with an output 6.6 dB below that of the 3M Type 111. Since the Audiotape can take an input signal 9 dB stronger than its output figure before the 3 per cent distortion point, the highest output of which it is theoretically capable before distortion

occurs is +3.6 dB, compared with the +8 dB provided by the 3M Type 111. If we compare these maximum-output figures with the bias-noise figures for each tape, we see that 3M Type 111 can put out a signal 59.7 dB above its noise level, while the Audiotape's maximum output is 56.7 dB above its noise level. The signal-to-noise ratio for 3M Type 111 is, therefore, superior by 3 dB—at least at 400 Hz.

tapes. As we have seen, at high frequencies magnetic tape tends, in effect, to erase itself. Since what is called "coercivity" is actually a measure of the energy needed to demagnetize the tape, an oxide coating with a higher-than-usual coercivity will automatically provide a built-in treble boost when compared with a standard tape. A typical example of the frequency response of a low-noise tape recorded and played back on a machine adjusted for a standard oxide is shown in Figure 1. Note that the rising high-end response of the low-noise tape is *not* the defect it might seem at first glance. Obviously you could compensate for the rising high end by turning down the amplifier's treble control—and with it, some of the tape hiss. You would therefore simultaneously restore proper frequency response and lower the audible noise level by 5 or 6 dB.

A better solution, however, would be to have your recorder's internal adjustments changed. One way to compensate for a rising treble response is to increase the recording-bias level. This, in turn, will tend to reduce distortion and at the same time permit a somewhat higher recording level. The latter is important because, as the table shows, low-noise tapes generally do not produce quite as much playback output for a given input signal as standard tapes do. Another way of achieving the needed high-end reduction for low-noise tapes would be to reduce the amount of the treble pre-emphasis in the recording amplifier. This would lower recorder electronic noise and also give more "headroom" for undistorted recording of high-frequency transients. In practice, most recorders are changed from "standard" to "low-noise" operation by altering only the bias current. However, for optimum performance (see table), both the bias *and* the record equalization should be changed. With proper bias and equalization, low-noise tapes can and should be driven harder than standard-oxide tapes. This means that the VU meter should also be recalibrated. Conventionally, on high-quality recorders, the meter is set to read 0 VU at a recording level 6 to 8 dB below that which produces 3 per cent harmonic distortion with a 400-Hz tone. (This 6- to 8-dB leeway or headroom gives a safety margin for transient pulses too short to register accurately on a VU meter. The 3 per cent level is often called "peak operating level" and is usually the reference point for signal-to-noise measurements. With proper recorder adjustment the improvement in recording quality (particularly of music) of low-noise over standard-oxide formulations is even more dramatic than an ordinary signal-to-noise measurement would indicate. This occurs because much of what the test meter reads as "noise" lies in the very low-level low-frequency region and is therefore inaudible. The improvement, however, all takes place in the audible area, leaving the inaudible areas relatively unaffected. The improvement represented by low-noise tape is so dramatic

that, except for the purposes of these tests, my own recorders are never adjusted for anything else.

If your recorder cannot be adjusted for low-noise tapes, however, or if their relatively high cost puts them out of your reach, you might well consider using a "high-output" tape. Here, by trading some sensitivity at the very high frequencies for overall output from a given recording level using "standard" adjustments, you can also improve recording quality. The higher output available lets you turn down the playback-level control, reducing the relative hiss level; moreover, as the table shows, "high-output" tape, like low-noise formulas, can be driven harder for a given level of distortion, thus further improving the signal-to-noise ratio. Probably the reason high-output tape is not more used by professional recordists is the danger of print-through, which is the magnetic transfer of signals between adjacent layers of tape wound on a reel.

Except when using extremely thin tapes (2,400 or 3,600 feet on a 7-inch reel), however, print-through is unlikely to be a real problem for the home recordist. These "superthin" tapes are almost never used for top-quality recording in any case, for in addition to being a thinner base material, they also use a somewhat thinner oxide coating. This not only limits the amount of signal that can be recorded on the tape, but, since bass frequencies rely on deep oxide penetration, bass response is impaired as well.

**A** NUMBER of final points about the table should be made. In the first place, it should be recognized that even the most reputable tape manufacturers cannot guarantee uniformity from reel to reel closer than  $\pm 0.5$  dB. Moreover, particularly at the high frequencies, some instantaneous output variations ("needle bounce") are inevitable, and must be "averaged" by eye. The measurements presented, therefore, do not pretend to laboratory accuracy. They do reflect a degree of accuracy, however, as high as that likely to be achieved by any competent technician when he attempts to adjust your recorder.

A number of tapes could not be tested because irregularities in their slitting, oxide thickness, or oxide smoothness made their output so variable that it could not be measured with reasonable accuracy. In marginal cases, where output varied within bounds which could reasonably be averaged (within  $\pm 1$  dB), the subscript "a" has been added to the figure cited. Some variations in the mid-high frequencies (3,000 to 7,000 Hz) can be expected with other recorders whose record equalization differs; however, these should not be more than  $\pm 1$  dB if the recorder is a high-quality machine.

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*Craig Stark*, STEREO REVIEW's tape-recording specialist and author of our monthly "Tape Horizons" column, has recently received his Ph.D. degree (in philosophy) from Princeton University.



On the Trail of

**LOUIS MOREAU GOTTSCHALK**

By Robert Offergeld



IN JUNE of the year 1865, Louis Moreau Gottschalk was for several days a victim of the excruciating dullness of Virginia City, Nevada. Too ill to perform or travel, America's then most famous musician was in effect a prisoner in a mining-camp hotel room, where he presently found himself to be the object of a total and unprecedented social neglect.

Nobody, but nobody, came to call on him. After eleven days of this treatment, it became depressingly clear that not a soul in those God-forsaken hills had the faintest notion of who or what he *was*. Gottschalk was in no sense a vainglorious man, but this unmerited saturation in nonentity was too much. Putting pen to journal, he forcibly repudiated the affront.

His spleen produced a remarkable paragraph in which he summarizes his accomplishments as a concert pianist, a composer, and a philanthropist. Ostensibly a rebuke to frontier incivility, the passage also served the more important psychological purpose of reaffirming its writer's identity under duress, and it reaches its climax in a long, indignant sentence that is built, rather like a Rossini crescendo, in a series of expanding conditional clauses.

The suspense and the virtuoso syntax of this sentence are so interesting that nobody has ever paid much attention to what Gottschalk actually says in it. One of the things he says is that he has already composed "two or three hundred pieces." An admittedly imprecise remark, and as such no doubt beyond the pale of decent scholarship. But it was my respectful view of this estimate—it comes after all from one who, even in a state of extreme irritation, might be expected to know—that eventually became the motor and motto of my Gottschalk catalogue, a task that has held me on twilight bibliographical courses for the past year and more.

The Centennial Catalogue contains 298 main entries, not counting the swarm of cross references made necessary by the feverish imaginations of Gottschalk's publishers, who tried manfully to give at least three commercially seductive titles to almost everything he sent them. This is more than twice the number of pieces heretofore credited to the composer by anyone except himself, and I would like to say at once that the catalogue is issued not as announcing the completion of a search but as urging the further prosecution of one.

As the reader will have no trouble discovering, I am

of the opinion that many more titles, and without question more manuscripts, remain to be unearthed. I believe that a few works remain undiscovered, or unidentified, even in the European period 1842-1852—particularly at the two extremities of that decade, when Gottschalk seems to have written, and possibly to have published, a certain number of pieces that have not reached us. It seems likely also that unfamiliar editions of a number of known works are yet to be located. The Columbia University Music Library, for example, possesses a Paris issue by A. Leduc of *Le Mançenillier*, an edition hitherto uncatalogued. It is true that Leduc was the Paris affiliate of Schott of Mainz, but the plates of the Leduc *Mançenillier* are not identical with those of Schott, and the issue may properly be considered a separate one.

In addition to unfamiliar editions of known works, I suspect also that totally unfamiliar titles of works both published and unpublished are yet to be turned up. Lincoln Center Library and Museum of the Performing Arts in New York City possesses copies of two published works—a piano piece, *La Brise*, and a vocal work, *Canadian Boat Song*—that have hitherto escaped notice in any known source, early or recent. Yet neither was published under the counter in the Balkans (Gottschalk was much pirated in Europe: see the catalogue entry for *Le Bananier*) but in broad U. S. daylight. Likewise with regard to unpublished works, of which many dozens are reported with performance documentation in the catalogue, I am of the opinion that even more remain to be discovered. Reasons are given below for my persisting belief that a likely place and time to reconnoiter might be Cuba and the Lesser Antilles, for the obscure island-hopping period 1857-1862. And of course nothing like a full account is yet available of Gottschalk's activities from 1865 to 1868 in Peru, Chile, Argentina, and Uruguay.

MY confidence stems in part from the peculiar nature of Gottschalk's ordinary or quotidian productivity. We can be certain that in all his globe-trotting he at no point lost his expertise at topical or reportorial music, a faculty he possessed from the first. As a youth of nineteen, for example, Gottschalk spent the revolutionary summer of 1848 in the French countryside, where robust peasant women worked the fields as seen in the paintings of Mil-

let. He returned to Paris with *La Moissonneuse*, which we have, and *La Glaneuse*, which has been lost. It was as if almost anything that interested or amused him might provide the nudge from reality that set him to writing a *pièce d'occasion*. The prospect of visiting an unfamiliar country (or even the unexpected availability of a good brass band) seems often to have been pretext enough—as were also the pretty faces at his concerts in Ponce (*Las Ponceñas*), a balloon ascension he made in New Orleans (*L'Extase*), a spectacular new painting by his friend Frederick Edwin Church (*The Acher*), and even a little West Indian passenger steamer grandly named for our sixteenth state. Of four resulting works, only *L'Extase* is known to us, but who would give up hope of hearing a piece about a sidewheeler named *Tennessee*?

Few of the early field reports in Romantic music remain fresher than Gottschalk's Caribbean dances—and what a lively (not to say wicked) book it would be that contained them all. Listed in the catalogue are seven vanished pieces entitled *Danza*, including one for two pianos. Five of them derive from 1859, the year of the Op. 33 *Danza* that Gottschalk published, and although these *may* be among the untitled manuscripts at the Lincoln Center music library, we cannot be sure. Perhaps some of them, like the one we know, were related musically to the *Escenas campestres* (a work featuring some notably earthy verses). Then there were at least six more dances from Gottschalk's earlier Caribbean visits: three under the general title of *Recuerdo de la Vuelta de Abajo* (*Zapateado cubano*, *Tengue terengue*, and *Bembo como ta*); two under the title *Caprichos sobre Danses de Puerto Principe* (*La Caringa* and *Maria Lancero*); and one more that we have special reason to regret, *Maria la O*, a companion piece to the published *El Cocoyé*. Gottschalk's program note, reported in the New Orleans

*Virginia City, Territory of Nevada* [sic], June 13, 1865:

I HAVE been sick for three days. I cannot recollect in fifteen years of travels and vicissitudes having passed eleven days so sadly as here. I defy your finding in the whole of Europe a village where an artist of reputation would find himself as isolated as I have been here. If in place of playing the piano, of having composed two or three hundred pieces, of having given seven or eight thousand concerts, of having given to the poor one hundred or one hundred and fifty thousand dollars, of having been knighted twice, I had sold successfully for ten years quarters of salted hog, or had made a great fortune by selling dear what I had bought cheap, my poor isolated chamber would have been invaded by adorners and admirers. Decidedly the country of money is not the one of artists. "*Muse, étendez vos ailes et suyez au plus vite.*"

—L. M. Gottschalk, *Notes of a Pianist*

*Daily Picayune*, stated that he derived *Maria la O* one night from some celebrant runaway Negroes in the woods near Santiago de Cuba (whence he later also obtained the native drummers for the 1860 Havana premiere of his first symphony), and in 1854 the piece excited the critics of New Orleans far more than the famous *Bamboula* had done.

The high mortality rate of Gottschalk's unpublished manuscripts is susceptible of no single explanation, for it involves the early disappearance of known scores (*La Glaneuse*, for example, was noted twice in Gottschalk's lifetime, first in 1853 and again ten years later) as well as the stubborn non-appearance of dozens of hypothetical ones. Part of the difficulty in hypothesizing scores for vanished Gottschalk pieces revolves about a definition. It was axiomatic among Gottschalk's friends that what he published was "only a shadow" of what he wrote. But because he was from youth a skilled extemporizer, some recent critics seem tempted to dismiss his more problematical pieces as mere improvisations.

I believe that the principle involved in this distinction betrays more interest in musicological housekeeping than in the working poetics of music. After all, a piece can be "improvised" only once. When programed at subsequent performances it necessarily becomes, for better or worse, a composition—and all such are so considered in the Centennial Catalogue, whether anybody has ever seen them on paper or not. The *Cri de délivrance*, as is noted in the catalogue entry for that piece, was first heard as just such an "improvisation." The fact that it promptly got written out and published (and that we now have it) is probably due more to the circumstance of its salability during the Civil War than to any fancied categorical difference in Gottschalk's view of it.



New York Public Library

In addition to the question of *when* a piece is a composition, we have with Gottschalk the related problem of how *often* it is one. He obviously had, for example, two big sure-fire *Il Trovatore* numbers, the *Miserere* and the *Grand Duo* paraphrase. Besides two published versions of the former, there seem to have been two (both unpublished) of the latter. One must ignore plain evidence to assume, as has been done, that the *Miserere* and the *Grand Duo* were the same piece. Richard Hoffman heard and was deeply impressed by the *Grand Duo* as spectacularly performed by Gottschalk and Sigismond Thalberg, and as of 1909 he observed that he had never seen it in print—something he could not possibly have said about the *Miserere*. Meanwhile, two-piano works obviously have to be scored, and Gottschalk's co-performers in the *Grand Duo* were so wildly assorted as to virtuosity—ranging from Thalberg to a Miss Eugenie Barnette all but unknown to history—that he almost necessarily had to score it in more than *one* way.

There can be no questioning the validity of those missing titles—the mentioned *Grand Duo*, or the *Lucrezia Borgia* paraphrase, or the *Gran Galopada* for two pianos, to name but three—that are known to have existed in manuscript. These have vanished since 1880, but it is also clear from the early sources that a number of Gottschalk's notated works disappeared during his lifetime, a phenomenon invited by his restless and often disordered existence. For roughly twenty years the composer

*A view of Virginia City, Nevada, photographed in 1865, the year of Gottschalk's concert visit. The town was then six years old, having risen on the flood of gold and silver released in 1859 from the Comstock Lode. The actress Ada Clare, Gottschalk's former mistress, had visited the town a year ahead of the composer, at which time she was interviewed by Mark Twain, a young reporter on the town's chief newspaper, the Territorial Enterprise.*



Lawrence & Southworth photo (Library of Congress)

had no proper home to speak of and lived out of trunks, meaning not *façon de parler* trunks but *real* ones. (The real loss of one such real trunk, containing by Gottschalk's own account an *ante* South American opera, and "many other valuable works," is noted in the catalogue.) It also seems probable, as Jeanne Behrend has suggested, that other manuscripts were appropriated by Gottschalk's greedy fans—particularly in South America and the West Indies, where he was idolized by the profession and the public alike.

Other manuscripts seem to have entered limbo after the 1870 public auction of Gottschalk's personal effects in Rio de Janeiro. Many of the composer's scores were at that time already held by (or shortly found their way into the possession of) two of his Latin American colleagues, Arthur Napoleão and Nicolas Ruiz Espadero. Other works, it would appear mainly piano pieces, subsequently turned up in the possession of Gottschalk's sisters in London. Although several of the works held by Napoleão and Gottschalk's heirs were published posthumously, neither of those collections seems ever to have been the subject of a published inventory. Espadero's holdings, including certain works derived from Napoleão, were catalogued in 1880 by Luis Fors.

Many of the Espadero scores were acquired in 1948 by the New York Public Library (these manuscripts are now at the Lincoln Center Library and Museum of the Performing Arts). Others from the same source reportedly remained in the possession of Espadero's heirs in Cuba. The latter are said to have been dispersed among even more distant Espadero connections, and by some investigators they are now thought—perhaps prematurely—to be irrecoverable.

The chief field investigations of Gottschalk's manuscript legacy have been those conducted in the last two decades by Professor David James of Brown University, by the Uruguayan musicologist Dr. F. C. Lange, and by Dr. John G. Doyle of Mansfield College. The published findings of these authorities are cited in the appropriate catalog entries, but they are to be exonerated of all responsibility for opinions advanced by me. Of particular note are the seven important Gottschalk scores first reported by Dr. Lange in 1950, at which time they were in the possession of Abrahão Carvalho of Rio de Janeiro. Thanks to the generosity of Eugene List, these scores were acquired by the Lincoln Center Library and Museum of the Performing Arts in 1967. Meanwhile, the sizable task of locating and identifying the published piano pieces in the editions then known was completed by Dr. Doyle in 1961. These and other sources used in the preparation of this catalog are identified by titles in a list of symbols and by page in the catalogue entries.

With regard to presumptive manuscripts held at the time of Gottschalk's death by persons other than Napo-

leão and Espadero, a possibility exists that may not be entirely dismissed out of hand. Certain known scores were reported in fragmentary condition almost ninety years ago. Others may exist unreported as a result of being to a degree indecipherable. Gottschalk is said to have used on occasion a peculiar musical shorthand—a not unlikely measure in such periods as those, in Havana and Rio de Janeiro, when he was desperate for time and professional help. It is perhaps significant that most of the larger surviving works exist not in Gottschalk's autograph but in copies or transcriptions—some of them, it seems evident, produced by Espadero, who also is said to have been familiar with Gottschalk's code.

AT THE periphery of the known Gottschalk *oeuvre*, meanwhile, there exists a twilight zone, familiar to all who consult the early sources, in which unidentified titles make brief and tantalizing appearances before vanishing. It is in this penumbra, one that has become no less dark in the century of its existence, that we must search for about half of the "two or three hundred pieces" that Gottschalk claims to have written.

Where is the pre-Lisztian *Mazeppa*?—the "immense" concert etude composed on Byron's poem in Baudelaire's Paris and dedicated, by a coincidence, to Liszt. It is not at all certain that Gottschalk and Liszt were personally unacquainted. In later years, Gottschalk's younger brother Gaston asserted, categorically, that Liszt had informed him *vis-à-vis* of such an acquaintance. But even if this were not the case, Espadero had possession of the *Mazeppa* score in 1880, and as a youth Gottschalk was much too punctilious (and much too well-connected) to have dedicated this ambitious piece to the world's foremost pianist unless some responsible party who had seen it—probably Berlioz—had undertaken to secure Liszt's welcome for it.

Where are the *Valse poétique, pour soprano et accompagnement d'orchestre*, the *Chant des oiseaux, trio pour soprano, flûte, et piano*, and the arrangement for soprano of *Le Carnaval de Venise*? All of these are dated 1857, all were obviously produced for Adelina Patti during Gottschalk's West Indian tour, and all were necessarily notated. Where, too, is the untitled song that Gottschalk wrote for Clara Brinkerhoff? It was reported in manuscript as of 1870.

And where are the operas?—*Charles IX* and, particularly, *Isaura di Salerno*, the "ópera seria en trois actes" that in Gottschalk's last years was reportedly the apple of his eye. To his private mind, this work seems to have been the undisclosed grand project that was to rehabilitate his larger career in Europe.

For that matter, where is the *Grand March for the Sultan* that Gottschalk says he wrote in 1869? On his planned visit to the Holy Land, he would necessarily have had to enter the Ottoman Empire. We may imagine that as one of the founding fathers of nineteenth-century

musical exoticism, Gottschalk would scarcely have spared the local color in a piece designed for Constantinople. It is not at all impossible that one of that century's most grandiose works in the *genre turc, style janissaire* may somewhere await discovery.

There are many, many others, and their titles are collected in the catalogue with the frank intention of disturbing the dust in attics, forgotten trunks, and somnolent private collections. I would perhaps be less optimistic about the results if I had not, *ante oculos*, seen Gottschalk manuscripts vanish as recently as 1951. In that year, by means of what I shall call an accident, I discovered some unreported scores, including a manuscript copy of *Le Cri de délivrance* under its English title, in a Southern public archive—one that at the time was somewhat irregularly administered. Upon my prompt application for permission to examine these manuscripts, I received a bland official denial that the institution possessed the works that I had held in my hand twenty-four hours earlier. To my knowledge they have not since reappeared.

In the same year I located a collateral descendant of Gottschalk's who informed me positively, in conversation, that he possessed "quite a lot of things that were supposed to belong to the famous musician." These, he gave me to understand, had been transmitted to him through an "Aunt Clara" (this could have been either Clara Gottschalk Peterson, the composer's sister, or Clara Aimée Gottschalk, his niece), and he mentioned specifically (1) "a lot of old papers," and (2) "a painting that shows him wearing all his medals." This gentleman, since retired, has consistently declined to respond to the appeals of investigators for permission to inspect his Gottschalk holdings.

Circumstances such as these return us to the larger question I postponed a moment ago with regard to the *Marcha Triunfal y Final de Opera*. When one recalls the curious history of so important a modern work as the third act of Alban Berg's opera *Lulu* (HiFi/STEREO REVIEW, October 1964), the question indeed seems long overdue. With regard to known Gottschalk works that are unlocated, I think it should henceforth be considered a matter for routine inquiry whether they are not, as a matter of present fact, being held in sequestration.

#### EDITOR'S NOTE

The foregoing is excerpted from Mr. Offergeld's Introduction to his just-completed catalogue of the works of Louis Moreau Gottschalk. Although the catalogue (it is not a discography) is being prepared by STEREO REVIEW for distribution to music libraries, a limited number of copies will also be made available for interested readers. Please send name, address, and 20¢ in stamps to cover postage to: Gottschalk Catalogue, STEREO REVIEW, 1 Park Avenue, New York, New York 10016.

STEREO REVIEW'S SELECTION OF RECORDINGS OF SPECIAL MERIT  
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CLASSICAL

AN EXCELLENT (AND COMPLETE) NEW *FREISCHÜTZ*

*Robert Heger directs an authoritative account of the Weber Singspiel for Angel*

THE American release of Angel's new recording of Carl Maria von Weber's *Der Freischütz* was very likely planned to coincide with the Metropolitan's revival of the work announced for early 1970 but now put aside owing to the house's long-delayed opening this season. Postponement of that overdue revival is a sad blow to the cause of an opera which, though cherished and esteemed in German-speaking countries, is barely known in America, but I sincerely hope that it will have no effect on the sales of this fine Angel set.

Fortunately, *Der Freischütz* is no stranger to records: the present complete version is the fourth in stereo. Angel has retained the spoken dialogue—a procedure both wise and logical. *Der Freischütz* is a succession of one wonderful aria and ensemble after another, but it is clearly more than just that. It is, in fact, a well-constructed *Singspiel* in which the spoken episodes carry the plot forward intelligently and with a reasonable economy of verbiage. The dialogue is, of course, in German, but so it is in *Fidelio* and *The Magic Flute*, and who would think of mutilating those two operas nowadays? If you infer from this comparison that I consider *Der Freischütz* to be on an equal plane with the Beethoven and Mozart masterpieces, you are more or less right.

The performance is excellent all the way, even taking into account some minor reservations. The veteran conductor Robert Heger (b. 1886) paces the opera

in a loving and leisurely manner—the rather comfortable tempo set for the *molto vivace* section of the Overture foreshadows his general approach—but the tempos are logically interrelated. The conductor's musical authority is unquestionable: he stresses the Romantic elements in which the music abounds, and he unfailingly draws a rich and sensuous sound from his fine orchestra.

In the role of Max, the sympathetic but gullible hunter, Nicolai Gedda is consistently dependable, intelligent, and vocally secure—he is easily the best overall interpreter of this demanding role on records. The casting of Walter Berry in the role of the villainous Kaspar is rather surprising; previous interpreters of the part have been true basses (Boehme, Frick, *et al.*),

whereas Berry is a bass-baritone. But he is one of the most resourceful singing actors in the business, one who can reasonably be expected to respond to almost any challenging assignment. In this instance, he compensates for the lack of true basso weight by sinister tone coloring and ominous inflections. The part does require a considerable amount of upper-register singing, where Berry's high-ranging and flexible voice is of course a distinct asset. Franz Crass delivers the Hermit's weighty music with great dignity and resonance, and a new (to records) baritone, Wolfgang Anheisser, handles the brief but difficult part of Ottokar extremely well.

Birgit Nilsson sings the role of Agathe, and this casting de-



CARL MARIA VON WEBER  
*A succession of wonderful arias*



Reinmann Archive

*Der Freischütz, Act II, Scene 2: In the Wolf's Glen episode, Kaspar the Forester conjures up Samiel the Wild Huntsman, who will infuse with magic the bullets Kaspar and Max have cast.*

cision seems to be justifiable only in terms of sales appeal. The part calls for a warmer projection, more expressiveness, and an easier command of florid singing than this brilliant dramatic soprano possesses. (These criteria are met with quite resounding success by Elisabeth Grümmer on Seraphim IB-6010.) But Birgit Nilsson is incapable of turning in a really unsatisfactory performance, and though her Agathe may not be an outstanding achievement for her, it still has much to commend it. The Änchen of Erika Köth is neatly and accurately sung, if slightly wanting in temperament.

Adding it all up results in the most satisfying total score yet achieved by any recording of *Der Freischütz*. The engineering is clear, rich-sounding, and well balanced. The ghoulish Wolf's Glen episode is effectively realized even without the inventive (and effective) gimmickry on the Everest set—another good performance excitingly conducted by Lovro von Matačić. There is one sonic miscalculation: Samiel's dramatic "*Hier bin ich*" gets lost in the orchestral din. George Jellinek

**WEBER:** *Der Freischütz*. Birgit Nilsson (soprano), Agathe; Erika Köth (soprano), Änchen; Nicolai Gedda (tenor), Max; Walter Berry (baritone), Kaspar; Wolf-

gang Anheisser (baritone), Ottokar; Jürgen Förster (baritone), Kilian; Franz Crass (bass), Hermit; Dieter Weller (bass), Kuno; Wolfgang Büttner (speaker), Samiel; others. Chorus and Orchestra of the Bavarian State Opera, Robert Heger cond. ANGEL SCL 3748 three discs \$17.98.

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for works of refinement, clarity, and muscle*

**T**HERE is only one possible word to describe Nonesuch's just-issued recording of Elliott Carter's Sonata for Cello and Piano and his Sonata for Flute, Oboe, Cello, and Harpsichord: *spectacular!* This is one of the few perfect presentations of contemporary music I have ever heard on records, and if there are any prizes coming up in the next twelve months, this disc should certainly be put high up on the eligibility list.

I have been familiar with both of these works for quite a few years. The Sonata for Cello and Piano dates from 1948, and the Sonata for Flute, Oboe, Cello, and Harpsichord from 1952, so they have been around for a while. And, though one can hardly say that many contemporary American works are frequent visitors to the concert platform, these have had a notable number of performances. They have also been (and are) represented in the record catalog: the Cello Sonata in a performance by Bernard Greenhouse (for whom the work was composed), and the work for larger ensemble in Columbia's "Contemporary Music Series" and on a recording by Decca.

In my mind, all the performances I'd heard had long ago blended into an aural memory of a kind of music which had everything in the world to recommend it: seriousness of purpose, adroitness of technique, honesty, independence, etc. But I must admit that nothing in my remembrance led me to anticipate the kind of musical response I have experienced on hearing this new recording. It would certainly be hard to imagine more stunningly intelligent, passionate, and thoroughly understood performances than these.

Undoubtedly the fact that the composer himself supervised the recording has bearing on the fact that the music speaks forth with such refinement, clarity, and muscle. But immense credit must also be given to the performers. They belong to a generation that, having been weaned on twentieth-century styles, is as comfortable with this kind of music as an older generation would have been with Brahms. It is no mystery to them. They play it with the sweetness of spirit, the incredibly delicate balancing of sound, and the ultra-precise interweaving of threads in

fragile, complex textures that are possible only when musicians are thoroughly relaxed and at home with the innards and the "outards" of a piece of music.

The recording engineer, Marc J. Aubort, must also be praised for the extraordinary excellence of this Dolby-system recording. It could hardly have been easy to fix such exquisite relationships between harpsichord, woodwinds, and cello as he has done here. You hear absolutely everything, but there is not a moment of starkness, nor an instant when the harpsichord (as it is wont to do both in the concert hall and on recordings) dissolves into acid chatter.

For anyone who wants to know what Elliott Carter's music has been about, at least since 1948, this record will provide an answer. These sonatas represent one of the most singular achievements of *any* contemporary composer, in terms of creating an absolutely individual and flexible language. The whole method of discourse is original, and yet thoroughly natural. It poses no arbitrary boundary-lines between what can be said and what cannot. And, what's more, it speaks not only from the head, but from the gut as well. *Lester Trimble*

**ELLIOTT CARTER:** *Sonata for Flute, Oboe, Cello and Harpsichord.* Harvey Sollberger (flute); Charles Kuskin (oboe); Fred Sherry (cello); Paul Jacobs (harpsichord). *Sonata for Cello and Piano.* Joel Krosnick (cello); Paul Jacobs (piano). NONESUCH H 71234 \$2.98.

## ENTERTAINMENT

### JEFFERSON AIRPLANE'S LATEST SORTIE

*Their new album for RCA is not calculated to build any bridges over the generation gap*

THE Jefferson Airplane continues to soar gloriously through the pop skies. They have become a kind of corporeal projection of all the bubbling emotions of today's generation of youth, for the advocacy of political and emotional revolution which has dominated their recent work would fall flat if it did not represent, in effect, an idea whose time has come. Despite what entertainer Art Linkletter, that paragon of up-tight, blameless, middle-class America, has to say in his fulminations against the activities of young people, youth will have its own form of drugs (different in kind and quality from their elders' choice of alcohol), they will continue to be skeptical about the pompousness of most traditional American institutions, and they will agitate, argue, confront, and, yes, sometimes fight and go to jail to support their points of view.

The Airplane recognizes this. When Paul Kantner writes (in *We Can Be Together*) "We are all outlaws

in the eyes of America. . . . We are obscene lawless hideous dangerous dirty violent and young," and "We must begin here and now/A new continent of earth and fire/Tear down the walls," he is speaking not just for an isolated, freakish minority, but for vast numbers of both outspoken and (to paraphrase) "silent" youths. Other songs in this collection are less specific, concerned with the Airplane's familiar interest in the expanded consciousness of the drug experience in such songs as *Wooden Ships* and *Eskimo Blue Day*, and filled with a kind of "inside" humor in drummer Spencer Dryden's *A Song for All Seasons* and Kantner's *The Farm*. But just to make sure your attention hasn't wandered from the principal business at hand, the album closes with Marty Balin and Paul Kantner's *Volunteers* ("Look what's happening out in the streets/Got a revolution /Got to revolution").

Obviously, many people are not going to be happy about hearing revolution of the body and mind and society propounded in a recording of popular music (or, for that matter, in a record review). Too bad. Like it or not, they may have to learn to live with it, because the symbolic Woodstock Nation which miraculously sprang to life full grown last summer from the hills of Bethel is, more likely than not, with us to stay. The Jefferson Airplane is only an advance sortie for the action yet to come. *Don Heckman*

**JEFFERSON AIRPLANE:** *Volunteers.* The Jefferson Airplane (vocals and instrumentals); various other musicians. *We Can Be Together; Good Shepherd; The Farm; Hey Frederick; Turn My Life Down; Wooden Ships; Eskimo Blue Day; A Song for All Seasons; Meadowlands; Volunteers.* RCA LSP 4238 \$4.98. Ⓟ TP3-1030 (3¼) \$6.95, Ⓢ P8S-1507 \$6.95, Ⓢ PK-1507 \$6.95.

### THE COMEDY OF POLITICS: "I AM THE PRESIDENT"

*David Frye's alarmingly accurate impressions make a number of things perfectly clear*

POLITICAL comedy has always been with us. There were probably jokes circulating about George Washington's wooden teeth even before the Constitutional Convention of 1787. Some chief executives, such as Lincoln, F.D.R., and J.F.K., have told their own jokes (including many on themselves), but this did not spare them the barbs of mimics, pundits, and lampooners. The Lyndon Johnson regime gave rise to a whole library of albums with imitations of the President and LadyBird drawling their way through situation comedies in settings that ranged from the LBJ ranch to



DAVID FRYE: *uncanny voice-portraits*

a Jewish resort in the Catskills. The most wearying discs have been those painstakingly concocted assemblages of Eisenhower's or Kennedy's or L.B.J.'s voice snipped from tapes of actual statements by the subject and strung together into tricked-up, forced absurdities where a man's own words can be used against him.

Once in a while, however, the fellows who make their living writing comedy scripts and a comedian with a genius for accurate mimicry put their heads together and come up with a winner. Such is David Frye's "I Am the President." It is far and away the funniest record of its kind since Vaughn Meader took on the Kennedys in "The First Family," and if you have not already acquired this one it is strongly suggested that you get hold of a copy before your friends have spoiled all the best moments in the show by relaying the punchlines. Rumor has it that Mr. Nixon himself found the album so funny he ordered it in quantity to distribute to his friends. If Mr. Nixon laughed, even his staunchest supporters should feel free to join in. His foes certainly will double up with laughter over his victory speech ("Well, you can't lose them all"), his visit to the Johnsons at four o'clock in the morning to look over the White House before he moves in, his colloquy with Billy Graham, his late-night interview with the cleaning woman who dusts his study, and his press conference in which all his favorite phrases ("Let me make one thing perfectly clear...") are brought into play, and

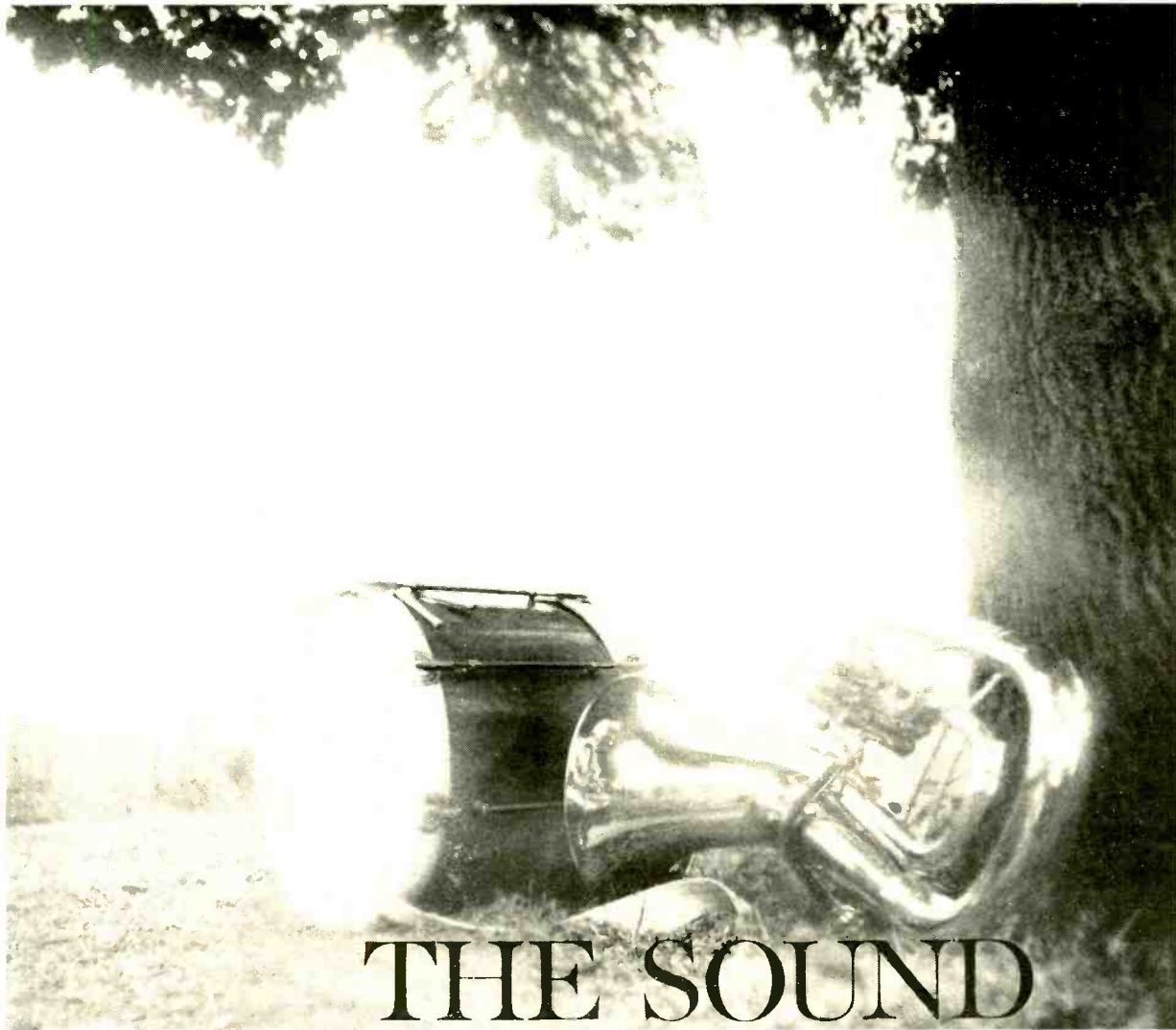
the second part of a question is likely to get answered before the first.

Gary Belkin and his associates—Tony Geiss, Donald Ross, and Norman Steinberg—have been writing first-rate television and screen comedy for years, but this time they have really outdone themselves. The writing is tight and consistently to the point, with scarcely a line wasted. But the script (a printed one came with my copy, labeled "for broadcast clearance purposes only") is just part of the story. The real hero of the occasion is Mr. Frye, who not only takes care of Mr. Nixon but also turns in uncannily accurate voice-portraits of William Buckley, Henry Fonda, ex-President Johnson, Nelson Rockefeller, George Jessel (as the man who briefs Mr. Nixon for his meeting with Golda Meir and tries in vain to teach him how to say "Shalom"), and even David Susskind. Supporting Mr. Frye, on the few occasions when it seems to be necessary, are Jimmy Caesar, Mina Kolb, Chuck McCann, Tom O'Malley, and Bryna Raeburn, who manages to serve as wife to both the incumbent and his predecessor without apparent transitional difficulties.

For this listener, in a program made up almost entirely of highlights, the most devastating moments occurred during our leader's valiant effort to improve his image as a swinger during a discussion of the problem of "mara-je-wana," while he lights up (after trying to eat) a "roofer," goes on a "bum voyage" and experiences a hallucination that he has just been elected Governor of California. On the other hand, the raspy voice of Rockefeller describing the color slides of his South American "good will" trip (dickering in the picturesque market place in Maracaibo—for his life, as it turns out) may rate even higher. And rock-ribbed Republicans surely will be comforted by the mercilessly precise report on the workings of Hubert Humphrey's mind as he listens in agony to one of his own long-winded speeches. As for Spiro Agnew, he had only gone so far as to categorize the intellectuals of the Eastern seaboard as "effete" and "impudent" when this record was made last Hallowe'en and had not yet launched his assaults on the news media, so the jokes about his anonymity are sadly dated. Little else is, though, and I have given away enough! Get your own copy of "I Am the President" before it does date, or the store runs out, or some right-winger decides the whole thing is unpatriotic and has to be confiscated, and—make no mistake about it, as our President would say—treat yourself to a session of your own uninterrupted laughter. *Paul Kresch*

**DAVID FRYE: *I Am the President*.** David Frye (comedian). *Victory Speech; The New Tenants; Rocky Reports; Oh Dad. Poor Dad; Historic Words; Golda Goes Washington; Ten O'Clock Shadow; Hush, Hush. Sweet Spiro; Dear Henry Cabot;* and ten others. ELEKTRA EKS 75006 \$4.98, Ⓟ M85006 \$6.95, © M55006 \$6.95.



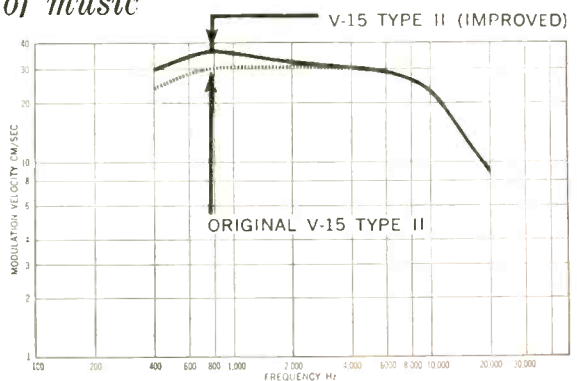


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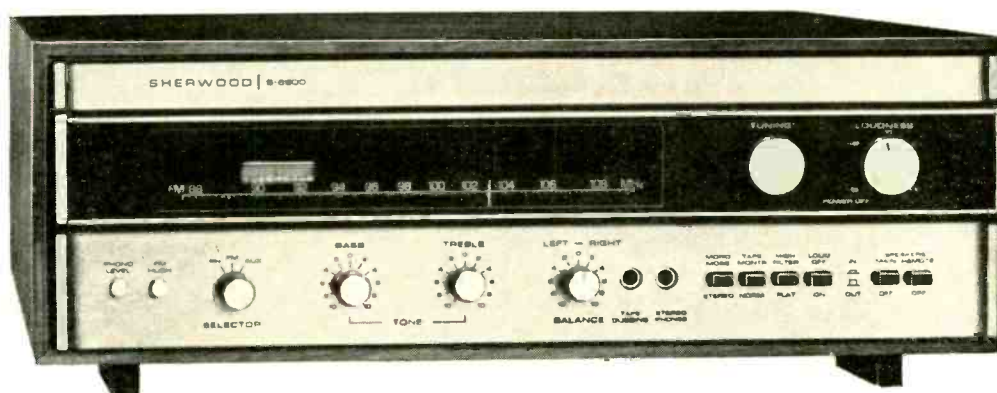


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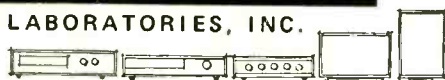
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# CLASSICAL

Reviewed by DAVID HALL • GEORGE JELLINEK • IGOR KIPNIS • ERIC SALZMAN • LESTER TRIMBLE

## RECORDING OF SPECIAL MERIT

BACH, J. S.: *Cantata No. 56, "Ich will den Kreuzstab gerne tragen"*; *Cantata No. 82, "Ich habe genug."* Mack Harrell (baritone); RCA Orchestra and Chorus, Robert Shaw cond. RCA VICTROLA VICS 1468 \$2.98.

Performance: **Spiritual**  
Recording: **Very good**  
Stereo Quality: **All right**

Admirers of baritone Mack Harrell will undoubtedly be pleased to know that his distinguished 1958 recording of the two solo bass cantatas of Bach has been reissued. Harrell, who died ten years ago, invested both works with an unusual sense of spiritual involvement; these are lyrical, deeply felt performances. The only quibbles I would have would be with the dryness of Harrell's timbre and, as for the orchestra, its overly Romantic manner of phrasing. The sonics of the recording show no sign of age, and match the warmth of the interpretations; regrettably, the organ continuo is almost inaudible. No texts are provided, but there are excellent notes by Philip Miller. I. K.

## RECORDING OF SPECIAL MERIT

BACH, J. S.: *Passacaglia in C Minor (BWV 582)*; *Trio Sonata No. 1, in E-flat Major (BWV 525)*; *Fantasy and Fugue in C Minor (BWV 537)*; *Prelude and Fugue in B Minor (BWV 544)*; *Prelude and Fugue in G Major ("Great," BWV 541)*; *Fantasy and Fugue in G Minor (BWV 542)*. Anthony Newman (Herz pedal harpsichord, in BWV 582, 537, 544, and Fantasy of BWV 542; and Beckerath Organ [1967] of St. Michael's Church, New York City, in BWV 525, 541, and Fugue of BWV 542). COLUMBIA MS 7309 \$5.98.

Performance: **Exciting, imaginative, and unorthodox**  
Recording: **High-level, with close-up harpsichord**  
Stereo Quality: **Satisfactory**

There is a great deal here that is going to upset a lot of traditionalists, mainly in the matter of tempos and of ornaments and embellishment. Anthony Newman, who was previously heard on records in a very fine

### Explanation of symbols:

- Ⓜ = reel-to-reel tape
- ⓐ = four-track cartridge
- ⓑ = eight-track cartridge
- ⓒ = cassette

Monophonic recordings are indicated by the symbol Ⓜ; all others are stereo

performance of the Soler double-keyboard concertos (along with his partner, Joseph Payne) for Turnabout, here plays some of the greatest Bach organ showstoppers on both organ and pedal harpsichord. The latter instrument has, of course, come in for a lot of attention lately, and for those unfamiliar with it, I should just mention that it is a regular two-keyboard harpsichord with an additional set of registers controlled by a pedal board similar to that of an organ.

Newman, first of all, is a phenomenal technician; he is also a brilliant, exciting performer, with a great deal of imagination to his interpretations. The prize pieces for

am certain that this failing will rectify itself in time. At the moment, this talented performer is a little like an uncontrolled bolt of lightning, racing through Bach with scarcely a moment to take cognizance of phrase endings and cadences (although he obviously knows precisely where they are). Part of the problem may be traced to a quotation in Bach's obituary, which describes his tempos as being very lively; this Newman seems to have taken quite literally—the *Passacaglia* and *Fugue*, for instance, is taken in just over nine-and-a-half minutes, whereas the usual timing is about thirteen minutes. He should stop and think, however, about the problems of acoustics, especially with the harpsichord, in which notes simply do not have an opportunity to sound at these fast speeds. Then, too, harmonies, as in the *G Minor Fantasy*, don't always have the chance of establishing themselves.

Nearly all else that Newman does, including his well-conceived articulation, his many additions to the texts, and above all his ability to convey musical excitement, is marvelously stimulating. I enjoyed the recital enormously and recommend it to anyone with an "open ear." The reproduction of both instruments (the organ is a fine tracker) is generally good but high in level, and the pedal harpsichord is a bit too clattery. I. K.



ANTHONY NEWMAN  
*A brilliant, exciting Bach performer*

me in this collection are the *Fantasy in G Minor* and the mighty *B Minor Prelude and Fugue*. In both *Fantasy* and *Prelude*, Newman plays with considerable rhythmic alteration. Thus, for instance, the *Fantasy* has its many recitative-like portions rendered in a manner quite unlike that in which notes of any given value are performed at exactly that value (here Newman plays with enormous rhythmic freedom, completely justified, I believe, by the rhetorical style of the work). He treats the *B Minor Prelude* as a French Overture, over-dotted the dotted rhythms, adding *notes inégales*, and even providing extra ornaments. I have always been very attached to Helmut Walcha's monumental recordings of this music, but after hearing what Newman does with it I found Walcha's rhythmically "straight" performances frankly stolid.

There is a tremendous energy to Newman's renditions, perhaps at times too much; certain moments definitely lack repose, but I

## RECORDING OF SPECIAL MERIT

BACH, J. S.: *The Keyboard Concertos (complete)*. *D Minor (BWV 1052)*; *E Major (BWV 1053)*; *D Major (BWV 1054)*; *A Major (BWV 1055)*; *F Minor (BWV 1056)*; *F Major, with Two Recorders (BWV 1057)*; *G Minor (BWV 1058)*; *D Minor (BWV 1059), with Oboe (reconstr. G. Leonhardt)*; *C Minor, for Two Harpsichords (BWV 1060)*; *C Major, for Two Harpsichords (BWV 1061)*; *C Minor, for Two Harpsichords (BWV 1062)*; *D Minor, for Three Harpsichords (BWV 1063)*; *C Major, for Three Harpsichords (BWV 1064)*; *A Minor, for Four Harpsichords (BWV 1065, after Vivaldi, Op. 3, No. 10)*. Gustav Leonhardt, Anneke Uittenbosch, Eduard Müller, Janny van Wering, Alan Curtis (harpsichords); Frans Brüggen, Jeannette van Wingerden (recorders); Cees van der Kraan (oboe); Leonhardt Consort, Gustav Leonhardt cond. Herbert Tachezi (harpsichord); Concentus Musicus, Wien, Nikolaus Harnoncourt cond. (in the *D Minor, BWV 1052*). TELEFUNKEN SCA 25022-T1/2/3/4/5 five discs \$29.75.

Performance: **Vital**  
Recording: **Warm and lively**  
Stereo Quality: **Intelligent**

(Continued on next page)

# Only Marantz Has a Built-in

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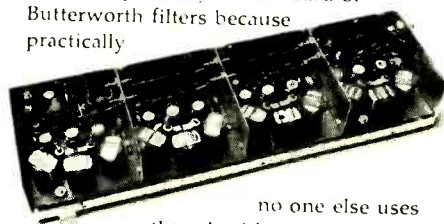
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# Oscilloscope!

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From left, Rostropovich, Angel's Executive Producer Peter Andry, Szell, and Oistrakh following the Brahms Double tapping.

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*King, Dance of the Mountain King's Daughter; Death of Aase; Morning; Arabian Dance; Anita's Dance; Solvejg's Song; Return of Peer Gynt; Solvejg's Cradle Song.* Patricia Clark and Sheila Armstrong (sopranos); Ambrosian Singers; Hallé Orchestra, Sir John Barbirolli cond. ANGEL S36531 \$5.98, ④ 4X S36531 \$5.98, ⑧ 8X S36531 \$7.98.

Performance: **A revelation**  
Recording: **Excellent**  
Stereo Quality: **Sensuously pleasing**

Anyone whose introduction to classical music came by way of the *William Tell* Overture and *Anita's Dance*, and whose primary association with the Prelude to Act IV of *Peer Gynt* (popularly known as *Morning*) is with dawn coming up in the Haydn Planetarium, is bound to have some special hang-ups that may have little to do with the composer's intentions when he contributed incidental music to Henrik Ibsen's play. On the other hand, there have been a number of critics who felt that Grieg didn't understand Ibsen's intentions, and that the sweetness and prettiness of the music are at odds with the ironies of the tale of the Norwegian peasant and his adventures and the bitter anger behind it. Personally, for many years I had no more profound thoughts about this score than that it seemed to take Aase an unconscionably long time to die, to the strains of a particularly monotonous melody. Still, as a boy, I anticipated with the same pleasure as I did the ending of Ravel's *Boléro* the delicious build-up of *In the Hall of the Mountain King*, and when I found out there was a second *Peer Gynt* suite with four more numbers, I was practically beside myself. The suites, however, are slim fare indeed when compared with the treasures of the full score, with its songs and dances and extended developments of rich choral passages they never told us existed in music appreciation class. Even the crescendo of *In the Hall of the Mountain King* as played in the suite is as nothing when compared with the effect when the chorus joins the orchestra in full cry, and the music abounds in delights and subtleties that may not be entirely appropriate for Ibsen but certainly add up to a stunning concert.

Sir Thomas Beecham did the honors for this score (also for Angel) some years ago, with results that his devotees assure me sparkled like a Norwegian landscape. I have looked it up and listened and they are right: the Beecham version does have a verve and a bite that do much to take the curse of sweetness from the score, and Ilse Hollweg's soprano is a lovely instrument. Recording techniques march on however, and the sound of Sir John Barbirolli's newer contribution (which includes both the *Overture* and *Dance of the Mountain King's Daughter* omitted by Beecham) is in itself a breathtaking experience. His efforts are further enhanced by the sopranos of Miss Clark and Miss Armstrong and the voluptuous tone of the Ambrosian Singers. Add to this the Barbirolli way of sculpting sound from an orchestra without ever forcing a tempo or a phrase, and his ability to evoke an inner glow that makes the most familiar passage sound like an idea freshly plucked from the brow of its creator, and you may divine some notion of the sustained beauty of this superb recording. The words are sung in German, as they were on the Beecham album.

P. K.

#### RECORDING OF SPECIAL MERIT

**HAYDN: Mass No. 11, in B-flat Major ("Creation").** April Cantelo (soprano); Helen Watts (contralto); Robert Tear (tenor); Forbes Robinson (bass); Choir of St. John's College, Cambridge; Academy of St. Martin-in-the-Fields, George Guest cond. ARGO ZRG 598 \$5.95.

Performance: **First-class**  
Recording: **Excellent**  
Stereo Quality: **Fine**

This Mass, the next-to-last of those written for the name day of the wife of Prince Nikolaus II Esterházy (this one dates from 1801), owes its nickname to a quotation, in the *Gloria*, of part of the Adam and Eve duet in *The Creation*. It is mature Haydn at his very best, but in popularity it has lost out to the more obvious appeal of the "Lord Nelson" Mass or "Mass in Time of War," numbers



VICTORIA DE LOS ANGELES  
*A youthful, charming, vivacious Manon*

nine and seven, respectively. The "Creation" Mass is a perfectly gorgeous work and is worth anybody's time, especially when presented in such an authoritative performance as this one. George Guest, conductor of the St. John's College Choir of Cambridge, England, has so far recorded four of the late masses; if they continue to turn out as well as they have in the past it will be a series to treasure. Among the excellences here are first-rate vocal soloists, marvelously clear playing of the Academy of St. Martin-in-the-Fields, and splendid choral work. I. K.

**HINDEMITH: Concert Music for Viola and Orchestra** (see BLACKWOOD); *Der Schwanendreher* (see WALTON)

**LECLAIR: Suite from the opera "Scylla et Glaucus"** (see DESTOUCHES)

**LISZT: Les Préludes; Hungarian Rhapsody No. 2.** TCHAIKOVSKY: *Overture 1812, Op. 49.* SIBELIUS: *Finlandia, Op. 26, No. 7.* Berlin Philharmonic Orchestra, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON DGG 643212 \$3.98.

Performance: **Heroic**  
Recording: **Excellent**  
Stereo Quality: **Discreet**

Von Karajan has long been possessed of a pair of magical, articulate hands that can turn the merest cliché into a monument when the right orchestra is there to do his bidding. The Berlin Philharmonic, which he has kept in trim condition, is such an orchestra, and it is heard to especially bright advantage (soaring unisons of strings; sharp, crystal-clear horn passages; a mellow glow in the sound of the whole ensemble) in the swashbuckling program chosen for this disc. It opens ultra-romantically with the heroics of *Les Préludes*, in which Franz Liszt not only trotted out his entire musical arsenal of pyrotechnical rhetoric, but also paved the way for the subtler tone poems of Richard Strauss. A more Byronic performance of this lovable relic is inconceivable, although more than a dozen top conductors have contributed their own heady readings in other albums. The Hungarian Rhapsody No. 2 gives the conductor another opportunity to demonstrate his plasticity of line and sustained singing tone that make the most familiar passages sound arresting and persuasive. He is not quite so successful with that most ornery of warhorses, Tchaikovsky's *1812 Overture* (which even its composer most heartily detested) since hushing the prefatory passages and accenting the ingenious interplay of military sounds rather than stressing the brute power of the piece still fails to lift the curse of its banality. Through careful shading, he has tried to present the overture as *music* rather than stress the cannons and the fireworks, but it doesn't work well that way; it *needs* the cannons, since vulgarity and noise are all that it has to offer.

Mr. von Karajan's way with musical monuments is demonstrated once more in his broad, noble treatment of *Finlandia*, which he has recorded before, and again there's some thrilling, beautifully modulated playing to enjoy here—although the work does not leap to life with the urgency it acquired when Toscanini took it in hand. It is, however, the best stereo *Finlandia* around, and brings a rousing hour to an emphatic close.

P. K.

#### RECORDING OF SPECIAL MERIT

**MASSNET: Manon.** Victoria de los Angeles (soprano), Manon; Henri Legay (tenor), Des Grieux; Michel Dens (baritone), Lescaut; Jean Borthayre (bass), Le Comte des Grieux; René Hérent (tenor), Guillot; Jean Vieuille (baritone), De Brétigny; Liliane Berton (soprano), Poussette; Raymonde Notti (soprano), Javotte; Marthe Serres (soprano), Rosette; Chorus and Orchestra of the Théâtre National de l'Opéra Comique, Pierre Monteux cond. SERAPHIM ID 6057 four discs \$11.92.

Performance: **The best there is—or was**  
Recording: **Reasonably good**

That gold mine for discriminating record buyers, the budget-price Seraphim catalog, offers us yet another treasure—the 1956 Opéra Comique recording of *Manon*—after its brief but lamentable absence from the available recorded repertoire. (This performance was first released by RCA Victor, then by Capitol.)

The production exudes authenticity and atmosphere, and an opera such as *Manon*, so naturally and inimitably French, suffers bad-

(Continued on page 106)



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ly if it lacks these things. The guest stars—Victoria de los Angeles and Pierre Monteux—are key parts of the smooth ensemble, a fact hardly surprising in the case of Monteux, whose career began in the orchestra of the Opéra Comique when *Manon* was still a novelty. This is the most distinguished operatic achievement of Monteux's long career, and we are fortunate to have this classic and affectionate *Manon* as part of his recorded heritage.

Victoria de los Angeles is captured here at her best: a youthful, charming, and vivacious *Manon*, singing with a bright, forward tone, virtually without effort throughout the range, and with flawless enunciation. As a vocalist, Henri Legay has his limitations, and they show up in the tense climaxes of the St. Sulpice scene. And yet, his is such a convincing portrayal, so sensitively and resourcefully etched, so elegantly and tastefully phrased, that the overall impression is emphatically positive. Michel Dens and Jean Vieuille are excellent veterans, and René Hérent must be the Opéra Comique's answer to the late Alessio de Paolis with his ability to turn vocal decay into canny characterization. Only Jean Borthayre fails to deliver the full measure of what his role calls for, though he too is more than adequate. What a marvelous opera this is, with all its sharply drawn characters and its human, believable, and sophisticated dialogue!

A new *Manon* with Beverly Sills is reported to be in the offing. Sonically, it will surely surpass the present effort, which shows its age slightly, though it is still enjoyable. But the standard of musical and vocal values documented here will not be easy to match.

G. J.

**PAISIELLO:** *Nina, or La Pazzo per amore*. Dora Gatta (soprano), Nina; Salvatore Gioia (tenor), Lindoro; Agostino Ferrin (bass), the Count; Angela Vercelli (soprano), Susanna; Giuseppe Zecchillo (baritone), Giorgio; Alfredo Nobile (tenor), a Shepherd. Cetra Opera Company Orchestra and Chorus, Ennio Gerelli cond. EVEREST S 467/3 three discs \$8.94.

Performance: **Good**  
Recording: **Fairly good**  
Stereo Quality: **Synthetic**

There is no "Mad Scene" in Paisiello's *Nina*. The heroine parts with her sanity *before* the opening curtain and, by the time she makes her appearance, she is properly "pazzo per amore." Her indisposition, though, is not in the coloratura-fireworks manner, but plaintive and melancholy. And all this because she believes her lover, Lindoro, to have been slain in a duel. But Lindoro is only wounded, and when at last he returns, gentle *Nina* miraculously recovers in time for the joyous finale. Add anxious father, loyal governess, faithful servant, and concerned townspeople, and you have the story of the opera. It is a relatively placid affair by a successful and highly respected composer who was to influence towering geniuses (Mozart and Rossini) and to be instantly eclipsed by them. When the servant Giorgio breathlessly announces Lindoro's recovery, the scene brings to mind Leporello's frantic account of the approaching Stone Guest in *Don Giovanni*'s final scene. Similarly, the final quintet of *Nina* calls to mind the ensemble in the second act of *Le nozze di Figaro*. It would be nice to indicate these as evidence of Paisiello's

forementioned influence on Mozart, save for one detail: *Nina* (1789) post-dated these Mozartian masterpieces. Could the teacher have also been influenced by the pupil?

Paisiello's craftsmanship in matters of melodic invention, expressiveness of writing, and orchestration is admirable, but his dramatic construction is primitive by the Mozart-Rossini standards: the arias are overlong, causing such action as there is to be unconvincingly condensed in the spoken passages that separate the set numbers. And yet there are pages of unusual interest: *Nina*'s aria, "Il mio ben quando verrà" is poignant and lovely, and so is the pastoral air "Già il sol si cela," very well sung by tenor Nobile.

Some (not I) may complain that the vocal lines here are too free of the permissible ornamentations. I find this a very enjoyable performance with singing of a consistently pleasing quality, except perhaps for the soprano who sings the governess Susanna. Or-



SERGE PROKOFIEV  
A photograph taken in 1910

chestra and chorus and good, though they are not too well served by the recording. The sound is fake stereo, but acceptable for its age (around 1955). Italian libretto and English synopsis are supplied. (Since the total is only about 95 minutes, why couldn't Everest have gotten the opera on two discs?) *Nina* is no "must" for an opera library, but it is an interesting and enjoyable item, surprisingly well performed considering the lack of "name" artists in the cast.

G. J.

**PROKOFIEV:** *The Gambler*. G. Troitsky (bass), the General; N. Polyakova (mezzo-soprano), Polina; V. Makhov (tenor), Alexei; A. Sokalov (tenor), the Marquis; B. Dobrin (baritone), Mr. Astley; T. Antipova (soprano), Granny; others. Chorus and Orchestra of the All-Union Radio, Moscow, Gennadi Rozhdestvensky cond. ULTRAPHONE S 163/4/5 three discs \$17.94.

Performance: **Good**  
Recording: **Fairly good**  
Stereo Quality: **Fairly good**

In 1929, when *The Gambler* received its belated world première in Brussels (it had been completed in 1917), Prokofiev observed that, though the performance was very satisfactory, the opera would have made a vastly

different effect in Russia. "In Brussels," he said, "certain actions (of the characters) were considered as examples of the bewildering foolishness of the Slavic soul."

Though the same observation could be made about other Russian operas as well, Prokofiev's point became crystal-clear to me upon encountering *The Gambler* on records. After intensive listening, diligently following the action with the aid of Ultraphone's English libretto, I confess to feeling thoroughly baffled by the strange doings of a group of eccentric Russian aristocrats in nineteenth-century "Roulettenburg" (Monte Carlo, one presumes). Sharing my mystification with my friend Victor Seroff, author of a new and excellent Prokofiev biography, I learned first that Dostoyevsky, whose novel was the source of the Prokofiev opera, was a compulsive gambler, and that the novel itself is considered to be at least partially autobiographical. "Don't expect to understand a Dostoyevsky story from an opera libretto," Mr. Seroff wisely added. "Read the novel. It's only about 200 pages. . . ."

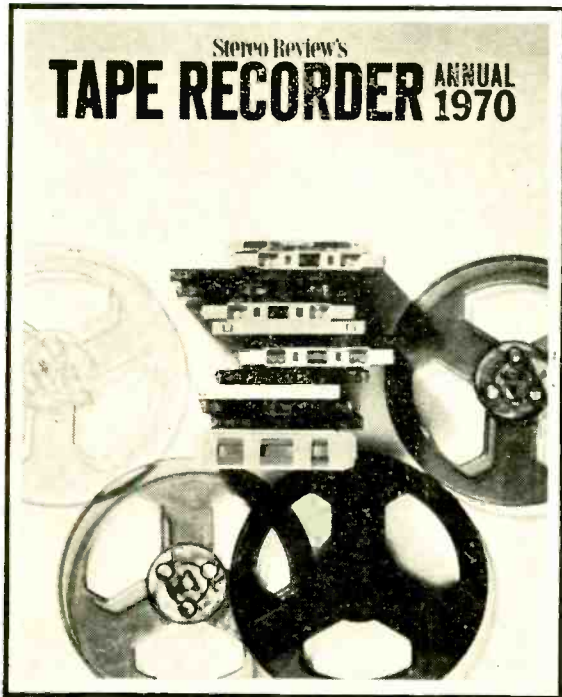
Well, it was only 129 pages, but it was worth it. Dostoyevsky's *The Gambler* is a masterly and penetrating study of Russian aristocratic decadence set against the nineteenth-century equivalent of today's "jet set"—an aggregation of fortune-hunters, gamblers, and international idle rich. The novel is a masterpiece, but only a young and inexperienced composer (Prokofiev was twenty-four when he began working on it) could have regarded it as a suitable subject for an opera. The libretto Prokofiev himself fashioned from the novel simply cannot shape the complex inner lives and the impulsive actions of the many characters into an intelligible continuity. This is evident in the translation of the text, despite the efforts of Ultraphone's immensely industrious Dr. Edward T. Salvato Jr. to master the elusive nuances of the Russian language.

Working against this fundamental problem, Prokofiev nonetheless gave his opera a musical treatment of great vitality and imagination, full of brilliant orchestral effects, including a graphically realistic musical illustration of the frantic action around the roulette wheel. Against the swirling, constantly animated music he set a vocal line of Moussorgsky-derived melodic *parlando*, devoid of memorable phrases. And yet the opera does leave a lasting overall impression, and it is bound to become more accessible as the subtleties of orchestral effects gradually take shape and attain meaning after repeated hearings. The music is somewhat unyielding at first, but the violence with which it was attacked in some circles a generation ago seems almost incomprehensible today. Unquestionably, *The Gambler* is a defective opera, but it clearly points the way toward Prokofiev's operatic peak—to follow shortly thereafter in *The Love for Three Oranges* and *The Fiery Angel*.

Tenor V. Makhov (first names continue to remain classified information in Ultraphone sets) is excellent as the young gambler who unwittingly becomes the center of dizzying social and family complications. As is usual in these productions, the singing is no more than adequate, but mezzo Polyakova and basso Troitsky display remarkable dramatic skills. Effective, too, is soprano Antipova in the brilliantly conceived part of the ancient "Granny" whose legacy would solve

(Continued on page 110)

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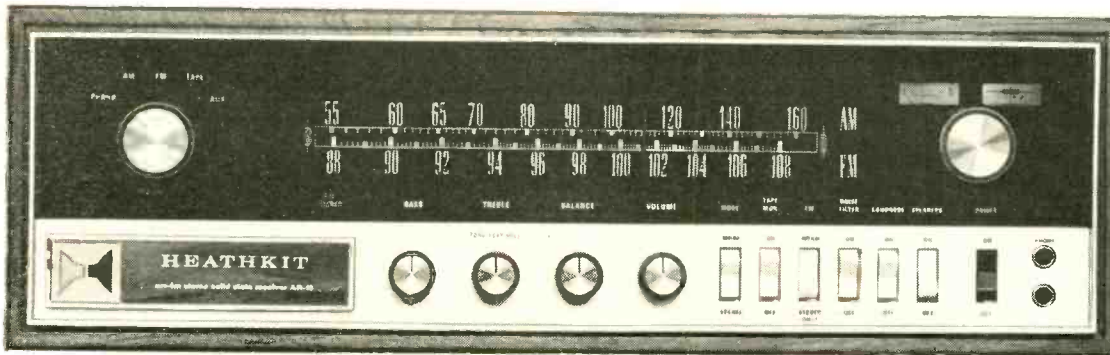
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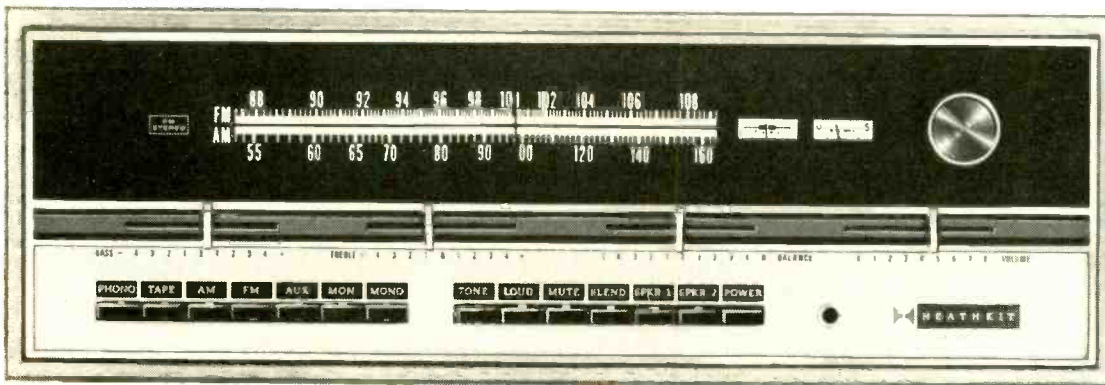
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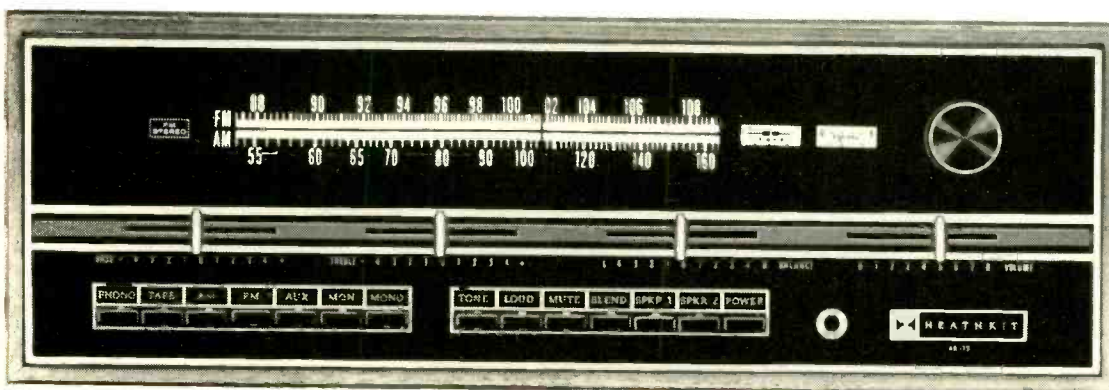
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the financial woes of the entire horde, but who not only refuses to die but comes to Roulettenburg to gamble. It's quite a story (thanks to Dostoyevsky) even if it is only intermittently intelligible (thanks, I am afraid, to Prokofiev). The recording, which is apparently a fairly recent effort, is technically acceptable. *G. J.*

**PROKOFIEV:** *Violin Concerto No. 2, in G Minor* (see SIBELIUS)

**RILEY:** *A Rainbow in Curved Air; Poppy Nogood and the Phantom Band*. Terry Riley (electric organ, electric harpsichord, rock-sichord, dumbec, tambourine, and soprano saxophone). COLUMBIA MS 7315 \$5.98.

Performance: **Indigenous**  
Recording: **Germane**  
Stereo Quality: **Built-in**

Terry Riley is an interesting offshoot of what we might call the mini-music movement. Minimal music, like minimal art, proposes singular and unified experiences extended and/or repeated—generally on out to infinity. Terry Riley's contributions to this genre include the simplest tonal fragments repeated, extended, and varied in endless, overlapping cycles. Like much mini music, it comes from nowhere and goes nowhere; its lack of dramatic curve gives it a suspended-in-time feeling that is quite remarkable.

*A Rainbow in Curved Air* is, like Riley's earlier album, a big uni-tonal fantasy. It is a curious moment of coming together, for it is as pop a piece as the so-called avant-garde has yet produced—not "pop" in the sense of Andy Warhol but of *Yellow Submarine*: joyous fantasies of smiling meadows in flowery aural technicolor.

*Poppy Nogood and the Phantom Band* is, in its original form, an all-night thing that Riley plays on a soprano sax out of which he coaxes an endless series of shenai-like (Indian oboe) phrases. Everything is picked up and tossed back and forth between two tape loops—the barber's mirror effect heading out toward infinity.

Recording timeless, environmental pieces without beginnings, middles, or ends is something of a problem. Although I think the decision to make studio versions was basically correct, it must be pointed out that *Poppy Nogood* emerges here in considerably altered form. And, given the decision that the sides would not end but just stop, the cut-offs could have been handled in more appropriate fashion. Cavils aside, these are big happy escapist fantasies . . . color rainbows, trips, turn-ons. Psychedelic if you like—but not at all mind-expanding. *E. S.*

#### RECORDINGS OF SPECIAL MERIT

**SCHOENBERG:** *Serenade, Op. 24, for Septet and Bass Voice*. Harold Wright (B-flat clarinet); Don Stewart (bass clarinet); Stanley Silverman (guitar); Jacob Glick (mandolin); Jaime Laredo (violin); Samuel Rhodes (viola); Madeline Foley (cello); Thomas Paul (bass); and Leon Kirchner cond. **SCHUBERT:** *Introduction and Variations on "Trock'ne Blumen," Op. 160*. Paula Sylvester (flute); Rudolf Serkin (piano). MARLBORO RECORDING SOCIETY MRS 3 \$6.50.

**SCHOENBERG:** *Suite, Op. 29*. James Corwin (E-flat clarinet); Harold Wright



LEON KIRCHNER

*Music for the love of it from Marlboro*

(B-flat clarinet); Don Stewart (bass clarinet); Jaime Laredo (violin); Samuel Rhodes (viola); Madeline Foley (cello); Ruth Laredo (piano); Leon Kirchner cond. **BOCCHERINI:** *Quintet in F Minor, Op. 42, No. 1*. Pina Carmirelli and Jon Toth (violins); Philipp Naegele (viola); Fortunato Arico and Dorothy Reichenberger (cellos). MARLBORO RECORDING SOCIETY MRS 2 \$6.50 (available only by mail from Marlboro Recording Society, 1430 Spruce St., Philadelphia, Pa. 19102).

Performances: **Beautiful**  
Recording: **Beautiful**  
Stereo Quality: **Beautiful**

The Marlboro Music Festival, Rudolf Serkin's summer establishment in the Vermont hills, has been drawing delighted week-end crowds from all over New England for quite a few years, and the warmth of its concert atmosphere and music-making is such that I have never heard from anyone that he found the trip less than worthwhile. Previously, some recordings were made by Columbia; now there are some new ones issued by the

ARTUR RUBINSTEIN

*A profoundly thought-through conception*



Marlboro Recording Society. The two I have on hand are simply beautiful. I cannot say with certainty that they were taped in the lovely little auditorium at Marlboro. The absence of any program notes whatsoever (my only complaint about these releases) doesn't help in the information department. However, I strongly suspect they were recorded at Marlboro, for the resonant, airy quality of sound, and the mood of the playing—most aptly described, I think, by the word *affettuoso*—evoke exactly the pleasant attributes one encounters on a visit to the Festival.

With Serkin himself playing in the Schubert Introduction and Variations, Op. 160, for flute and piano, one is not surprised to find that the performance is totally splendid. But for winter-time Serkin fans, the special warmth and tenderness of his and Paula Sylvester's playing may come as a small revelation. This is Serkin in his most personal and intimate state of mind—Summer Serkin, as it were.

The two Schoenberg works conducted by Leon Kirchner are favored with the same atmosphere of relaxation and "music-for-the-love-of-it" that color the older music. The composer-conductor has directed exceedingly suave, clean performances, in the sense that every motive and every nuance is exactly in place and smoothly displayed. The music sings out in all its oddly glowing, expressionistic color. The unusual *élan* of the playing, however, has to be credited equally to the virtuoso instrumentalists who, at Marlboro, behave like chamber-music devotees instead of footlight prima donnas. At least, this is the impression one gets from their playing, and it's a fine impression indeed. *L. T.*

**SCHUBERT:** *Introduction and Variations on "Trock'ne Blumen"* (see SCHOENBERG)

#### RECORDING OF SPECIAL MERIT

**SCHUBERT:** *Piano Sonata, in B-flat Major (D. 960)*. Artur Rubinstein (piano). RCA LSC 3122 \$5.98, Ⓢ R8S 1136 \$6.95.

Performance: **A testament**  
Recording: **Good**  
Stereo Quality: **Sufficient**

An artist of Artur Rubinstein's stature and eighty-plus years does not take on idly the recording of a work such as this. This performance, recorded in Rome during June of last year, is obviously the result of a profoundly thought-through conception of what the pianist feels the music is. Having on hand for comparison the classic 1939 reading by Artur Schnabel, as well as an excellent 1961 version on Odeon by Annie Fischer, it became clear at once that Rubinstein, in comparison, has somewhat tempered the lyrical ardor and subjective drama of the music—not so much suppressed these qualities, but brought the maximum of classic balance to phrasing and rhythmic pattern. The result, on initial hearing, seems detached in feeling, but I suspect that it will wear exceedingly well over repeated playings. The recorded sound is clean and bright. *D. H.*

**SCRIABIN:** *Symphony No. 1, in E Major, Op. 26*. Larissa Avdeyeva (mezzo-soprano); Anton Grigoriev (tenor); RSFSR Russian (Continued on page 112)

# HIRSCH-HOUCK REALLY FLIPPED OVER THE NEW CONCORD MARK III



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CIRCLE NO. 13 ON READER SERVICE CARD

Chorus; U. S. S. R. Symphony Orchestra, Yevgeny Svetlanov cond. MELODIYA/ANGEL SR 40113 \$5.98.

Performance: **Good**  
Recording: **Okay**  
Stereo Quality: **Okay**

**SCRIABIN: *Symphony No. 2, in C Minor, Op. 29.*** London Philharmonic Orchestra, Georg Semkov cond. COLUMBIA MS 7285 \$5.98.

Performance: **Good**  
Recording: **Good**  
Stereo Quality: **Good**

Both of the early Scriabin symphonies! Will wonders never cease! These works suggest the upward striving and inner search that was to characterize the composer's later music. Both use expansions of the classical plan: a troubled opener, a storm-and-stress sonata, a reflective and searching slow movement, another cinematic storm, and then an upward-reaching finale which strives for (and doesn't quite achieve) something like exaltation. The First Symphony also has a quirky, charming, but rather irrelevant-sounding Scherzo in the middle. And it uses soloists and chorus in its onward-and-upward-with-the-arts finale—an unbelievably naïve hymn to the sacred muses and holy art. When this work was written, Scriabin's nascent mysticism hadn't quite gotten off the ground.

The Second Symphony is a far more original and sophisticated work, but, like its predecessor, it achieves the commonplace rather than the transcendental in its finale. Both works suffer from a lack of orchestral imagination; the scoring is on the heavy, piano-player side. But there are many remarkable things. The First has an absolutely extraordinary opening—full of suspensions and expressive harmonic aggregates—which, alas, only sets up expectations that cannot be fulfilled. All the slow movements are particularly inspired. And if all the *Sturm-und-Drang* and upward leaping seems a little quaint, it has quite a lot of turn-of-the-century camp value.

The Russian performance is only just fair, and I note, with dismay, what appears to be substantial meddling with the score—there is, for one thing, a suspicious and unpleasant-sounding cymbal that keeps turning up. The recording is, however, one of the less foggy Russian jobs (lots of close-up microphones?). Anyway, in terms of repertoire, there isn't a great deal of choice. In the Second Symphony Semkov performs the rather remarkable feat of getting an English orchestra to sound Russian—even to the quavery, sobbing wind tone that is such a Russian specialty. This is a good performance, rather darkly but decently recorded.

E. S.

**SIBELIUS: *Finlandia* (see LISZT)**

**SIBELIUS: *Violin Concerto, in D Minor, Op. 47.* PROKOFIEV: *Violin Concerto No. 2, in G Minor, Op. 63.*** Henryk Szeryng (violin); London Symphony Orchestra, Gennady Rozhdestvensky cond. MERCURY SR 90453 \$5.98.

Performance: **Elegant**  
Recording: **Good**  
Stereo Quality: **Good**

These are suave, technically accomplished

statements of much-recorded works. Coming into a crowded field, however, it is hard to summon persuasive arguments that would imply *special* distinction. In the Sibelius Concerto, Heifetz, for me, remains unsurpassed. He alone can sail through the formidable bowing and fingering hazards at an unrelenting pace as though these difficulties simply did not exist. Szeryng approaches the work with a silken elegance that matches Heifetz's tonal refinement. His work is technically nearly flawless (there is some imperfect intonation in one of the fiendish octave passages in the first movement), but it lacks the reckless bravado of the Heifetz achievement. It stands comparison, however, with the Oistrakh and the Perlman versions, which lead the others in the catalog.

In the relatively less problematic Prokofiev Concerto, Szeryng need not defer to any other master. It must be pointed out, however, that the catalog already offers perfor-



HENRYK SZERYNG  
*Suave readings of familiar violin works*

mances on a similarly high level by Isaac Stern, Nathan Milstein, and Ruggiero Ricci (in addition to the aforementioned Messrs. Heifetz, Oistrakh, and Perlman). Neither the accompaniments (discreet in the Prokofiev, occasionally unpolished in the Sibelius) nor the recorded sound (pleasant but lacking bite) provide that "extra-special" element that would raise this disc to real distinction.

G. J.

**R. STRAUSS: *Oboe Concerto (1945); Horn Concerto No. 2, in E-flat Major (1942).*** Pierre Pierlot (oboe); Georges Barboteu (horn); Bamberg Symphony Orchestra, Theodor Guschlbauer cond. MUSICAL HERITAGE SOCIETY MHS 975 \$2.50 (plus 50¢ handling charge from the Musical Heritage Society, 1991 Broadway, New York, N.Y. 10023).

Performance: **Good**  
Recording: **A bit over-reverberant**  
Stereo Quality: **Good enough**

A fine coupling, this, and unique, to my knowledge. It is good to have these two lovely late Strauss concertos paired on a disc. The Oboe Concerto fares excellently in veteran oboist Pierre Pierlot's hands, and the

more lyrically ruminative Horn Concerto gets a good workout from soloist Georges Barboteu, who most of the time manages to avoid the saxophone-like tonal quality that is characteristic of today's French players of the horn. Barboteu, however, faces very strong competition from Barry Tuckwell, whose London stereo disc also has the benefit of superior recorded sound, free of the somewhat over-reverberant quality of the Bamberg hall in which these recordings were done; this not only tends to obscure details of the well-played accompaniment, but also makes the soloist sound unduly prominent. This is, however, a relatively minor flaw in an excellent repertoire package.

D. H.

**TCHAIKOVSKY: *Concerto for Violin and Orchestra, in D Major, Op. 35.*** David Oistrakh (violin); Moscow Philharmonic Symphony Orchestra, Gennady Rozhdestvensky cond. ***Symphony No. 6, in B Minor, Op. 74 ("Pathétique").*** Moscow Philharmonic Symphony Orchestra, David Oistrakh cond. MELODIYA/ANGEL SRBO 4112 two discs \$11.96.

Performance: **Not quite first-rate**  
Recording: **Live—in concert**  
Stereo Quality: **Fairly good**

David Oistrakh's sixtieth birthday was celebrated with a pair of concerts on September 27 and 28, 1968, in the Grand Hall of the Moscow Conservatory. The Tchaikovsky Concerto, played by the celebrant under Gennady Rozhdestvensky's baton, and the Sixth Symphony, conducted by Oistrakh himself, were the major selections at the two concerts. Captured for posterity, with applause at the end and the usual audience noises, they add up to a worthy souvenir of the occasion, but otherwise this is a disappointing set.

In the Concerto Oistrakh is, of course, authoritative (it is safe to assume that he has been playing it for fifty of his sixty years). However, his approach to the work is rather more mannered and deliberate than it has been in previous recordings; the first movement, in particular, suffers from overphrasing and a lack of spontaneity. There are a few rough spots, too, both in the solo part and in the accompaniment.

The Symphony is sensibly paced, an emotion-charged yet unhystrical account, but it is entirely undistinguished. It seems wanting in firm rhythmic definition as well as ultimate polish. Technically, the recording is adequate, but surely not the last word in inner clarity. Since superior performances of both works abound in the catalog (including Oistrakh's own earlier account of the Concerto with the Philadelphians on Columbia MS 6298), joining them together in this set hardly makes a winning combination.

**TCHAIKOVSKY: *Overture 1812* (see LISZT); *Quartet No. 1* (see BORODIN)**

#### RECORDING OF SPECIAL MERIT

**TCHAIKOVSKY: *Piano Concerto No. 1, in B-flat Minor, Op. 23.*** Gary Graffman (piano); Cleveland Orchestra, George Szell cond. COLUMBIA MS 7339 \$5.98.

Performance: **A-1**  
Recording: **Opulent**  
Stereo Quality: **Fine**

(Continued on page 114)



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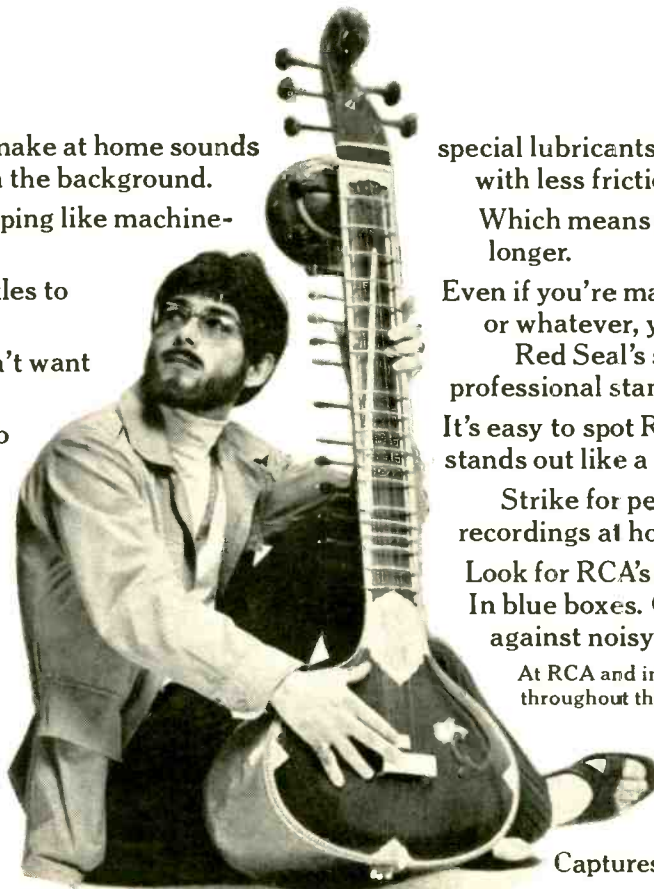
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#### RECORDING OF SPECIAL MERIT

**WALTON:** *Viola Concerto (Revised Version)*. **HINDEMITH:** *Der Schwanendreher*. Paul Doktor (viola); London Philharmonic Orchestra, Edward Downes cond. ODYSSEY 32 16 0368 \$2.98.

Performance: **Beautiful**  
Recording: **Sumptuous**  
Stereo Quality: **Good**

Since hearing a performance of a concerto for viola and orchestra in the concert hall is an experience roughly comparable to finding a flamingo in Antarctica, Paul Doktor's newly released recordings of the Walton Viola Concerto and Hindemith's *Der Schwanendreher* give reason not only to laud him for extraordinary playing, but to praise the record industry as well for filling in another glaring gap in the repertoire. Neither of the two works on this disc is currently available in any other form, and they both certainly belong in the catalog.

Traditionally, the viola was considered a sort of tractable work-horse, plodding along in a string quartet or the string section of an orchestra without any fuss, and serving mainly to fill up acoustical space between the cellos and the violins. This century has brought a slight change in attitude toward the instrument, mostly, it must be said, on the part of composers and a relative handful of concert artists. Hindemith himself was a fine violist, and his activities as composer and performer gave some impetus toward elevating this instrument to solo status. His *Der Schwanendreher*, a pleasantly odd, modern-medieval work based on early German folk songs, is really a concerto for viola and small orchestra, though its title disguises that fact a bit by its reference to the folk song, "Seid ihr nicht der Schwanendreher?" which appears in the finale.

The William Walton opus is a straightforward concerto in three movements, and it is a gorgeous piece of writing. The original score, composed in 1929 when its author was twenty-seven, was somewhat heavier in orchestration and had some differences in the solo part. I am not really familiar with that version. But the present "revised" one, dating from 1961, is one of the most utterly beautiful neo-Romantic works I have heard. The melodies flow on and on with the kind of undulating, oceanic surge one associates with British Romantic music; the textures are dignified and yet fascinatingly colorful, transparent, and varied. It is a more

compelling work on second and third hearing than on the first, which I consider a good sign. In the initial go-around, one may recognize, here and there, a hint of Prokofiev, a touch of Brahms. By the third playing, however, so sturdy is the work in its own individual logic that these "influences" seem to have blended completely into Walton's personal language.

Paul Doktor, the soloist, has, for at least a decade and a half, been among the two or three leading solo violists on the international concert scene. His performances are almost always stunning. But in these two recordings (and it is particularly noticeable in the more brilliant Walton concerto) he transcends even his own usual level of excellence. His tone is warmly handsome, robust, and smooth in the lower and middle registers, and almost unbelievably sweet and refined all the way up to high pitches where the instrument is seldom trusted to go. Tem-

Oxford University Press



SIR WILLIAM WALTON  
*A gorgeous neo-Romantic viola concerto*

peramentally, too, Doktor is ideally suited for this music. He is basically a romantic musician, and the surge and flow of curvaceous melodies bring out his best.

Conductor Edward Downes deserves equal praise for these performances. One senses that he and Doktor must have felt very comfortable together, for the opulent sound he draws from the London Philharmonic matches Doktor's at every moment, and the ensemble rapport is total. Balances within the orchestra, too, are adjusted with thorough sensitivity. In short, this is a recording to remember for many a day. *L. T.*

**WEBER:** *Der Freischütz* (see Best of the Month, page 85)

#### RECORDING OF SPECIAL MERIT

**ZANDONAI:** *Francesca da Rimini: Three Great Scenes*. Magda Olivero (soprano), Francesca; Mario del Monaco (tenor), Paolo; Virgilio Carbonari (baritone), Tower Keeper and Gianciotto; Annamaria Gasparini (soprano), Biancofiore. L'Orchestre National de l'Opéra Monte Carlo, Nicola Rescigno cond. LONDON OS 26121 \$5.98.

Performance: **Effective**  
Recording: **Good**  
Stereo Quality: **Not atmospheric enough**

Riccardo Zandonai's *Francesca da Rimini* (1914) was little appreciated by the Metropolitan Opera (nine performances in 1916 and 1917), but then, relatively speaking, the same was true of *Turandot* and *Mefistofele* in those days. I don't mean to imply that the Zandonai opera is equal to these masterpieces, for Zandonai possessed neither Puccini's superior melodic gifts nor Boito's vivid dramatic imagination. What I do mean to imply is that in these days, when the art of writing viable, effective, audience-appealing operas seems to have reached its nadir, perhaps renewed attention ought to be directed to the "less successful" efforts of the previous generations. After all, an opera's being dubbed "less successful" when compared with the best inspirations of a Giacomo Puccini or a Richard Strauss need not in the least be taken as a dismissal of that work.

The subject of Zandonai's opera comes, of course, from the well-known passage in Dante's *Inferno*, but the opera is based on D'Annunzio's passionate play, a big theatrical success in 1901. Zandonai shared with Italo Montemezzi—another gifted post-Puccinian—the art of colorful orchestral writing and the skillful blending of vocal and orchestral melody in which the vocal lines are paramount but the web of sound is continuous. There are ariosos for both soprano and tenor, but they are not the kind of old-fashioned "arias" that interrupt the action. The vocal writing itself in *Francesca da Rimini* is fervently Italianate, effective for the voices, essentially lyrical, rich in felicitous phrases, but not particularly haunting or memorable. Still, the three extended excerpts offered here—all focusing on the unfortunate lovers who are murdered by Paolo's cuckolded brother in the final scene—renew in me a healthy respect for Zandonai's gift for atmospheric writing. They are quite representative of the opera as a whole (still available in a decent mono performance dating from 1952 on Everest 450). Surely, London's disc of highlights is eminently worth acquiring.

Its greatest asset is Magda Olivero, an artist long admired in Italy, who has been scantily represented on records. Her voice is rather unexceptional at this stage of her career, but she is doing extraordinary things with it: she acts the part convincingly, infuses her phrases with poetry and expressiveness, floats some beautiful pianissimos (as in the phrase "per salvare il marzo" in the second scene), and creates the distinct impression of singing through tears in the arioso "Paolo, datemi pace." Mario del Monaco has long been associated with the role of Paolo Malatesta (he and Olivero appeared in La Scala's 1959 revival), and I only wish that a recording had captured him when he was younger. The text calls for some yearning, tender phrases, but the tenor can supply only hard and inflexible tones—which, however, are impressive for their strength and steadiness, and the accuracy of their intonation.

The orchestral performance sounds convincing and passionate. The overall recorded sound lacks the immediacy and impact of London's best efforts, however, and the stereo possibilities are not realized with the imaginativeness shown in certain other of London's operatic endeavors. *G. J.*

(Continued on page 118)

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How America's top film editor (*Rachel, Rachel; Bonnie and Clyde; Alice's Restaurant*) separates the good from the ordinary with a scissors.

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## COLLECTIONS

### RECORDING OF SPECIAL MERIT

**E. POWER BIGGS:** *The Organ in Sight and Sound*. Thirty-two organs heard in 110 musical examples performed, with commentary, by Biggs. COLUMBIA KS 7263 \$6.98.

Performance: Exceptional illustrated lecture  
Recording: Very good  
Stereo Quality: Good

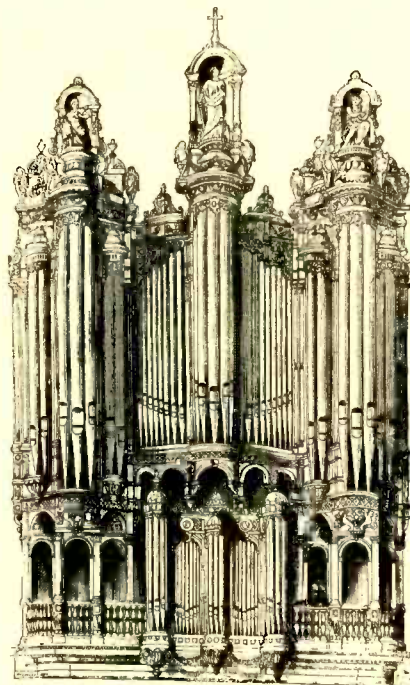
I don't believe anyone has done as much for the pipe organ as E. Power Biggs. First, there were his many years of weekly Sunday morning broadcasts from Cambridge, Massachusetts (what a shame they are no longer taking place), second, there are his concert tours, and finally there are his many, many recordings. Mr. Biggs has for long been a staunch proselytizer for the so-called "classic-style" organ, a term that denotes the principles of organ building before the nineteenth century—tracker action (as opposed to non-mechanical electric action), a lower wind pressure, and a slider chest, among other concepts—all of which were learned by builders of this century through the restoration of old organs. That is basically what this record is about. It is a stereo remake (but not a literal one) of a monophonic album first released as Columbia DL 5288 in 1958 and called simply "The Organ." Like that lavishly produced set, the new one is an excellent aural guide: Biggs explains the history of the organ and the different kinds of sounds it can produce, and demonstrates not only what a wide variety of pipes sound like but how organs differ from each other; here is where the healthy dose of propaganda for "classic" organs comes in. The album notes, naturally, are a visual guide, with updated articles by Biggs and D. A. Flentrop and a superb array of photographs, prints, and drawings. If you read the twenty-eight-page booklet and listen to the disc, you can't help but learn something about the construction of the organ and its capabilities, and I can't imagine anyone doing a better job as a teacher for this sort of thing than Biggs. The sonic reproduction is fine, except for slight constriction at the end of the second side. I. K.

### RECORDING OF SPECIAL MERIT

**FERRUCCIO BUSONI:** *The Issued Records. THREE BUSONI PUPILS PLAY BUSONI.* Bach: *Prelude and Fugue No. 1, in C Major, from Book 1, "Well Tempered Clavier" (BWV 846).* Bach-Busoni: *Choral Prelude, "Rejoice, Beloved Christians!"* Beethoven-Busoni: *Ecossaises.* Chopin: *Prelude, Op. 28, No. 7, in A Major; Etude, Op. 10, No. 5, in G-flat Major (2 versions); Etude, Op. 25, No. 5, in E Minor; Nocturne, Op. 15, No. 2, in F-sharp Major.* Liszt: *Hungarian Rhapsody No. 13.* Ferruccio Busoni (piano). Bizet-Busoni: *Fantaisie super "Carmen."* Michael von Zadora (piano). Bach-Busoni: *Chaconne from the Unaccompanied Violin Sonata No. 4, in D Minor.* Egon Petri (piano). Busoni: *Indian Diary, Book 1.* Edward Weiss (piano). INTERNATIONAL PIANO LIBRARY LIMITED EDITIONS CLUB IPL 104 \$10 for non-members (available from I.P.L., 215 West 91st St., New York, N.Y. 10024).

Performance: Inimitable  
Recording: Early and middle

Side one of this record consists of the known extant recordings of Ferruccio Busoni—disc recordings, not piano rolls. They seem to have been made around 1919 in London and were issued on four English Columbia discs (how curious that nothing more precise is known). It is remarkable and not a little tragic that so perceptive and visionary an artist as Busoni failed to see the significance of recording as a means of preserving his art. At any rate, barring the possible rediscovery of an unissued disc, this is it. It is better evidence than the piano rolls and, except for the fact that vignettes and poetic trifles were not his specialty, we get a pretty good idea of his playing. He took unpardonable liberties, of course—they all did then—but there is nothing the least bit mannered, rhetorical, or exaggerated about this. Everything is structured, full of latent power—not just of technique but of thought and



*The organ in St.-Eustache Church, Paris*

expressive mastery. What one would give to hear him play a Mozart concerto, the "Goldberg Variations," or the "Hammerklavier" Sonata!

No phony stereo, hurray, hurray! In pursuit of absolute purity (a quality that was not very characteristic of Busoni himself) the producers of this disc decided not to equalize or filter the originals in any way. However, it is obvious that a good deal of the scratch, crackle, and pop lies well above the frequency range of the actual recording and, in fact, to make it bearable, I strongly recommend cutting the treble on your amplifier to the necessary degree. Busoni recorded only enough to fill one side of an LP, and side two has been intelligently filled out with recordings by three Busoni pupils: the master's "Carmen" Fantasy played by Michael von Zadora (c. 1929), the once-famous Bach-Busoni Chaconne played by Egon Petri (1945), and Busoni's *Indian Diary* played by Edward Weiss (1952). The last-named, which brings us forward to the LP era, revises the first part of one of Busoni's important works, a striking and monumental treatment of American Indian motifs! Whether or not the playing on side two

represents anything like a "Busoni tradition" is difficult to judge, but this half of the disc contains much of interest and serves as a foil for the murky, fascinating, and madly distant glories of side one. E. S.

### RECORDING OF SPECIAL MERIT

**IVAN DAVIS:** *The Art of the Piano Virtuoso.* Liszt: *Hungarian Rhapsody No. 6.* Chopin: *Andante Spianato e Grande Polonaise.* Moszkowski's "Carmen" Fantasy; *Spanish Caprice.* Schumann: "Abegg" Variations. Rimsky-Korsakov-Rachmaninoff: *The Flight of the Bumble Bee.* Liszt-Davis: *Paraphrase on Themes from Mendelssohn's "A Midsummer Night's Dream."* Liapunov: *Lesghinka.* Ivan Davis (piano). LONDON CS 6637 \$5.98, ® I. 80220 (7½) \$7.95, © M 67220 \$6.95, © X 10220 \$5.95.

Performance: Superb, superb  
Recording: Resonant  
Stereo Quality: Okay

I'm sure it never occurred to the editors when they sent me the above item for review that their avant-garde composer-critic actually owned a score of Moszkowski's *Spanish Caprice*, but such, in fact, is the case. The score actually belonged to my mother, and my early years were bathed in the golden afterglow of such departed glories. I must admit that, when I copped the music out of the family collection, I never dreamt that it would one day be of use professionally; I just took it because I have a taste for various kinds of pop, schlock, camp, and Kitsch.

In spite of this, I popped Ivan Davis on the turntable in a spirit of cynicism. This disc must easily qualify as the classical hype of the year. Besides the title, "The Art of the Piano Virtuoso," and the subtitle, "Homage to a Great Tradition," the cover features old photographs of Liszt, Chopin, Clara Schumann, Anton Rubinstein (but not Arthur!), Rachmaninoff, Hofmann, Lhévinne, and Horowitz, all surrounding a softly tinted, sepia-ish oval-framed photo of Davis. Inside are articles on each of these pianists and more photos ending up with Mr. Davis, of course. Each piece played is supposed to "represent" or "pay homage to" one of Mr. Davis' illustrious predecessors. For example, Josef Lhévinne is represented by the Moszkowski "Carmen" Fantasy, Rachmaninoff by his transcription of *The Flight of the Bumble Bee* and Horowitz by Davis' own transcription of Liszt's version of Mendelssohn. Dig?

Okay, it's a giant hype and a totally phony promotion—with soupy concert-grand sound to suit. But I must say that the playing is simply fabulous. This is not mere blood-and-thunder virtuosity; these pieces, even the baldest of the balderdash, are full of really fine sensibility and poetic touch. Even the gross additions and changes that Davis sees fit to introduce—touching up in the Grand Old Style—as well as the rubatos and other rhetorical flourishes, are managed in great good taste and with musical finesse.

Surely the playing alone would have been enough. Alas, we are entering the Golden Age of Hype—pop and classical alike—and, after all, merely to proclaim that you are the successor of Liszt, Horowitz, et al. is mild enough these days. At least Davis has something to back it up. E. S.

(Continued on page 120)



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**RECORDING OF SPECIAL MERIT**

**THE JOLLY MINSTRELS** (Minstrel tunes, songs, and dances of the Middle Ages on authentic instruments). Adam de la Halle: *Li Mans D'Amor*. Raimbault de Vaqueras: *Kalenda Maya*. Richard Coeur de Lion: *Ja Nun Nons Pris*. Anonymous: *The Song of the Ass* (12th C.); *Ductia* (c. 13th C.); *English Dance* (13th C.); *Conductus: Rege Mentem* (13th C.); *Saltarello* (14th C.); *Estampie* (14th C.); *Lamento Di Tristan* (14th C.); *Estampie* (c. 1325); *C'est La Fin; Estampie* (13th C.); *Ductia* (13th C.); *Conductus: Novus Miles Sequitur; Moulin de Paris* (13th C.); *In Seculum Aviflex* (13th C.); *Sol Ovitur* (13th C.); *Vierbundert Jar Uff Diser Erde* (15th C.); *Trotto* (14th C.); *Worldes Blis* (13th C.); *Alta* (c. 1500); *Die Suss Nachtigall* (15th C.); *Pour Mon Coeur; Estampie Royale* (13th C.). Gerald English (tenor); The Jaye Consort. VANGUARD CARDINAL VCS 10049 \$3.98.

Performance: Superior  
Recording: Excellent  
Stereo Quality: First-rate

A great deal of this medieval repertoire, though not quite all of it, is available in collections by the Early Music Quartet, the New York Pro Musica, Safford Cape's Pro Musica Antiqua of Brussels, and some of the *Expériences Anonymes* anthologies, to mention only some of the major sources. But if there is not much out of the way in this program's varied selections, the album does make a superb introduction to the music of the twelfth through the fifteenth centuries. Not the least of the disc's attractions are the engaging and flavorful performances. These are expertly conceived, with just the right amount of lyricism and vital spirit. Gerald English is most sensitive in his vocal assignments, and the large assortment of instruments of the period (fifteen are shown on the cover photograph, including a hurdy-gurdy, minstrel's harp, various lutes, and percussion) are extremely effectively played by the members of the Jaye Consort. The recording is first-rate, but the notes (no vocal texts or translations, just an occasional synopsis) are surprisingly skimpy. Furthermore, there is no description of the instruments themselves other than an identification chart. In spite of this serious omission, I would still advise obtaining this collection if you haven't had much experience with medieval music—it is delightful.

I. K.

**RECORDING OF SPECIAL MERIT**

**JOHN McCORMACK: Arias.** Mozart: *Don Giovanni: Il mio tesoro*. Méhul: *Joseph: Champs paternels*. Bizet: *Carmen: Flower Song; Les Pêcheurs de perles: Mi par d'udir ancora*. Gounod: *Faust: Salve dimora*. Delibes: *Lakmé: Vieni al contento profondo*. Massenet: *Mignon: Il Sogno*. Puccini: *La Bohème: Che gelida manina*. Boito: *Mefistofele: Dai campi, dai prati; Giunto sul passo estremo*. Herbert: *Natoma: Paul's Address*. Wallace: *Miritana: There is a flower that bloometh*. Balfe: *The Bohemian Girl: Then you'll remember me*. Wagner: *Tristan und Isolde: O König, das kann ich dir nicht sagen*. John McCormack (tenor); orchestral accompaniments. RCA VICTROLA VIC 1472 \$2.98.

Performance: Magical  
Recording: Variable

John McCormack started out as an opera singer, but his enormous popularity as a concert artist and his lack of respect for those "old operas with impossible librettos" eventually led him to cease operatic activity altogether. (The story is informatively told in Philip L. Miller's annotations for this record.) Every once in a while, though, he would go to a recording studio to show his active opera-singer colleagues how the thing is done. He left a precious heritage of operatic recordings, and RCA has been in the habit of reissuing them in various guises every decade or so. "Die Frist ist um," as the Dutchman would say—the time is now—and here is the latest, a complement to the already released Victrola 1393. There are fourteen selections here, from the justly celebrated *Il mio tesoro* to the documentation of his "creator's" role of Paul in *Natoma* (with composer Victor Herbert himself conducting the orchestra); from the fabulous *Mefistofele*

RCA



JOHN McCORMACK  
*One astonishing vocal feat after another*

arias to his memorable recorded fling as Tristan.

If there ever was a prize package, this is it—a succession of one astonishing vocal feat after another; incredible diminuendos, endless breath supply, exquisite cadenzas and ornamentations, clear diction, perfect intonation, total and unflinching control. Everybody, himself included, knew McCormack's limitations as an actor, but these limitations do not interfere with the persuasive dramatic effect of his recorded interpretations.

Some of the record surfaces are noisy. Producer Robert Zarbock, whose work in these areas deserves great praise, has wisely elected not to tamper with the original sound and kept the voice quality true. In any case, the excessive noise on two or three selections can be reduced with treble attenuation. My advice: look at the value that goes with this ridiculous price, and get not one but two copies of the disc. It may be deleted soon, and ten years is a long time. . . . G. J.

**THE MOOG STRIKES BACH** (see *The Well-Tempered Synthesizer*)

**RECORDING OF SPECIAL MERIT**

**MUSIC FOR BRASS, 1500-1970.** Palestrina: *Ricercar sopra il primo tuono*. Reiche: *Baroque Suite*. Dowland: *Four*

*Dances*. Susato: *Five Flemish Dances*. Michael East: *Desperavi, Triumphavi*. Pezel: *Six Seventeenth Century Dances*. A. Simon: *Quatuor en forme de Sonatine. Op. 23, No. 1*. Ewald: *Quintet in B-flat Minor, Op. 5*. Glazounov: *In Modo Religioso, Op. 38*. Poulenc: *Sonata for Trumpet, Horn and Trombone*. Hindemith: *Morgenmusik*. Bergsma: *Suite for Brass Quartet* (1945). Dahl: *Music for Brass Instruments*. Starer: *Five Miniatures*. Tanenbaum: *Improvisations and Patterns for Brass Quintet and Tape*. Manzoni: *Quadruplum*. Bozic: "Kriki" for Brass Quintet, Voice and Tape. Whittenberg: *Triptych for Brass Quintet*. American Brass Quintet (Gerard Schwarz, trumpet; John Eckert, trumpeter; Edward Birdwell, French horn; Arnold Fromme, tenor trombone; Robert Biddlecome, bass trombone). DESTO DC 6474/5/6/7 four discs \$23.25.

Performance: Excellent  
Recording: Excellent  
Stereo Quality: Good

For something more than a week, now, I have been admiring the look of the American Brass Quintet's handsome black, white, and gold box of "Music for Brass 1500/1970," greedily waiting for a day when I would have an afternoon to savor its contents. Having heard and respected this virtuoso group in concert, and knowing its fine reputation (especially as performer and commissioner of contemporary brass scores) I wanted to hear the four-disc, almost four-century compendium at leisure.

It was worth waiting for. As it turned out, one afternoon was not nearly enough, for eight sides is a lot of brass, and I had to take it in several healthy chunks.

The first record of the four is devoted to ancient music (mostly in transcriptions), ranging from a piece attributed to Palestrina through works by Gottfried Reiche, John Dowland, Tielmann Susato, Michael East, and Johann Pezel of "tower music" fame.

Sides three and four are devoted to late nineteenth-century works by Anton Simon, Victor Ewald, and Alexander Glazounov. Apparently at the turn of the century, a special enthusiasm for brass ensemble music arose among certain, mostly minor, composers in Russia, and these three composers' works were uncovered in St. Petersburg.

The second half of the American Brass Quintet's generous venture is devoted entirely to music of our own century—four record sides of it—and this, for me, is the most fascinating part of the collection. Poulenc's *Sonata for Trumpet, Horn, and Trombone* dates from 1922, the Hindemith *Morgenmusik* from 1932. The remaining works, most of them by Americans, and several commissioned by the Quintet, represent the Forties (Bergsma's *Suite*, Dahl's *Music for Brass Instruments*, Starer's *Five Miniatures*) and the Sixties (works by Tanenbaum, Manzoni, Bozic, and Whittenberg). The Fifties have been skipped.

To begin again at the beginning, I should certainly mention that the American Brass Quintet, since its formation in 1954, has probably done more than any other such ensemble to re-elevate brass music to high estate, and to encourage expansion of the twentieth-century brass literature. The group has everything to recommend it. The galaxy of attractive timbres the members produce is

(Continued on page 122)

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(Stereo Review, January 1968)



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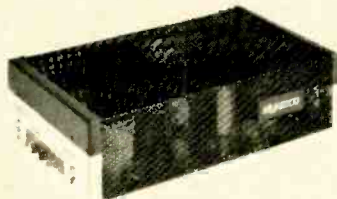
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**The Stereophile, Vol. 2, No. 9, 1968**

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**Julian Hirsch in Stereo Review, January, 1968**

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impressive beyond belief, and their control of dynamics, their ability to play fast and difficult figured passages, their rhythmic verve and sense of style—all these are much more than first-rate.

On the record containing ancient music, their pure sound and excellent ensemble playing are easily identified in the context of simple, consonant harmonies and smooth contrapuntal interplay. The nineteenth-century disc, though equally well performed, is simply less interesting musically. But the group's full range of abilities is displayed most amply and convincingly in the twentieth-century works. Elias Tanenbaum's *Improvisations and Patterns for Brass Quintet and Tape* is a particularly fascinating opus: full-blooded, sensitive, and original. The tape portion of this piece was composed on this year's "glamour-boy" of the electronic world—the Moog synthesizer. Ingolf Dahl's *Music for Brass Instruments*, slightly Coplandesque or Stravinskian at times, is nevertheless a very distinguished piece indeed. Bergsma's *Suite for Brass Instruments* is flashy, bright-spirited, a little light-weight. But, then, it is not really striving to be more than a divertissement.

Charles Whittenberg's *Triptych*, the Yugoslavian composer Darijan Bozic's *The Cries* for brass quintet, voice, and tape, and Robert Starer's *Five Miniatures* are, each in a different way, important and admirable works. The *Triptych* is severely structured and angular, and produces many interesting colorations both of harmonic sonority and of instrumentation. The Bozic work is more dramatic. It is theatrical and atmospheric, using a male voice to declaim with intensity in the midst of sensitively wrought sounds from brasses and electronic tape. It is a short work, but pithy. (Unfortunately the side containing the two latter pieces is afflicted, at least on my review copy, with some untoward fly-specks of static.) Since the Starer *Five Miniatures* were written in 1948, when neo-classicism was in full flower, it is not surprising to find that they partake of that general ambiance. They are excellent examples of a very respectable genre. L. T.

**LILY PONS:** *Arias.* Handel: *Floridante: Alma mia; Alessandro: Lusinghe più cave.* Pergolesi: *Se tu m'ami.* Mozart: *The Abduction from the Seraglio: Avec la tendresse.* Donizetti: *Lucia di Lammermoor: Mad Scene.* Verdi: *Rigoletto: Caro nome; Tutte le feste.* Grétry: *Zémire et Azor: La Fauvette.* Meyerbeer: *Dinorah: Ombre légère.* Thomas: *Mignon: Je suis Titania.* Rimsky-Korsakov: *Le Coq d'Or: Hymn to the Sun.* Delibes: *Lakmé: Bell Song.* Lily Pons (soprano); flute obbligatos by George Possell and Henry Bove; orchestras, André Kostelanetz and Rosario Bourdon cond. RCA VICTROLA VIC 1473 \$2.98.

Performance: Very enjoyable  
Recording: Oldish, but well restored

This reissue of a reissue (all of these selections come from the long-deleted Camden CBL 101 two-disc set) documents Lily Pons' first American decade (1930-1940) when she was the undisputed Queen of the Coloratura Scene—a title she continued to hold and thoroughly enjoy for at least a dozen years more, but with Columbia affiliation.

With a few and relatively minor exceptions, the disc is a treat. The *Seraglio* aria ("Durch Zärtlichkeit") is not idiomatic in



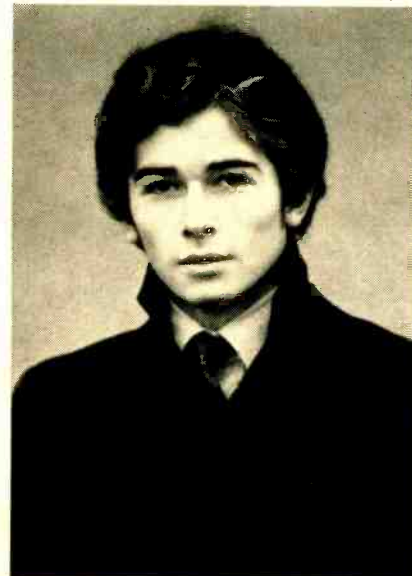
LILY PONS  
Well-remembered élan and vivacity

French, and the *Hymn to the Sun* is spoiled by uncertain intonation. On the other hand, the little-known Grétry aria turns out to be a gem, beautifully sung, and the Handel and Pergolesi items are also admirably suited to the artist's style and special gifts. The *Lucia* Mad Scene (from 1930) plumbs no dramatic depths, but vocally it is assured and brilliant. The technical display is even more impressive in the Meyerbeer, Thomas, and Delibes arias: florid passages are tossed off with ease and near-perfect intonation, and the *staccati* are quite spectacular. And, above all, there is the well-remembered Pons élan and vivacity in everything she does.

The engineering is entirely satisfactory, but of course cannot remedy the undernourished and not too inspiring orchestral accompaniments. Francis Robinson's "inside" commentary lends a becoming touch to this welcome recorded souvenir of the pert, forever colorful, and deservedly unforgotten diva. G. J.

**ALADÁR RÁCZ:** *At the Cimbalom.* Traditional: *Three Hungarian Csárdáses; Im-*

STAFFAN SCHEJA  
Formidable technique and musicality



*provisations on Rumanian Melodies; Two Hungarian Folk Songs; Rumanian folk dance (arr. RácZ); Improvisations on Hungarian Melodies (solo).* Scarlatti: *Sonatas: G Minor (L. 338); F-sharp Minor (L. 481).* Muffat: *Minuet.* Daquin: *L'Amusante.* Couperin: *Musette de Choisy; Musette de Taverny.* Bull: *Allemande.* Stravinsky: *Valse and Polka (with spoken introduction).* Aladár RácZ (cimbalom); Yvonne RácZ (piano). BARTÓK (M) 929 \$4.81.

Performance: Flavorful  
Recording: Excellent considering source

Aladár RácZ (1886-1958), who can be heard on several discs (Westminster and Bartók) in addition to this one, was undoubtedly Hungary's most celebrated cimbalom player. He was a sort of Landowska of that instrument, in that he tried to elevate it to concert status from its more customary place in the gypsy popular orchestra. This collection, made at the performer's Budapest home during the final year of his life, gives a good indication of his achievements: in the Hungarian and Rumanian traditional pieces one can hear the full flavor of this dulcimer-like instrument, a table with a trapezoid top and 120 strings whose sound is activated by being hit by hammers held in the hands of the player. RácZ's Hungarian background is most evident in his consummate handling of rhythms. The second side contains mainly earlier repertoire, very skillfully, albeit romantically, played. One highly interesting exception is a transcription, from some four-hand piano pieces, made by Stravinsky himself when he met RácZ in 1915. In all these works (with the exception of a Hungarian improvisation) RácZ is accompanied discreetly on the piano by his wife. The quality of the sound, considering the obvious informality of the home recording session, is startlingly realistic. For those who enjoy the role of the cimbalom in such a work as Kodály's *Háry János*, this recital may be of considerable interest. Notes on the performer and the instrument are provided. I. K.

**STAFFAN SCHEJA:** *Romantic Swedish Piano Music.* Larsson: *Sonatine No. 1, Op. 16.* Stenhammar: *Three Fantasies, Op. 11.* Wirén: *Ironical Miniatures, Op. 19.* Rangström: *Legends from the Lake Malaren.* Staffan Scheja (piano). RCA LSC 3119 \$5.98.

Performance: Very smooth  
Recording: Splendid  
Stereo Quality: Fine

The Swedish pianist, Staffan Scheja has a lot going for him. Not only does he possess a really formidable keyboard technique and, seemingly, musicianship to go with it, but he's only nineteen years old and, if his photo doesn't lie, looks almost like a reincarnation of the late James Dean. It's not difficult to believe that he may have "made Stockholm's teen-age girls come to the concert hall."

It's a pity that on this important occasion, which seems to be his recording debut, he should have so little interesting or substantial music under his fingers. The entire record is given over to Romantic piano music by four Swedish composers. None of their names is familiar to me, but their birth dates (1871, 1884, 1905, 1908) put them into rather elderly generations. Most of the pieces chosen for this recording are early works, so

(Continued on page 125)



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*Twenty-first in a series of short biographical sketches of our regular staff and contributing editors, the "men behind the magazine"—who they are and how they got that way. In this issue, Assistant Technical Editor*

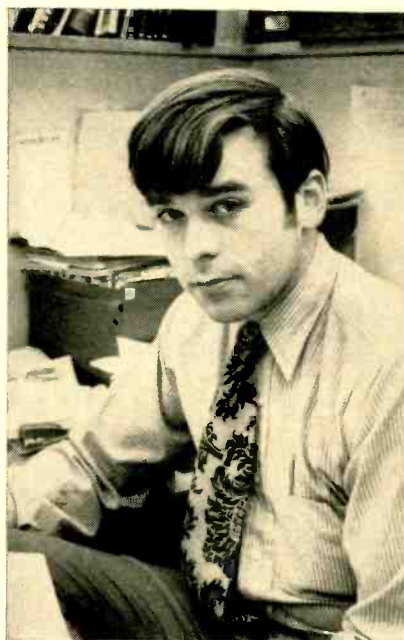
## RALPH HODGES

By WILLIAM LIVINGSTONE

A MAN'S hearing, and particularly his ability to perceive very high frequencies, deteriorates as he approaches middle age. Consequently, when a multi-band tone-control device was demonstrated recently in the STEREO REVIEW editorial offices, it was not surprising that the only person on the staff who could hear the highest test frequencies was Assistant Technical Editor Ralph Hodges, who is only twenty-six.

Born in Hartford, Conn., the son of an orthodontist, Ralph counts among his earliest recollections the old Koussevitzky recording of *Peter and the Wolf* (which he reduced to powdered shellac on the family phonograph) and *Le nozze di Figaro* as staged by a local Hartford company. He became more familiar with serious music while singing in the choir of his elementary school and later that of his secondary school, Kingswood Academy. Most of his listening has been given over to the classics ever since.

"I blundered into some understanding of electronics," he says, "because I was often involved with electronic things. Just before my teens I assembled my first kits, a ham radio transmitter and receiver. To no one's surprise they never worked. When stereo emerged, an aggressive salesman in a record store sold me one of the early stereo portables. After a while I noticed a rattle in the left speaker and began tearing apart the cabinetry to get at it. By the time the phonograph was stripped down to its basic parts and scrutinized, I had lost all faith in the thing's ability to function as a decent reproducer. I decided to replace it piecemeal with components, and again turned to kits to ease the expense of the



B. Patchewsky

undertaking. At that time there were kit turntables and even kit tone arms on the market, along with amplifier kits. Gradually I accumulated these and constructed the speaker systems myself. They were the first of several designs." By the time he was a senior in high school, he had finally assembled a system he could live with.

His ear for language was trained at Kingswood, where he was associate editor of the literary magazine, editor of the yearbook, and winner of the essay prize. Following graduation from the academy (*cum laude*) in 1961, he entered Columbia University, where he majored in English and also took courses in music history, including one taught by the late composer Henry Cowell.

"At that time I seemed to be headed in the direction of an academic career," Ralph says. "At Kingswood I was trained in writing papers on English and American literature. By the time I got to Columbia I had the hang of it and was encouraged by some of the professors there, but my work seemed to me merely clever, if that. When I realized what a plodding affair serious literary research was, I knew I would have to get out of that line and seek brighter prospects."

He graduated from Columbia in 1965 and went home to Hartford to think about what those prospects might be. With time on his hands he returned to his audio hobby and bought a new stereo amplifier kit. "It was my first experience with solid-state equipment," he says, "and I ran into some problems. I consulted the owner of the kit manufacturer's local warranty station, and the next thing I knew I was working for him. In the course of a

year spent in repairing early transistorized units and correcting the mistakes of amateur kit builders, I learned something about solid-state electronics from a practical point of view."

In 1967, he decided to pack up his components and move to New York to seek his fortune in the publishing industry. He got a job with an editorial contracting firm (Copeland & Lamm, Inc.) that specialized in textbooks, and spent the next two years exercising his writing and editing skills on college texts in history, literature, and mathematics. In June of 1969, after marrying his beautiful wife Veronica, he felt he was ready for a professional step forward. Having learned that the position of assistant technical editor at STEREO REVIEW was open, he applied for it.

Ralph's rare combination of experience with high-fidelity equipment, interest in music, and proven editorial ability impressed the editors, and they promptly hired him. Under Larry Klein's supervision he now writes the "New Products" column and the "Installation of the Month" feature, maintains liaison with contributing editors Hans Fantel and Craig Stark, handles most reader correspondence and the paperwork associated with incoming manuscripts and equipment, and acts as general technical factotum and backstop for the technical editor. His first feature article appears in this issue on page 65.

COMMENTING on his dual interest in audio equipment and music, Ralph says: "I am often asked if I am not more interested in the performance of the equipment than the performance of the musicians, and I suppose there must be some truth in this. My tastes in music include many of the densely polyphonic and the dramatically orchestrated areas in which high fidelity's accuracy and definition shine. I am a little sorry that the speaker systems one constructs in the basement can no longer surpass—if even equal—factory designs. High fidelity is no longer a hobby in that sense, but there is still the music.

"I have been a faithful reader of STEREO REVIEW for many years, and am both delighted and surprised at being with the magazine—delighted because my interest in high fidelity was renewed after college when I found out how good it had become, and surprised because I once thought that life led one inevitably away from the familiar. I especially enjoy the company of the staff here, and find the work worthwhile and challenging. Moreover, as long as music and its reproduction continue to have a future, I hope to have a part in it."

the somewhat tame and indefinite sentiments are hardly cause for surprise. Perhaps the only real twentieth-century element discernible in any of the music is the influence of Prokofiev, whose "wrong-note" style is occasionally audible.

Thus, I'll have to judge this extraordinary teen-ager's abilities somewhat tenuously, having no real evidence to indicate what he could do interpretively with more substantial music. I am willing to guess, however, that he would do splendidly. He seems to have no technical problems whatsoever. His fingers move with precision and an evenness that is neither machine-like nor glib. Speed flusters him not at all, and he produces a perfectly lovely tone. The only potential handicap I notice is a certain impassiveness of sentiment, and a slight "squareness" in his interpretations. However, one doesn't expect Rubinsteinian depths from a nineteen-year-old, and there is hardly much in the music he's playing on this record to call forth the ultimate in passion from anybody. I hope that his next recording opportunity will treat him a little more kindly as an executant, even if it has to slight the cause of these older Swedish gents, or Patriotism, or Romanticism, or whatever. Scheja deserves to be heard in some really strong, important music. L. T.

#### RECORDING OF SPECIAL MERIT

**THE SERAPHIM GUIDE TO RENAISSANCE MUSIC** (72 Vocal and instrumental works from the thirteenth to the seventeenth centuries, including music by Perotinus, Tassin, Coeur de Lion, d'Agincourt, Alfonso el Sabio, de la Halle, Machaut, Jacopo da Bologna, Landini, Lorenzo de Firenze, Gherardo da Firenze, Dunstable, Dufay, Legrant, Paumann, Isaac, Walther, Sachs, Othmayr, Resinarius, Cornyshe, Henry VIII, Sandrin, van Lublin, Ortiz, Gulielmus, Encina, Valderrabano, Ganassi, Focoli, Gastoldi, Pesenti, Ockeghem, des Prés, Obrecht, de la Rue, Susato, de Turnhout, and Sweelinck). Syn-tagma Musicum of Amsterdam; with Sven Berger (one-handed flute, fife, kortholt, cow's horn, and cornett); Johannes Collette (fiddle); Gusta Goldschmidt (lute); Ben de Ligt (violin); and Mary Macrow (fiddle); Kees Otten dir. SERAPHIM SIC 6052 three discs \$7.47.

Performance: **First-class**  
Recording: **Excellent**  
Stereo Quality: **Commendable**

This whopping anthology runs more or less chronologically from its opening piece, an organum *Alleluja* by Perotin of about 1200, to a Sweelinck harpsichord toccata, the same composer's vocal "*Marchans qui traversez*" (both from the beginning of the seventeenth century), and a *Gagliarda* by Martino Pesenti for cornett and continuo dating from 1645. What, you may ask, is a Renaissance collection doing starting so early and ending so late? Well, I don't have a ready answer, although I suspect that Seraphim didn't want to get stuck with a title such as "The Seraphim Guide to Medieval Music, Renaissance Music, and just a little bit of the beginnings of the Baroque." To be precise, some musicologists have argued that the Renaissance in music can conceivably begin as early as 1250 (that does, however, leave out the present ballade for solo fife by Richard Coeur de Lion, who died in 1199); but

usually Renaissance music is said to have begun in the fifteenth century, which means that the first three sides of this six-sided album are pre-Renaissance—*Ars Antiqua*, *Ars Nova*, and all that. The Pesenti piece at the other end of the spectrum is a very good example of early Baroque, mainly because of the use of continuo, one of the important innovations of that period.

Well, titles and pigeonholing can be annoying at times, and what is no doubt rather more important (assuming you now have a fairly clear idea of what is covered in this album) is the contents, not to mention performances. The selection of works is excellent; there is a great variety, both instrumental and vocal, of smaller ensemble pieces from this enormous repertoire, including works by Flemish, English, Spanish, Polish, Italian, French, and German composers. Some very clever contrasts are made: Pierre Sandrin's chanson *Douce memoire* is heard,



"Hausmusik"—engraving (c.1480) Meckenem

for example, in its original vocal version, and this is followed in turn by a keyboard setting by Jan van Lublin and a viol *ricercar* on the same tune by Diego Ortiz. The same carefully judged variety can be heard in the performances, which are technically of the highest quality. The players and singers are most sensitive to their materials and to the different styles; there is, for instance, a lovely feeling of lyricism in the fifteenth-century *Sancta Maria* by Dunstable, and, as well, a good sense of jaggedness in the *Kyrie* of the anonymous fourteenth-century Tournai Mass. Charm and liveliness come through delightfully in such a humorous ditty as the anonymous *Czener greuer* from the fifteenth-century Glogauer Liederbuch, and Dufay's *Flos Florum*, from the same period, is rendered with the utmost in expressiveness. It all adds up to a fine, beautifully performed collection, which, understandably, cannot pretend to offer anything like a complete sampler of the myriad styles of music during these five centuries. The album's one serious shortcoming is the text booklet, which contains most of the texts (but no translations) and some well-intentioned but skimpy comments that deal in synopsis-like paragraphs of oversimplification and an occasional dangerous generalization ("A villan-

cico, or Christmas carol, . . ."). What was really needed here was a well-illustrated booklet which gave the full historical background of the periods, not to mention pictures and descriptions of the actual instruments used. Even if that meant paying a full six dollars a disc, it would have been worth the extra cost. L. K.

**THE WELL-TEMPERED SYNTHESIZER.** Monteverdi: "*Orfeo*" Suite; "*Domine Ad Adjuvandum*" from *Vespri della Beata Vergine*. Scarlatti: *Sonata, in G Major, L. 209/K. 445*; *Sonata, in D Major, L. 164/K. 491*; *Sonata in E Major, L. 430/K. 531*; *Sonata, in D Major, L. 465/K. 96*. Handel: *Water Music: Bourrée; Air; Allegro Deciso*. Bach: *Brandenburg Concerto No. 4, in G Major (BWV 1049)*. Walter Carlos (engineer-transcriber). COLUMBIA MS 7286 \$5.98.

**THE MOOG STRIKES BACH.** Chopin: *Etude, Op. 10, No. 5 ("Black Key")*. Mozart: *Turkish March; Eine Kleine Nachtmusik (K. 525)*. Rachmaninoff: *Vocalise, Op. 34, No. 14*. Prokofiev: *Prelude, Op. 12, No. 7*. Wurman: *Thirteen Variations on a Theme of Paganini*. Bach: *Tocatta and Fugue, in D Minor (BWV 565)*. Hans Wurman (engineer-transcriber). RCA LSC 3125 \$5.98.

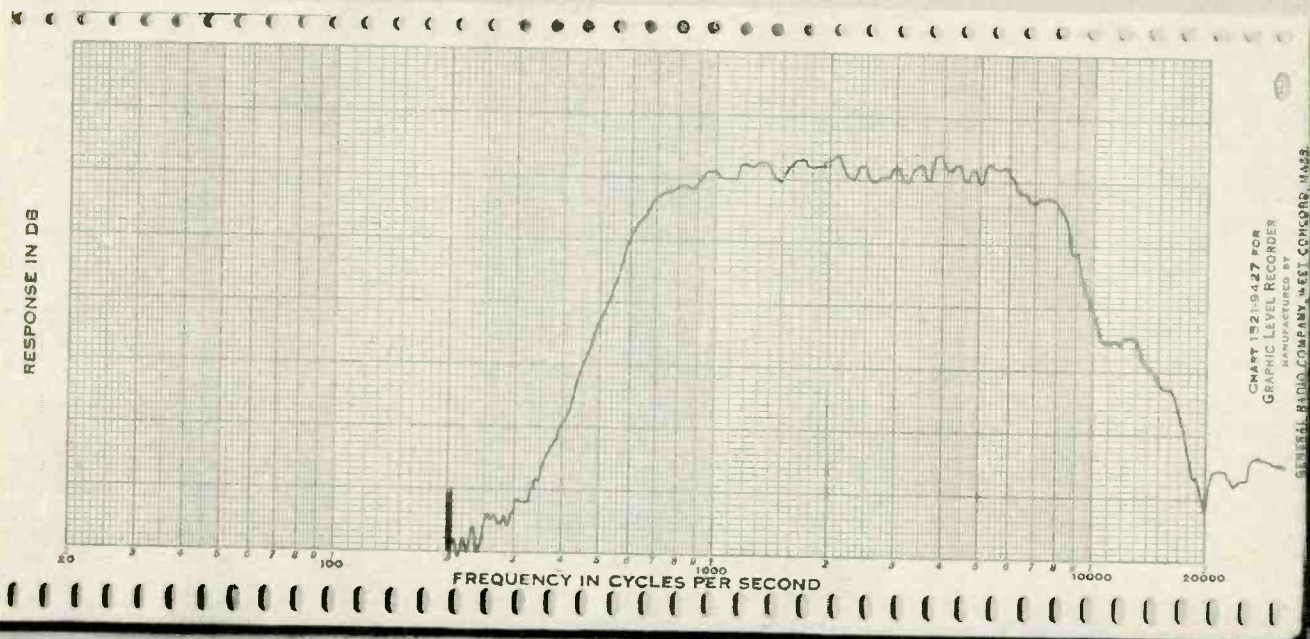
Performances: From amusing to grotesque (Col.), awful (RCA)  
Recording: Presumably accurate (Col.), ditto (RCA)  
Stereo Quality: Part of package (Col.), ditto (RCA)

Well, here we go again! The ancient Romans may have had the calliope, but we, being a more advanced people, have the synthesizer. Or, rather, we have several synthesizers, of which one is represented on these discs. The more I hear of this one, at least as it is employed by present hands, the more its limitations become glaringly apparent. Although engineer-transcribers have obviously worked with great doggedness and diligence at the patch-panels and dials, the auditory results on these records can only be fairly described as travesty, in the straight, dictionary sense of the word.

Of course, if anyone wants to go to the trouble, qualitative distinctions can be made between any two things, even travesties. In this particular instance, I would venture that Columbia's is of somewhat higher refinement than RCA's, whose effort, entitled "The Moog Strikes Bach (to say nothing of Chopin, Mozart, Rachmaninoff, Paganini and Prokofieff)"—oh, if only those poor, public-domain composers could themselves strike back—probably hits the taste-nadir of all time, including even Caligula's Rome. However, one really cannot be that much more sanguine about the Columbia issue. To listen to the succession of wilted hiccups that tries to pass itself off as the cadenza of the Bach Fourth Brandenburg Concerto is to subject yourself to one of the most impoverished auditory experiences imaginable. If you happen to be familiar with the original piece, or the original cadenza, which is both the climax of the Concerto and probably the most brilliant, audacious, spine-tingling cadenza that any Baroque composer ever wrote for the violin, you will be taken down and disenchanted. The "new" one will strike you only as misguided and pathetic. As, indeed, both these ventures are. L. T.

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# ENTERTAINMENT

POPS • JAZZ • FILMS • THEATER • FOLK • SPOKEN WORD

Reviewed by DON HECKMAN • PAUL KRESH • REX REED • PETER REILLY

**CHET ATKINS/BOSTON POPS/ARTHUR FIEDLER:** *Chet Picks on the Pops*. Chet Atkins (guitar); Boston Pops Orchestra, Arthur Fiedler cond. *Wimoweb; Spanish Harlem; The Last Waltz; Ode to Billie Joe; Delilah; Galveston*; and four others. RCA LSC 3104 \$5.98, Ⓟ R8S 1129 \$6.95, Ⓢ RK 1129 \$6.95.

Performance: Good  
Recording: Good  
Stereo Quality: Excellent

Someday I expect to hear that Arthur Fiedler and the Boston Pops are recording with Mrs. John Mitchell; it seems as though they have backed everyone else of note or notoriety. This time it is Chet Atkins, one of the leading Nashville lights, in a collection of pop songs slickly arranged by Richard Hayman to accent Atkins' guitar talents. It is a glossy job, with Atkins sounding particularly good in such things as *Scarborough Fair* and a medley of *The Battle of New Orleans* and *Sugarfoot Rag*. The Pops really is an American recording institution, and I never fail to be impressed by their conviviality and Fiedler's joyous beat. As a matter of fact, I find Fiedler just about the best around for the symphonic-orchestra approach to pop music. P. R.

**HARRY BELAFONTE:** *Homeward Bound*. Harry Belafonte (vocals); orchestra, William Eaton cond. *Homeward Bound; Sad Heart; The Last Time I Saw Her; The Dolphin; If I Were a Carpenter*; and five others. RCA LSP 4255 \$4.98, Ⓟ P8S 1515 \$6.95.

Performance: Sulky and sultry  
Recording: Superb  
Stereo Quality: Tactful

Harry Belafonte is depicted on the cover of his latest album napping by the side of a railroad track in a handsome mattress-ticking shirt while he evidently waits for the train that will take him home from God knows where. Inside, the drowsiness of the visage in the photograph seems to cling to the singer's voice as he puts his talent to work on ballads about sad hearts, homesickness, and other rueful subjects. The Belafonte sound is as velvety and caressing as ever; he puts his heart into everything, whether he's

asking the lady in *If I Were a Carpenter* whether she'd marry him and have his baby, or turning *Suzanne* from a pretentious bore about a madonna-like creature I hope I never meet into something less garrulous and more musical than it usually seems. In fact, no number in the album can be faulted for performance. But Mr. Belafonte will not be hurried; he does everything at the same mesmeric pace, and his programs are beginning to sound positively funereal because he refuses to spice them up with anything even remotely resembling a change of pace. I wish he would reconsider, for on the back cover



BUTTERFIELD BLUES BAND  
"White" blues done to perfection

he is shown wide awake and smiling with a flash of particularly white and even teeth. Are we never to share that mood when he sings? P. K.

**THEO BIKEL:** *A New Day*. Theo Bikel (vocals); instrumental accompaniment. *Urge for Goin'; Jennifer Juniper; Lady Jane; I Love My Dog; For No One; Amsterdam*; and five others. REPRIS RS 6348 \$4.98, Ⓟ B 6348 (3¾) \$5.95, Ⓢ 4RA 6348 \$5.98.

Performance: Tampered with Theo's "image"  
Recording: Excellent  
Stereo Quality: Too much

Mr. Bikel is a seasoned, well-proved, deservedly honored performer of folk music, as well as of the musical theater, but record companies nowadays are taking no chances on merely solid reputations. The producers at Reprise have taken Mr. Bikel in hand and fitted out the founding father of the Newport Folk Festival with a brand new set of

musical clothes. That he emerges scathed only slightly from this ordeal by updating is a tribute to the indestructibility of his talent. Some of the garments he has to model here include Joni Mitchell's *Urge for Goin'*, which he is rather too mature to wear; Peter Yarrow's *The Great Mandala*, a number he almost wrecks by trying to treat it as an operatic aria; and Paul McCartney's *For No One*, a sad song about the bitterness of separation that is also ill-fitting for a voice as hearty as Bikel's. He does, however, acquit himself beautifully in George Harrison's taunting attack on the middle class called *Piggies*, in *I Hear the Laughier*, and, despite a super-production complete with sound effects and off-stage roistering that almost inundates the song, in Jacques Brel's stirring ballad *Amsterdam*. All in all, yes—the "new" Bikel brings the album off, in spite of the handicaps. P. K.

**MICHAEL BLOOMFIELD:** *It's Not Killing Me*. Michael Bloomfield (vocals and guitar); orchestra. *If You See My Baby; For Anyone You Meet; Good Old Guy; It's Not Killing Me; Goofers; Why Must My Baby*; and five others. COLUMBIA CS 9883 \$4.98. Ⓟ HC 1192 (3¾) \$6.98, Ⓢ 18 10 0722 \$6.98, Ⓢ 16 10 0722 \$6.98.

Performance: More suburban than country  
Recording: Good  
Stereo Quality: Good

Michael Bloomfield, a talented guitarist, makes a go here for some Dylan territory in an album that tries for a country feel and misses by a country mile. It just isn't there, particularly in his vocals. On something like *For Anyone You Meet*, a rear-jerker, he sounds about as authentically c-&-w as Sergio Franchi would. Bloomfield has written all the material here, and the best of the lot is the title song. One thing I can say for the whole enterprise is that it has been carefully and well produced, and that it has a cheerfully modest and youthful air about it. That aside, it seems of small interest. P. R.

## RECORDING OF SPECIAL MERIT

**THE BUTTERFIELD BLUES BAND:** *Keep on Moving*. The Butterfield Blues Band (vocals and instrumentals). *Love March; No Amount of Loving; Morning Sunrise; Losing Hand; Walking By Myself; Except You*; and six others. ELEKTRA 74053 \$4.98.

Performance: Perfect Butterfield  
Recording: Bravo  
Stereo Quality: Good

Paul Butterfield's still remains one of the  
(Continued on page 130)

### Explanation of symbols:

- Ⓡ = reel-to-reel tape
- Ⓢ = four-track cartridge
- Ⓟ = eight-track cartridge
- Ⓢ = cassette

Monophonic recordings are indicated by the symbol Ⓢ; all others are stereo

# JOSÉ FELICIANO

## "Alive Alive-O!" at the London Palladium

Reviewed by HENRY PLEASANTS



RCA

I ATTENDED José Feliciano's London Palladium concert last October, and listening to the playback on the two-disc album RCA derived from it stimulated a lot of second thoughts about "live at" recordings in general and about José Feliciano in particular.

The basic problem of "live at" records is that what works in the theater does not necessarily work on record—indeed, it is unlikely to work. The vibrant relationship between artist and audience is of the moment, the place, and the occasion; it cannot be reinvented, revived, or even sustained. Nor can it be transmitted to others. This is especially true of Feliciano, for his is an uncommonly engaging, amiable, and outgoing personality. His pleasure in music is obviously intensified by sharing it with others. He likes to sing. He likes to play. And he likes to sing and play for people.

It's hard to pick nits when an artist is so talented, even harder when the artist is so eager to please, and particularly hard when he gives so much pleasure. A Feliciano concert quickly becomes a love affair, with the audience almost immediately and irrevocably predisposed in the artist's favor. As you can hear on these records, jokes, puns, take-offs, and send-ups that were greeted uproariously were not really all that good. And the applause betrays an audience hardly inclined to discriminate. Feliciano did some wonderful things at the Palladium that night. And some that were not so wonderful.

In short, I enjoyed the concert more than I enjoyed the records. How much better, I thought, must Feliciano be in a studio performance, unencumbered by all that applause, the "thank yous!" and "I love yabs!" and the corny punning and the irrepressible mimicry (he's wonderful on Dylan) and the apparently random interpolations. And so I got hold of a batch of his previous releases—and changed my mind!

Several of the things he did at the Pal-

ladium appear on earlier records—*California Dreamin'*, *Light My Fire*, *Hi-Heel Sneakers*, and *Don't Let the Sun Catch You Cryin'*—and with every one of them I found the Palladium recording preferable. Not superior, necessarily—just preferable. And largely because Feliciano, working without fancy backings and trimmings, and with time to stretch out, comes through so much more naturally, so much more *alive!* There is something to be said for "live at" recordings after all.

More could be said for this one had more of the chatter and applause been edited out and more of what he played and sang edited in. But on balance it is a good account of Feliciano and a good account of the occasion. Feliciano comes over clearly as a very talented young man in search of a style, or, perhaps, as a young man impatient of the restrictions implicit in the style he already has.

To my ears he is an urban blues singer, and works at his excellent best either in blues material or in material at least not incompatible with his penchant for blues-based ornamentations, embellishment, and melodic extravagance. I like him best in such songs as *Nobody Knows You When You're Down and Out*, *Hi-Heel Sneakers* (although he stays with it too long), his own *Rain* and *California Dreamin'*. Some of the Spanish things are very nice, notably *El Jenite*, in which he easily takes a sensational high D in head voice (in falsetto he sings up to an F).

But when he brings the same embellishments and deviations to the Lennon-McCartney *Day Tripper* and *A Day in the Life*, it just doesn't wash. The latter, especially, is an example of stylistic disaster. Feliciano bends this essentially plain, wan, simple melody all over the place, and he ruins it. He did the same thing at the concert (they are not included on the records) to *Miss Otis Regrets* and *Windmills of Your Mind*.

In reviewing the concert for the Inter-

national *Herald Tribune* I observed that Feliciano, both as singer and guitarist, "has more talent than he knows what to do with." It's almost entirely, I think, a question of style. He obviously is not content to be just a blues or soul singer, or, to be more precise about it, a bluesy singer. But if he wants to satisfy his obvious enthusiasm for many kinds of music, he must broaden his stylistic base.

Two bands require some explanation. *No Dogs Allowed* refers, of course, to the British quarantine on dogs coming into Great Britain. It used to be six months in a government-controlled kennel, and is now eight. And there are no exceptions, not even for Feliciano's Seeing Eye. And the playing of *God Save the Queen* at the beginning of the concert had everybody confused. First there was the familiar drum roll behind the curtain. Everybody stood up. Then came the guitar, and everybody sat down, laughing at what was assumed to be a send-up. Then, when it was clear that Feliciano was really playing the national anthem, everybody stood up again. The laughter, for obvious reasons, has been edited out. Most of it, anyway.

Remember when Feliciano rocked *The Star-Spangled Banner* (and, ever so slightly, the nation) at the World Series in Detroit in 1968? Well, he's an irrepressible fellow, and that has a lot to do with making him pretty irresistible.

**JOSÉ FELICIANO: *Alive Alive-O!*** José Feliciano (vocals and instrumentals). *God Save the Queen*; *Hi-Heel Sneakers*; *Rain*; *Malagueña*; *El Jenite*; *Nobody Knows You When You're Down and Out*; *El Voh*; *The Comedy Bit*; *Guantanamera*; *No Dogs Allowed*; *Mama Don't Allow It*; *Don't Let the Sun Catch You Cryin'*; *Day Tripper*; *A Day in the Life*; *Medley*; *California Dreamin'*; *Light My Fire*; *La Envidia de Bilbao*. RCA LSP 6021 two discs \$9.98. Ⓡ TP3-5000 (3¾) \$9.95; selections Ⓡ P88-1537 \$6.95, Ⓢ PK-1537 \$6.95.

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biggest and best of the "white" blues bands. No longer considered eccentric, his weird jazz-blues-folk-rock is now as common as strobe lights in today's dance dungeons. Butterfield himself remains ahead of his time with each new record—by always adding just a little bit of something different. I think it safe to say he was one of the first to switch folk-rock on to electricity, back in 1965. Then he took all those smoky Chicago-oriented blues sinkhole songs and brought them out into daylight.

On "Keep on Moving," he presents twelve original creations, and they are all great. I can't find even a vaguely weak spot in this record after many playings. It's too bad that much of what is original on this record today sounds like Blood, Sweat and Tears, or others. But remember, Paul was here in this jazz-based bag first. Though the songs are new, they have that magic suffering syndrome synonymous with all great blues. *Except You* is a really smashing torch song that will hang in my memory for a long time. Paul Butterfield has been doing everything right for a long time. He still keeps on moving in that direction. R. R.

**THE BYRDS:** *Ballad of Easy Rider*. The Byrds (vocals and instrumentals). *Ballad of Easy Rider; Fido; Oil in My Lamp; Tulsa Country Blue; Jack Tarr the Sailor*; and six others. COLUMBIA CS 9942 \$4.98.

Performance: **Okay if you like the Byrds**  
Recording: **Very good**  
Stereo Quality: **Very good**

I've never been much of a Byrds fan. Yes, their music is pleasant; yes, it contains piquant touches of country music, folk music, etc., etc. And, yes, despite various personnel hassles, the group has maintained a sturdy musicality. But I still don't get turned on by them. I've listened to this collection four or five times now, and still find that it forfeits my attention within five minutes after I put it on the turntable. *The Ballad of Easy Rider* (from the film, of course) is about the only thing that grabs me. And that just ain't enough. Sorry, Byrds—maybe next time.

D. H.

**CREEDENCE CLEARWATER REVIVAL:** *Green River*. Creedence Clearwater Revival. *Green River; Commotion; Tombstone Shadow; Wrote a Song for Everyone*; and five others. FANTASY 8393 \$4.98, (R) X 8393 (33 $\frac{3}{4}$ ) \$5.95, (4) X 48393 \$5.95, (8) MI 88393 \$6.95, (C) X 58393 \$5.95.

Performance: **Top-forty white Delta blues**  
Recording: **Very good**  
Stereo Quality: **Very good**

The enormous popularity of Creedence Clearwater is a mystery to me. It is an imitative group that, despite its protestations to the contrary, has based its style upon a synthetic interpretation of black delta-style blues. Synthetic because all the guts, emotion, disjunct rhythms, and sometimes indecipherable black dialect have been slicked up and packaged with a country-green ribbon for all the white folks. The Poo-bah of the group is obviously lead guitarist and vocalist John Fogerty, who arranged and produced the record and wrote eight of the nine songs. It is his voice that gives Creedence its most distinctive sound, and it is his arranging that has so successfully diluted the many complex elements of black blues. The fact

that singles by Creedence have been riding the charts for months now tends to confirm my belief that blues provide American popular music with its greatest source of continued vitality. But I can't understand why—short of some kind of freaky thing in the cultural subconscious—audiences continue to prefer bland popularizations to the real thing. D. H.

#### RECORDING OF SPECIAL MERIT

**THE FLOCK:** The Flock (vocals and instrumentals). *Introduction; Clown; I Am the Tall Tree; Tired of Waiting; Store Bought-Store Thought; Truth*. COLUMBIA CS 9911 \$4.98.

Performance: **Special, but superb**  
Recording: **Excellent**  
Stereo Quality: **Excellent**

The Flock may just be too good for their own good—commercially, that is. First, they are all top-flight musicians, with special honors going to Jerry Goodman on violin, Frank Posa on trumpet, and Rick Canoff

from any source that I have heard in some time. The production and sound on every band here is close to flawless.

I hope I am not scaring anyone here with my description of the Flock and making them seem a "serious" group with intellectual aspirations. The music here is truly *populu* music, be it called rock or whatever, and it offers dynamic possibilities as to where that music in general is going. That this group most obviously knows what it is about should not lead anyone to think that it lacks vitality or force. Instead it seems to gain in both those qualities because of its sureness and real musicianship. I have called the album "special" only in the sense that it is going to need, I fear, a lot of support from the people who like it for it to succeed in any way equivalent to its worth. P. R.

**DAVID FRYE:** *I Am the President* (see Best of the Month, page 87)

**THE FUGS:** *The Belle of Avenue A*. The Fugs (vocals and instrumentals), Ken Pine arr. *Bum's Song; Dust Devil; Chicago; Four*



**THE FLOCK:**  
*Exploring musical territory beyond the current definition of rock*

and Tom Webb on tenor sax. Second, their ensemble playing and the production accorded them here are superb. Third, and this may be the snag, their compositions and performances show them to be a group that is exploring musical territory beyond the current definition of rock. Their work is a true fusion of musical ideas drawn from all sources, both classical and popular. They really are the first "new thing" to happen in pop music for quite a while.

Each of the performances here is an entity unto itself, with the built-in unity of thought and execution that one usually associates with "serious" music. That is not to say that the essential vitality and emotionalism of rock is sacrificed for spurious gloss. Far from it. I think that the amount of genuine feeling they can create while working out their musical statements is one of their great strengths. The opening (*Introduction*), for instance, features the really impassioned violin playing of Jerry Goodman set against an orchestral mosaic of blues, jazz, and rock. It is some sort of weird and wild concerto, quite different from anything I have heard before and hypnotically engrossing. There are only six bands on this recording, and, as so seldom happens, the longest, *Truth*, which runs almost sixteen minutes, turns out to be the best. It is here that the musical synthesis that the Flock is trying to create achieves its greatest success. It is one of the best pieces of new music

*Minutes to Twelve; Mr. Mack; The Belle of Avenue A; Queen of the Nile; Flower Children; Yodeling Yippie; Children of the Dream*. REPRISE RS 6359 \$4.98, (4) RA 6359 \$5.98.

Performance: **Fun from Avenue F**  
Recording: **Cacophonous**  
Stereo Quality: **Okay**

Remember yesterday when the Fugs shocked all of us down to our puritanical pedicures? Who had ever heard such brazen lyrics? They were downright dirty. And the music! Was it music or just so much eye-glazing iconoclasm? And they were hairy—long before hair was a status symbol, or an impossible-to-get-Broadway-ticket. They were pro-pot, pro-bisexuality, pro-love, pro-flowers. They were anti-war, anti-cop, anti-hate, and anti-authority. They still have all of those hangups, and what's more, a large minority now agrees with them. Oddly enough, the Fugs have not lost their bite. Nor have they become passé or boring. Though they are not very long on musicality, they do have an innate intelligence. I get the feeling that all the time they're so deadly serious, they're also having a great laugh on themselves and on me. I forgive them, because down deep under all the unwashed veneer, the Fugs remain innocent and naïve. R. R.

**JEFFERSON AIRPLANE:** *Volunteers* (see Best of Month, page 87)



**JETHRO TULL:** *Stand Up*. Jethro Tull (vocals and instrumentals). *A New Day Yesterday*; *Jeffrey Goes to Leicester Square*; *Bourée*; *Back to the Family*; *Look into the Sun*; and five others. REPRISÉ 6360 \$4.98, ⓑ B 6360 (3¾) \$5.95, Ⓞ 4RA 6360 \$5.98.

Performance: Eclectic pop-rock  
Recording: Very good  
Stereo Quality: Very good

Jethro Tull is one of the rare rock groups that support their commercial popularity with a considerable degree of musical skill. Energized by the flute playing, composing, and singing of Ian Anderson, the group is the product of his musical psyche. Their first album sounded to me too much like jazz gone wrong, like a mediocre jazz flutist trying to find commercial success in rock music. Shortly after it was released I heard Jethro Tull "live" and was even less impressed. On the basis of this new effort, however, I must admit to a change of heart, since the group ranges far and wide, from delightful quasi-Baroque pieces like *Jeffrey Goes to Leicester Square* to a genuine contemporary *bourrée*, from sweet English folk melodies to hard-driving rock. The traces of inadequate jazz are gone, and Anderson and the others clearly have made the decision to go with the eclectic style they can play best.

D. H.

**TOM JONES:** *Live in Las Vegas*. Tom Jones (vocals); orchestra, Johnnie Spence cond. *Turn on Your Love Light*; *Hard to Handle*; *Delilah*; *Yesterday*; *Hey Jude*; *Twist and Shout*; *Danny Boy*; *Bright Lights*;

*Love Me Tonight*; and four others. PARROT PAS 71031 \$4.98.

Performance: Maiden's and matron's delight  
Recording: Good  
Stereo Quality: Good

One of the highlights of a recent night-club engagement by Tom Jones in New York was that several ladies in the audience felt themselves so moved by the Jones *persona* that they threw their panties on stage in lieu of applauding. Why Jones is considered so sexy remains a mystery to me. It certainly is not his voice, which sounds like a third-rate imitation of any blues singer, so it must be his movements and looks that carry his message. Since neither of these are available on a recording (aside from requisite front and back cover photos), I guess the girls will just have to imagine the wriggles, the perspiration, and the orgasmic approach to everything, including, so help me, *Danny Boy*.

This recording was made "live" at the Flamingo in Las Vegas, and from what I can gather from the shrieks and moans of the audience, it was mainly women. The men seem surprisingly silent—or perhaps they are just tensely waiting for the dreaded sound of snapping elastic. Mercifully, Jones keeps his introductions short as he plows through some of his better-known hits, such as *Delilah*, *I Can't Stop Loving You*, and *It's Not Unusual*. In everything he performs he seems a "Mr. Cufflinks" to me. By that I mean that his manner evokes for me a pair of very large cufflinks, probably with some sort of monogram, set with diamond chips and perhaps a ruby or two. They may,

or may not, resemble an accompanying jeweled "pinkie" ring. It is the kind of unconscious vulgarity that is difficult to resent and is reminiscent of the way old-time Hollywood stars used to act. And in a strange way it has a kind of innocence about it which I suppose many women find endearing.

I do wish, however, that Jones would stop harping on his Welshness in his introductions, since his singing sounds, if anything, like that of an American black man. Besides, it only serves to remind me of Dr. Fagan, in Evelyn Waugh's *Decline and Fall*, who informs the hero that "The Welsh are the only nation in the world that has produced no graphic or plastic art, no architecture, no drama. They just sing," he said with disgust, "sing and blow down wind instruments of plated silver." P. R.

#### RECORDING OF SPECIAL MERIT

**KING CRIMSON:** *In the Court of the Crimson King*. King Crimson (vocals and instrumentals). *21st Century Schizoid Man*; *I Talk to the Wind*; *Epitaph*; *Moonchild*; *The Court of the Crimson King*. ATLANTIC SD 8245 \$4.98.

Performance: Awesome  
Recording: Fine  
Stereo Quality: Excellent

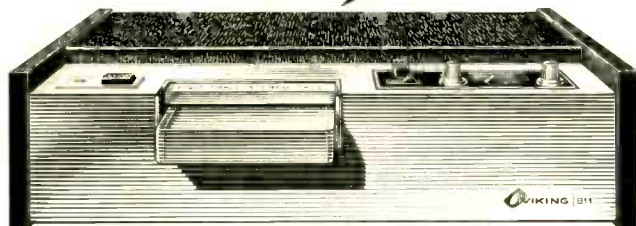
After the opening band, *21st Century Schizoid Man* (including *Mirrors*) finished here, I felt like I had a rift in my head from ear to ear. But then *Talk to the Wind* followed, and I listened to these truly poetic lyrics with total incredulity. This is a beautiful

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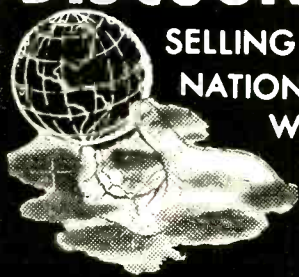
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song, and so is the next one, *Epitaph*. So I started side one over, this time *prepared* for the electric assault of band one. Wow! King Crimson has got it and got it big. This is a musical happening, and the musical shock waves will continue to widen and will silence all in awe. I caution those who do not have an open mind for new approaches to music; King Crimson may just blow your mind and the roof. Acid rock is not to be passed around lightly; it sometimes produces bum trips. But I find this first album spellbinding and enjoy it best when I am alone. Sometimes absurd in its parts, the "Court of the Crimson King" makes beautiful sense as a whole. Try it yourself and see. R. R.

**AL KOOPER:** *You Never Know Who Your Friends Are*. Al Kooper (piano, organ, guitar, ondioline and vocals); various other musicians. *Magic in My Socks; Lucille; Too Busy Thinkin' 'bout My Baby; First Time Around; Loretta; Blues—Part IV*; and six others. COLUMBIA CS 9855 \$4.98, Ⓜ HC 1190 (33/4) \$7.98, Ⓢ 18 10 0718 \$6.98.

Performance: **Where's the real Al Kooper?**  
Recording: **Very good**  
Stereo Quality: **Very good**

Al Kooper is a musical enigma. Bursting with ideas, he enlivens all aspects of his recording productions with a flair and originality that is matched by few of his contemporaries. His ideas extend from art work to musical arrangements, from choice of performers to the composition of much of the material on his albums. One waits expectantly to hear what will come out of all this.

What is puzzling is that despite the bustling in all directions, the wearing of many hats, the sticking of fingers in everyone's pie, the results rarely seem worth the effort. It is as though Kooper's obsession with so many activities throws him off balance. His music has a fragmented, even intermittent quality, in which the focus is on the building up of many small elements. Unfortunately, assembling them rarely results in anything more than the sum of the individual parts.

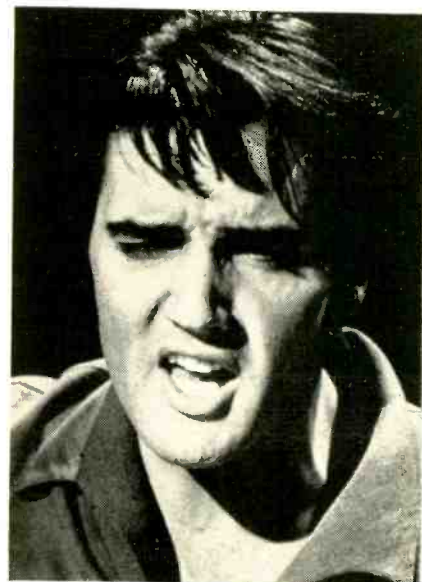
Like Kooper's previous recordings, this set bounces about from late-Fifties, Spectorish rock pieces to blues—particularly when Kooper plays organ—to crude attempts at humor (they usually have something to do with false starts and engineer's instructions), to feeble satires. Pieces like *The Great American Marriage/Nothing* presumably are intended to be funny, but one is always left with the horrible suspicion that Kooper might really be serious. The few beguiling musical moments that he comes up with too often are surrounded, and overcome by, his over-manipulative mind. D. H.

**LEE MICHAELS.** Lee Michaels (vocals and instrumentals); Bartholomew Smith-Frost (drums). *Tell Me How Do You Feel; (Don't Want No) Woman; My Friends; Frosty's; Think I'll Go Back; Stormy Monday; Who Could Want More?; Want My Baby; Heighly Hi*. A&M SP 4199 \$4.98, Ⓜ AAM 4199 (7 1/2) \$6.95, Ⓞ AAM 4199, Ⓢ 5.98, Ⓢ AAM 4199 \$6.95, Ⓞ AAM 4199 \$6.95.

Performance: **Duet for virtuoso and drum**  
Recording: **Fine**  
Stereo Quality: **Very good**

To those familiar with Lee Michaels' first album, "Carnival of Life," the word "vir-

tuoso" is synonymous with his name. Lee Michaels is a virtuoso performer on the piano, on the bass, vocally, and best of all, on the organ. Things have not changed in this latest release, titled simply with his name. Together with an incredibly talented drummer, Lee Michaels creates the biggest two-man-band sound I've ever heard. The information offered on the jacket cover is brief but to the point. It states that in six hours and forty-five minutes, Michaels, with the dazzling help of "Frosty" and producer Larry Marks, completed this record. But his great creative gift is a burden, and it—plus Michaels' youth—occasionally drowns these two in pools of self-indulgence. An especially tedious puddle occurs on side one, when "Frosty" the drummer is allowed an endless display of *his* virtuosity on the skins. Once heard, a drum solo stays heard forever. It is side two that is rewarding. *Stormy*



ELVIS PRESLEY  
*A living legend*

*Monday's* sustained organ chords pleading for mercy as effectively as any great blues voice could ever do—coupled with Michaels' own personal vocal agony—inspires the first of my bravos. An honest heavy-rock number titled *Who Could Want More?* follows. In *Want My Baby*, Michaels turns on the charm and gently sweet-talks his way through a gospel-like love song. He keeps the best until last in the form of a mighty yet confined twister of a super-hit he calls *Heighly Hi*. It is here, with his virtuosity under strict control, that Michaels jumps right off the record at you. Bravo once again. R. R.

**MOBY GRAPE:** *Truly Fine Citizen*. Moby Grape (vocals and instrumentals), Bob Johnson arr. *Changes; Circles Spinning; Looper; Truly Fine Citizen; Beautiful Is Beautiful; Love Song*; and six others. COLUMBIA CS 9912 \$4.98, Ⓢ 18 10 0746 \$6.98.

Performance: **The four horsemen of the bucolic**  
Recording: **Good**  
Stereo Quality: **Good**

Moby Grape is a polished quartet of young men who hide their basically sophomoric hillbilly musical hearts under tons of left-over Beatles gloss and the sticky rock fluff of

a few years ago. Their sound is highly professional, and it is all well performed, but it doesn't "get to me." Their music is not sophisticated enough to live side by side with Vanilla Fudge or Blind Faith. I suspect their audience must be the bubble-gum set of Madison Avenue. In other words—adult juveniles. I'm certain teenagers or the really turned on are too deep in another groove to dig this sound, which, by today's standards of acid or stone rock, is absolutely bucolic.

Nothing exceptional happens in any of these songs. Just lots more of the same—refried Beatles. And what, may I ask, happened to the vocals on *Love Song*? It sounds like someone brought the curtain down for this one. The boys were just left standing there screaming their little white souls out through tons of drapery folds. Maybe they finally were embarrassed singing such a flagrantly dead-beat love song. R. R.

#### RECORDING OF SPECIAL MERIT

**FRANK PATTERSON:** *Songs from the Four Corners of Ireland.* Frank Patterson (tenor); orchestra, T. C. Kelly cond. *Killarney; The Rose of Tralee; The Star of the County Down; Slievenamon; The Gentle Maiden; The Banks of My Own Lovely Lee; Kitty of Coleraine; The Meeting of the Waters;* and seven others. PHILIPS PHS 900242 \$5.98.

Performance: **Superior Hibernian tour**  
Recording: **Good**  
Stereo Quality: **Good**

Frank Patterson is an affable-looking Irishman with a powerful tenor that is reminiscent of John McCormack's, and if that isn't praise I don't know what it is. Mr. Patterson takes us on two tours of his country, the first scenic, the second political. By way of Killarney and County Kerry he moves us from song to song down from the North through the central plains and south to County Tipperary, to Cork on the banks of the Lee, and finally to County Wicklow, all the while extolling the scenery and the beauty of the collens in song. On side two he sings three of Thomas Moore's most famous songs with their revolutionary overtones and tears for a vanished heroic time, while the harp "hangs mute on Tara's walls." Songs of defiance are interspersed with others of the woes of Irish emigrants homesick for the old sod and of the glory of the bold Fenian men. It's a stirring concert in all, and a special word of praise should be added for the impressionistic arrangements played by a fine, though anonymous, orchestra under the direction of T.C. Kelly. P. K.

#### RECORDING OF SPECIAL MERIT

**ELVIS PRESLEY:** *Elvis in Person at the International Hotel Las Vegas.* Elvis Presley (vocals and instrumentals); various accompaniments. *Blue Suede Shoes; Johnny B. Good; All Shook Up; Are You Lonesome Tonight; Hound Dog; I Can't Stop Loving You; My Babe; Medley; Mystery Train; Tiger Man; Words; In the Ghetto; Suspicious Minds; Can't Help Falling in Love;* and ten others. RCA LSP 6020 two discs \$9.98, (R) TP3 5077 (3¾) \$9.95, (R) P8S 5076, \$9.95.

Performance: **Rock hero's return**  
Recording: **Alive and well in Vegas**  
Stereo Quality: **Okay**

Can you believe that the world was really shocked by Elvis (rhymed with pelvis) Presley's first hip-twirling TV appearance? Little did the world realize that Mick Jagger, Jim Morrison, etc., would one day go so far as to make Elvis seem as wholesome as Girl Scout cookies. Today, he stands as tall and square as the national hero he really is. It's too bad this country doesn't have an equivalent to England's Order of the British Empire (bestowed on the Beatles by Great Britain) for Elvis. He deserves it. His story has been told so often that I sometimes forget he's still alive and not just a legend (though I suppose drive-in movies would go out of business if he stopped making all those B films). Elvis is not only alive, he's still churning out hit songs, and lately there has been a tremendous nostalgic return to his

"Golden Oldies," some of them dating all the way back to 1954.

This album is just such a nostalgic voyage. It was recorded "live" last year at his first personal-appearance concert in many years, and it succeeds in reviving wonderful memories. His performance is as naive and schmaltzy as ever, and I loved every minute of it. I can't imagine anyone not enjoying Elvis, either in person or on records. Like the late Marilyn Monroe, he is one of a kind, and his imitators have all failed. With this new release, kids of every age can now throw away those worn-out 45's (or at least most of them), and listen to more than an hour of Presley, not only performing but talking. Nothing has changed except that, now that Elvis has become an institution, he has developed a small but significant social con-

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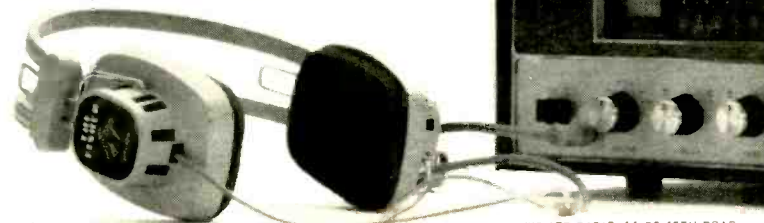
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science, and he is almost soothing. *Tempus* and the twist may have fugit-ed, but Presley plays on. R. R.

**RHINOCEROS: *Satin Chickens*.** Rhinoceros (vocals and instrumentals). *Satin Doll*; *Monkee Man*; *Find My Hand*; *Top of the Ladder*; *Sugar Foot Rag*; *Don't Come Crying*; and five others. ELEKTRA EKS 74056 \$4.98, (R) X 4056 (3¾) \$5.95, (4) X 44056 \$5.95, (8) M 84056 \$6.95, (C) X 54056 \$5.95.

Performance: Reasonably good contemporary rock

Recording: Very good  
Stereo Quality: Very good

Rhinoceros has improved since its first recording. There is a little more variety here and even—thank goodness—an attempt or two to be humorous. But the group still becomes mired in tediously long, smotheringly dull pieces that are based on one or another permutation of blues chords. John Finley, the singer whose voice dominated the first Rhinoceros recording, is as good as ever, and he receives assistance from singer-pianist Alan Gerber, a rapidly improving performer. I still like the fact, too, that Rhinoceros is so much together. Even though the songs leave much to be desired, they are performed impeccably and structured for maximum interest. I expect the group will be around for a while, since their recordings ride pretty comfortably on the money charts. Given time for musical seasoning, Rhinoceros could develop into something more than just another "top forty" rock group. D. H.

#### RECORDING OF SPECIAL MERIT

**ROLLING STONES: *Let It Bleed*.** Rolling Stones (vocals and instrumentals). *Gimme Shelter*; *Love in Vain*; *Country Honk*; *Live with Me*; *Let It Bleed*; *Midnight Rambler*; *You Got the Silver*; *Monkey Man*; *You Can't Always Get What You Want*. LONDON NPS 4 \$4.98.

Performance: Typical  
Recording: Excellent  
Stereo Quality: Good

With the retirement of the Beatles from public performance, it now seems fairly evident that the Rolling Stones have become the most important pop group now appearing. Their new London recording, "Let It Bleed," is being released coincidentally with their triumphant American tour, and it displays all the qualities for which the Stones have become famous: impertinence, nitty-gritty sexuality, raw-edged and driving rock, immense vitality, and very good, very personal material. I used to find something vaguely revolting about them—they offended my middle-class sensibilities. But with each new release their work has appealed to me more and more. To me, "Let It Bleed" is their best album yet, and while I still can't get as much satisfaction from them as their most ardent fans appear to, they have proved themselves to me—they're a basic group for rock repertoire.

Running down the list, the best things here are the title song, *Love in Vain*, and *You Can't Always Get What You Want*. The last of these three is an almost eight-minute tour-de-force in typical Stones fashion which features not only the vocals of the inimitable Mick Jagger but also those of (are you ready?) the London Bach Choir.

It is probably the most ambitious thing the group has yet attempted, and it is a complete success in every way. In such material they come into focus not only as an important rock group but as an important musical group.

Currently there is an awful lot of nonsensical commentary about the Stones, with inferences that verge on the cosmic being drawn about their performances. Mick Jagger is fast being elevated to the position of the *Jedermann* of the under-twenty-five generation (even though a million-dollar-a-year *Jedermann* seems a contradiction in terms). The simple truth about the Stones is that they have continued to grow from a rather sleazy beginning—when their principal appeal was that they offered a dark alternative to the boyishness and charm of the Beatles—to the point where they are now a solidly important musical group that has main-



IKE & TINA TURNER WITH THE IKETTES  
*Beautiful black blues and soul*

tained the raw-edged gutsiness and immediate emotional contact that is central to rock.

In all likelihood, intellectual trend-hounds and reenyboppers have already worn their copies of "Let It Bleed" thin by now, so all I can do is advise anyone who might have an aversion to the average tastes of both these groups to get a copy of his own and enjoy one of the best albums yet of the new year. P. R.

**CONNIE SMITH & NAT STUCKEY: *Young Love*.** Connie Smith and Nat Stuckey (vocals); orchestra. *Young Love*; *Two Together*; *I Got You*; *Yours Love*; *Together Alone*; *Whispering Hope*; and six others. RCA LSP 4190 \$4.98, (8) P8S 1482 \$6.95.

Performance: Routine c-&-w  
Recording: Good  
Stereo Quality: Good

"Connie and Nat go together like ham and eggs, salt and pepper, or other such inseparables," declare the liner notes. Maybe so, but to this auditor they sound like a hundred other country-and-western teams with a slightly slicker style than is usual from Nashville. They make close and snappy harmony in something like *Young Love* and *Two Together*, but after those two bands things get pretty much alike and pretty bor-

ing. Miss Smith's voice struck me as deserving rather more authentic material, since it has an earthy undertone that I think might find more scope in more adventurous songs.

P. R.

#### RECORDING OF SPECIAL MERIT

**IKE & TINA TURNER:** *In Person*. Ike and Tina Turner, The Ikettes (vocals); orchestra, Ike Turner arr. *Everyday People*; *Gimme Some Lovin'*; *Sweet Soul Music*; *Son of a Preacher Man*; *I Heard It Through the Grapevine*; *Respect*; and nine others. MINIT LP 24018 \$4.98, (B) B 24018 (3 3/4) \$6.95, (4) Liberty 4157 \$5.98, (8) Liberty 8157 \$6.98, (C) Liberty C. 0157 \$6.95.

Performance: Only being there is better  
Recording: In person  
Stereo Quality: Okay

Ike and Tina Turner really have to be seen to be believed, and since they travel so much, and are seen by so many devoted fans, you probably won't object to this album's being an "in-person" production (I object only because I have an aversion to recorded applause taking up all that valuable disc space). But the moment Miss Turner screeches the opening bars of *Do You Like Sweet Music*, you'll be applauding along with me and the rest of the world. It is phenomenal how these two crazy characters, along with the kicky Ikettes, have suddenly burst out into total popularity. Way back in 1966 England was screaming itself hoarse over the sensational single *River Deep, Mountain High*. Nothing much has changed except it's

not just England that's screaming now. Ike and Tina are the same, the aforementioned Ikettes are the same, and even the Kings of Rhythm are still with the act. The musical style and beat, and many of the songs, are the same. Maybe that consistency is the clue to their success. Ike and Tina Turner do best just what they always have done, and I say thank God they have the simple honesty to keep doing it. If you are the rare rock-and-roll fan who has never seen or heard Ike and Tina, this record is a perfect place to begin. The only thing better than this record is seeing them "live."

Tina is the star. She's the fastest, least inhibited, and most passionate performer of popular black soul music this side of camp. She's this side of camp because she works so hard that she *must* be serious. Besides, the Ikettes are camp enough for one act.

*Son of a Preacher Man*, *I Heard It Through the Grapevine*, and *Respect* are straight from the r-&-r charts of the last few years. The remaining selections are basic black blues and soul. Basic is the perfect word to describe Ike and Tina Turner. Basic, black, and beautiful.

R. R.

**THE VOGUES:** *Memories*. The Vogues (vocals and instrumentals). *Earth Angel*; *Standing on the Corner*; *Shangri-La*; *Time after Time*; *Love Is a Many-Splendored Thing*; and five others. REPRISE RS 6347 \$4.98, (4) JRA 6347 \$5.98.

Performance: Nostalgic  
Recording: Excellent  
Stereo Quality: Fine

Talk about your old wine in new bottles! Not only are three of this group's four members shown on the album cover wearing shirts and ties under the last word in suits (the fourth wears a turtle neck under his) but their ears are visible, and what they sing is indeed the stuff of "Memories"—as advertised. Nostalgia is the game as these boys ease their way through *Shangri-La*, *Love Is a Many-Splendored Thing*, *If I Loved You*, and other time-worn classics on the theme, all spiffed out in swinging new arrangements but quite recognizable as to tune, words, and sentiments. The Vogues are either bucking every trend or starting one of their own—and good luck to them.

P. K.

**MASON WILLIAMS:** *The Listening Matter*. Mason Williams (vocals and guitar). *Them Sand Pickers*; *Them Stickey Gitters*; *Them Toad Suckers*; *Them Banjo Pickers*; *Them Yodel Yellers*; and seventeen others. EVEREST 3625 \$4.98.

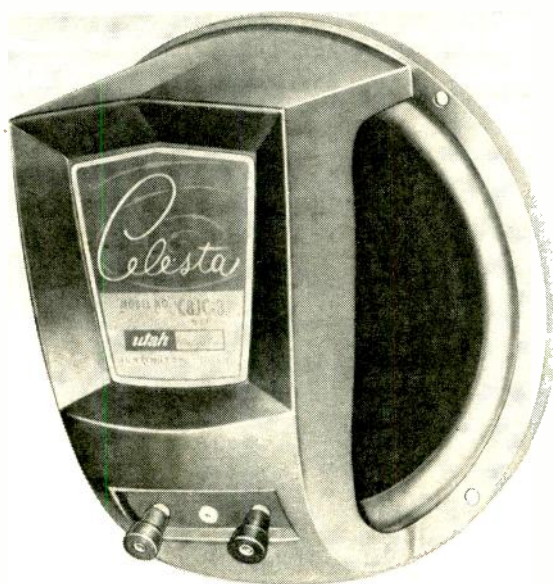
Performance: Expert  
Recording: "Live"  
Stereo Quality: Rechanneled

There is something about Mason Williams that sticks both in the craw and in the mind. This album is a case in point. Much of it is simply southern California smart-aleck: pseudo-intellectual folksiness, I-am-more-with-it-than-thou attitudinizing, a little-boy prurience about sex, and a seemingly overwhelming self-admiration. But there are also things on this recording that show an original and often fascinating mind that can ex-

(Continued on page 137)

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## THE ROLLING STONES "LIVE" AT MADISON SQUARE GARDEN

By Don Heckman

**T**HE Rolling Stones "live"! Wow! It had been three years since either of the premier British rock groups—the Stones and the Beatles—had actually materialized in full living color on this side of the Atlantic. And now, after months of speculation, rumor, and some of the most fantastic stories since Boccaccio, the actual dates were set, the halls were reserved, and the frantic scrambling for press tickets was underway.

To make the picture complete—and, no doubt, to cash in on what would obviously be a blitzkrieg of publicity—London arranged for the release of a new Stones album ("Let It Bleed," reviewed in this issue) simultaneously with the tour.

After reams of rip-snorting newspaper reports about wild crowd scenes for the Stones' early appearances in California, we of the New York music press anticipated their arrival with, as the saying goes, mixed emotions. (Advance ticket sales assumed the aura of a World Series, with crowds of young people showing up at Madison Square Garden ticket booths a day early, fortified with food, warm clothing, blankets, and sleeping bags.)

The day before the first scheduled concert, a press conference was held in the Rainbow Room high atop the towering RCA Building at Rockefeller Center. To say that chaos reigned is to belabor the obvious. Booze and food flowed freely for the limited members of the press who had

bluffed, bullied, or actually passed legitimately through two or three rings of security to reach the eighty-fourth floor. Somewhere in the midst of the crowd a chamber group played what sounded like Haydn, and a brilliant late-afternoon sun cast a golden winter light on the whole surrealistic scene. A strange mixture of stimuli for the head.

When the Stones actually emerged to face the press, they were quiet, well-mannered (in the face of some hideously offensive questions: for example, to new addition Mick Taylor, "How does it feel to replace a dead man?"), and rather bland. The question of just what it was they had to say that was important enough to warrant a press conference in the first place somehow never got asked. Unlike the Beatles, who view the entire world as their theatrical arena, the Stones appear to be most comfortable on the concert stage. Press conferences are not their forte.

Just *how* comfortable they are on stage became vividly clear the next night, when they gave their first program. It was a heavyweight. Terry Reid, a fair-to-middlin' young white English blues belter, opened the show, but his occasionally pleasant efforts were lost on a crowd that was still shuffling around finding its seats. B. B. King, acknowledged by virtually everyone to be the master of the contemporary blues guitar, was next. Although greeted warmly, he appeared rather bored, as though he

knew the audience was simply passing time waiting for the Big Moment.

If they were, they got the surprise of their lives when Ike and Tina Turner came on next. It's been nearly ten years since the Turners had their first major hit, and they've been improving ever since. Tina, in particular, looks very much like the next big, big black star, and for my money, there isn't a more effectively erotic performer alive, either in manner or appearance. Remarkably, the audience demanded an encore, even though they knew that the Stones were due next.

The group's appearance was predictably vigorous, but failed to arouse the mob hysteria that apparently had been anticipated by vast numbers of security police in and out of the Garden. Clearly, Mick Jagger was the whole show for the Stones, dressed in gangster black, trimmed with appropriately flashy metallic accessories, and wrapped in a long, shimmering red scarf. His stage demeanor was just this side of high camp, but, as with such "straight" performers as Jack Benny and Bob Hope, movements that sometimes appeared to be effeminate actually represented a kind of up-dated interpretation of the traditional mannerisms long familiar to English music hall audiences.

The Stones concentrated on material from the new album. With the exception of two tunes (*Country Honk*—a remake of *Honky Tonk Woman*—and *You Can't Always Get What You Want*, performed on the record with the assistance of—would you believe?—a boys' choir) the material is all new, and solidly rooted in the black blues tradition that has always underpinned the Stones' style.

This group personifies the transformation of rhythm-and-blues into rock-and-roll, and rock-and-roll into a voice of generational protest. All the subtle sexual metaphors, the rollingly erotic, hard-driving rhythms, and the shamanistic reveling of black music are there. On another level, the Stones seem to offend almost everyone over the age of thirty because they are so clearly advocating the kind of emotional liberation that drives middle-class white America up the wall. Unlike the Beatles, the Stones will never enter the pantheon of the great Tin Pan Alley up in the sky. When they write lyrics like "We all need someone to cream on/Why don't you cream on me," it's pretty clear that their music isn't going to be setting any feet tapping at next week's PTA dance.

But they *are* saying something that a self-focused, independent generation of young people wants to hear. When they closed the program with *Street Fighting Man*, it was obvious that the Rolling Stones were rather more significant than just a rock-and-roll band. What made their "live" appearance so important at this particular point in time is the fact that they vividly symbolize the passions and desires, the angers and frustrations of a body of young people who are not particularly happy about confronting three more years of Nixon America. And they know that if a blood-and-guts, "live" Mick Jagger can shout angry defiance from the stage of Madison Square Garden, there's hope for them yet.

press itself simply and directly within the form of the doggerel ballad.

I have a feeling that this album is a salvaged effort from earlier days in Williams' career. He is heard performing before an appreciative audience, but they seem a little unsure of him at the beginning and only warm up toward the end. Considering the reputation that Williams enjoys today, I doubt that any audience would start out lukewarm.

The twenty-two numbers here are pretty much along the lines of the titles listed above, and as can be expected, the form wears pretty thin by the end of the recording. Williams is an assured performer and is able to project his material with confidence and style. An interesting mind. P. R.

**J.J. WORTHINGTON: *If I Should Touch You*.** J.J. Worthington (vocals); orchestra and chorus, Paul Livert cond. *Gentle on My Mind*; *Babshaba*; *Jennie*; *A Whiter Shade of Pale*; *Yesterday*; *Julie*; and six others. LONDON PS 546 \$4.98.

Performance: **Lightweight**  
Recording: **Excellent**  
Stereo Quality: **Excellent**

J. J. Worthington is a lightweight singer with an almost prissy approach to his lyrics. He sounds a little like Tony Newley and a little like Nat Cole, which isn't exactly a help when he tackles things like *Gentle on My Mind* or *Blowin' in the Wind*. The arrangements and the orchestral and choral accompaniment by Paul Livert's orchestra and chorus are all extremely glossy with a soporific lushness that eventually begins to drag the album down. It is, however, a beautifully produced and recorded disc. When the performer and the material come together, as they do in the quasi-folk *Babshaba*, Worthington can be an ingratiating singer. But his supposedly "gentle approach to words and music" is actually more routinely genteel than genteel. P. R.

## COLLECTIONS

### RECORDING OF SPECIAL MERIT

**MISSISSIPPI DELTA BLUES, VOLUME 1.** Various performers. *Ob Baby*; *Long Haired Doney*; *Three O'Clock in the Morning*; *Stuttgart, Ark.*; *Gonna Bring Her Right Back Home*; *See that My Grave is Kept Clean*; and six others. ARHOOLIE 1041 \$5.98.

Performance: **Superb music from the Delta**  
Recording: **Good**  
Stereo Quality: **Okay**

It seems almost miraculous that, in 1969, black blues of the most basic variety continues to be played and developed by performers both young and old. This new collection from the Mississippi Delta reveals how alive that tradition still is. A couple of names, Fred McDowell and Furry Lewis, will be familiar, but the other performers are obscure. A few, inactive in recent years, were spun through the whirlwind popularity that accompanied the surge of interest in black blues in the late Twenties and Thirties. Two of these, James Peck Curtis and Hustin Stackhouse, played with the great Sonny Boy Williamson. Drummer Curtis closes the recording with a direct, uncluttered, and moving story of Sonny Boy's death.

(Continued on next page)

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The traditional black determination to survive—even thrive—in the face of sometimes incomprehensible oppression was especially noticeable in the ability to make music from virtually anything that was at hand, from wash tub basses and harmonicas to guitars and wooden fifes. And if a harmonica player, like Robert Diggs, lacked a guitarist, he would simply alternate singing and playing his own accompaniment. The guitar, of course, was an ideal all-purpose instrument, and it's no surprise that it has played a significant role in the development of black American blues, flamenco, and any number of the world's other important musical styles.

I also was fascinated by Napoleon Strickland, a fiftist, and the Como Drum Band, a group with an intense rhythmic complexity that cannot help but contain a residue of African percussion music.

All in all, then, this is an exceptionally fine collection. Unlike other recent blues recordings, it is never tedious; the unfamiliar dialects and the "crude" musical means that are employed in no way detract from the musical joy and—let's face it—the unalloyed musical talent that is in action here. Arhoolie, producer Chris Strachwitz, and recording researcher George Mitchell can be thanked for having provided us with such a truly fascinating collection of contemporary American music. *D. H.*

### RECORDING OF SPECIAL MERIT

PRIZE-WINNING SONGS FROM YUGOSLAVIA. Biserka Spevec, Ibrica Jusić, Dubrovački Trubaduri, Tereza Kesovija, Arsen Dedic, Jimmy Stanic, Vice Vukov, Ivica Šerfezi (vocals); instrumental accompaniment. *La, La, La; Stranac (The Stranger); Jeden Dan (Day by Day); Moje Suze (My Tears); Razgovaram S Morem (Conversation with the Sea); Gdje Si Sad (Where Are You Now?); Zivjet Cemo Od Ljubavi (We Live for Love); Dalmatinski Lero (Dalmatian Joker); Moje Oči (My Eyes); Dalmatinski Elegija (Dalmatian Elegy); Ponoc (Midnight); and Reci Ljubavi (Tell, My Love).* MONITOR MFS 705 \$4.98.

Performance: Breezy

Recording: Fair

Stereo Quality: Fair—some artificially added

If budgetary considerations make a sojourn on the beach at Dubrovnik impractical at this time, you might do worse than console yourself with this set of prize-winning songs from one of those open-air concerts that the Yugoslavian TV and radio network apparently goes in for sponsoring. Here are care-free numbers with a rock base such as *La, La, La* (it won the Grand Eurovision Prize in 1968); a wistful *Razgovaram S Morem*, or "Conversation With the Sea," conducted by a talented young man named Arsen Dedic; gypsy-ish ballads such as *Jeden Dan* (Day by Day) and *Dalmatinski Lero* (Dalmatian Joker) sung by a dashing set of troubadours who call themselves the Dubrovački Trubaduri; and yearning numbers such as *Midnight*, sung by Ibrica Jusić, a girl with a frank, middle-register voice. Miss Jusić and most of the other performers, as well as the numbers they perform, have a characteristically South European quality—even their rock comes out softened and rounded at the edges, while the voices are strong, forthright, good-natured, and refreshingly unforced and unaffected. *P. K.*

## JAZZ



THAD JONES/MEL LEWIS: *Central Park North*. Thad Jones-Mel Lewis Jazz Orchestra. *Tow Away Zone; Quietude; Jive Samba; The Groove Merchant; Big Dipper; Central Park North*. SOLID STATE SS 18058 \$5.98.

Performance: Crisp, big-band jazz

Recording: Excellent

Stereo Quality: Very good

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jazz musicians. With a regular Monday night gig at the Village Vanguard serving as a rallying point, and occasional extended engagements and recordings providing special stimuli, the band has had ample opportunity to explore the limits of traditional big band jazz.

And that's about what they come up with—traditional big band jazz. Jones was an avid experimenter in the mid-Fifties, but little sense of exploration comes through in the arrangements he has written lately (and, specifically, those for this date). Good? Yes, indeed; his work is about as well-crafted as anyone could ask for. This is a man who knows how to write for big bands. But there is not enough more than that. Somehow, Jones has never really managed to translate his brilliant improvisational invention into written arrangements for other musicians.

The band plays with the precision of an army drill team, and the soloists are very models of modern major jazz men. But, as with the arrangements, there is the feeling of too little ventured. Predictably, too little is gained. *D. H.*

HAROLD LAND: *The Fox*. Harold Land (tenor sax); Dupree Bolton (trumpet); Elmo



Hope (piano); Herbie Lewis (bass); Frank Butler (drums). *The Fox; Mirror-Mind Rose; One Second, Please*; and three others. CONTEMPORARY \$7619 \$5.79.

Performance: Reissued West-Coast be-bop  
Recording: Very good  
Stereo Quality: Good

Only a decade has passed since the material on this reissue was recorded, but it might just as well have been a half-century. Ten years of the Beatles and avant-garde jazz, of blues revivals and the eclecticism of contemporary pop add up to ten years in which this kind of crisp, technically adept neo-bop—so characteristic of the West-Coast jazz of the late Fifties—has gone further and further into artistic limbo.

Land came to prominence with the much-praised Clifford Brown/Max Roach groups of the middle Fifties and was one of the first of the "hard"-sounding tenor saxophone players to break through the dominance of the then-prominent cool style based on Lester Young. But Land never really got the appreciation he deserved. He was not what I would call an extremely inventive player, but he was a damned good craftsman and a rock-hard swinger. Much of his talent comes through in this collection, out of date though it may sound, and he is assisted brilliantly by one of the best rhythm teams of the day. Trumpeter Dupree Bolton, a highly original player who surely had a significant influence upon avant-gardist Don Cherry, seems to have disappeared from the scene. Too bad; he was a good one. *D. H.*

#### RECORDING OF SPECIAL MERIT

**DAVE MACKAY & VICKY HAMILTON.** Dave Mackay (piano); Vicky Hamilton (vocals); Ira Schulman (woodwinds); Ray Neapolitan (bass); Joe Porcaro (percussion); Francisco Aguabella (Latin percussion); Bill Plummer (sitar). *Now; See You Later; Jacque the Junkman; Jersey Bounce; Like Me*; and five others. IMPULSE AS 9184 \$5.98.

Performance: New, good jazz vocals  
Recording: Very good  
Stereo Quality: Very good

Mackay and Hamilton arrive straight out of the blue. They obviously have been directly or indirectly involved with the various experiments in unusual rhythms that Don Ellis has been stimulating for the last few years on the Coast. (Several of the performers here, in fact, have been sidemen with one or another Ellis group.)

"Experiment," however, may be a deceptive term. Mackay and Hamilton are well past the point of working things out, and have effectively integrated a wide array of unusual meters into their musical conceptions. When such elements are used, they appear logically, consistently, and (for most listeners) unnoticeably, except for the unexpected, off-step, and fascinating rhythms. And that, of course, is the way it should be.

Vicky Hamilton's voice is not all that appealing to me, and Mackay will hardly set the world on fire as a jazz pianist, but the combination produces musical sparks from each other (like Jackie and Roy), and that, sometimes, is more important than outstanding individual gifts.

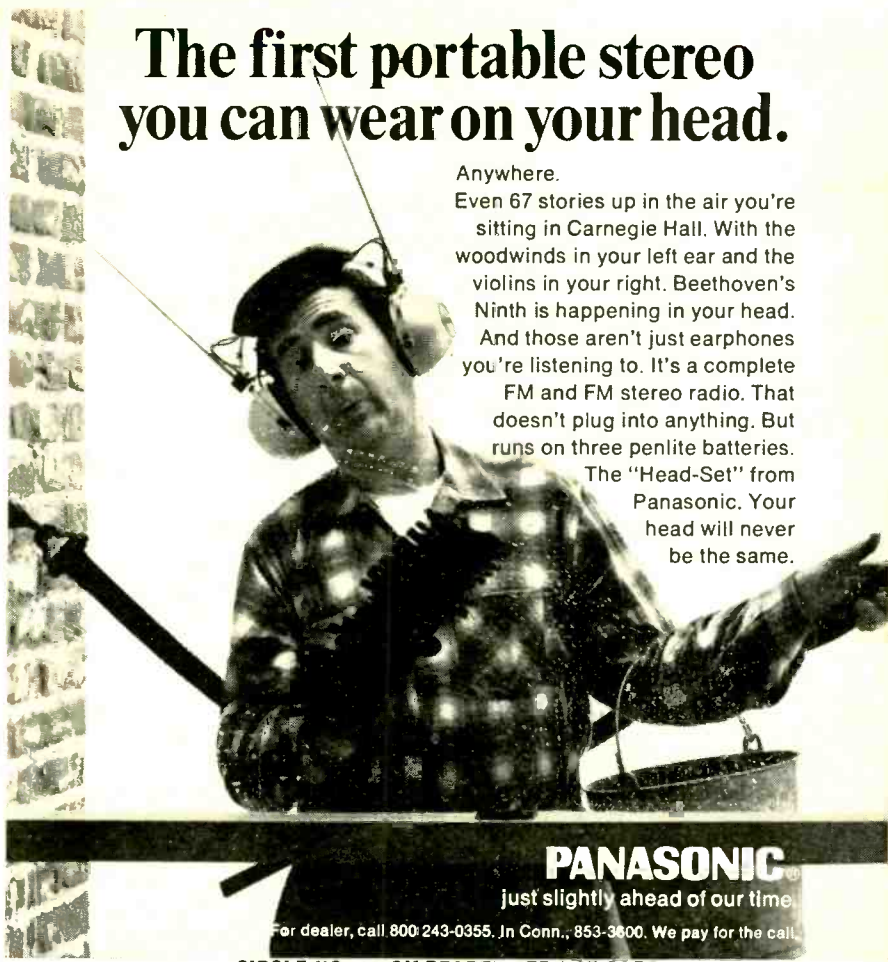
I guess I feel like an editor who gets an "over the transom" manuscript—that tradi-

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tional bane of the journalistic profession—and discovers, to his delight, that it's a winner. Mackay and Hamilton should be pleasing us for some time to come. D. H.

### RECORDING OF SPECIAL MERIT

**SHIRLEY SCOTT:** *Shirley Scott & The Soul Saxes.* Shirley Scott (organ); King Curtis (tenor saxophone); Hank Crawford (alto and baritone saxophone); David Newman (tenor saxophone and flute); other musicians. *It's Your Thing; A Natural Woman; You; Stand by Me;* and three others. ATLANTIC SD 1532 \$5.98, Ⓟ TP 1532 \$6.95 and M 81532 \$6.95, Ⓞ X 51532 \$5.95.

Performance: Miss Scott swinging hard  
Recording: Very good  
Stereo Quality: Very good

Soul on the wing, here: Shirley Scott has been making so many gutsy, hard-driving blues recordings that it's easy to overlook her astounding ability to make almost anything (even the proverbial telephone book?) swing with a vengeance. This is a pretty good set, and somewhat more interesting than usual because of the variety of material.

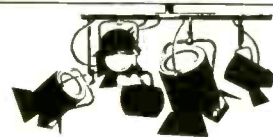
To liven things further, Miss Scott is aided by the three best rhythm-&-blues saxophonists anywhere. King Curtis has always been a particular favorite of mine, but Marty Sheller's arrangements, Bernard Purdie's sterling drum work, and Miss Scott's impressive organ "comping" seem to push everyone to exceptional heights. D. H.

### RECORDING OF SPECIAL MERIT

**GEORGE WEIN:** *George Wein's Newport All-Stars.* Red Norvo (vibraphone); Tal Farlow (guitar and guitar bass); Barney Kessel (guitar); Ruby Braff (cornet); George Wein (piano and vocal); Larry Ridley (bass); Don Lamond (drums). *Blue Boy; These Foolish Things; In a Little Spanish Town; Am I Blue; Ja-Da;* and five others. ATLANTIC SD 1533 \$5.98, Ⓞ M 81533 \$6.95.

Performance: Blue ribbon for the All-Stars  
Recording: Good  
Stereo Quality: Fine

Too many musical groups with quaintly absurd names, electrically distorted guitars and keyboards, and drummers with more muscle than *métier* are crowding my record shelf these days. I find I prefer hanging the albums for the cover art to listening to them more than once. Even the pop artists, including Sinatra, Streisand, Bennett, and Fitzgerald, have given in to the Lennon-McCartney, Webb-and-Simon school of shock imagery. What can satisfy my longing to hear something musical, lyrical, and capable of being listened to without damaging one's auditory nerves? Jazz, maybe? But not too old and historic, not too abstract like Davis, not too stylized like Brubeck. Who but a perfect grouping of artists like these? Both the songs and the jazz style have roots in at least five, maybe six, decades of popular music which ended in the Sixties, from *Ja-Da* to *Sunny*, from *These Foolish Things* to *My Melancholy Baby*. Wein has chosen a smooth assortment of confections, sometimes as *passé*, but always as dearly remembered, as a Whitman's Sampler. This album is a breath of welcome nostalgia, and artistically it should please exacting jazz buffs. R. R.



## THEATER • FILMS

**GOODBYE, MR. CHIPS** (*Leslie Bricusse.* Original-soundtrack recording Orchestra, John Williams cond. MGM SIE 19 STX \$5.98, Ⓞ L 19 (7½) \$7.95, Ⓞ M 819 \$6.95, Ⓞ X 519 \$5.95.

Performance: Depressing  
Recording: Typical soundtrack dub  
Stereo Quality: Fancy

Whatever the merits or demerits of this quasi-musical remake of the old Robert Donat vehicle about the timid schoolmaster who discovers life in the person of a Socialist governess (she's a musical-comedy star this time), and however expertly Leslie Bricusse's score may be used to point up the moods of James Hilton's sentimental story, as music alone it's dull and deplorable. "This Muzak is in some neutral neo-sentimental mode that makes you feel that it's programming you to be banal, putting a pacifier in your head," is the way Pauline Kael described it in *The New Yorker*, and I am inclined to agree with her. If there is a musical equivalent of cyclamates, Mr. Bricusse has got hold of the formula here. There is an overture that never gets underway and is a long time ending, followed by a choir of chirping schoolboys who promise to "fill the world with love" but actually just fill both loudspeakers with the dreariest caroling. Then Peter O'Toole, who seems to have studied singing under Rex Harrison, comes on to ask *Where Did My Childhood Go?* in a tuneless, toneless lament. The scene changes to a London theater, but musically matters do not improve. Petula Clark, as the star who awakens the schoolmaster's humanity, can sing a song all right, but there is none to sing. *Louison Is Louison* is a soporific in the style of Eric Coates, but without that Englishman's gift of melody. Miss Clark also sings about flowers and sunshine to arrangements that evoke an Athenian landscape, but these bright moments only cloud over into more school songs and more teary nostalgia. I had thought we had said goodbye to Mr. Chips thirty years ago. If the music is any gauge, let's hope it's for good this time! P. K.

**JIMMY** (Bill and Patti Jacob). Original-cast recording. Frank Gorshin, Anita Gillette, Julie Wilson, Jack Collins (vocals); orchestra, Milton Rosenstock cond. RCA LSO 1162 \$5.98, Ⓞ O8S 1042 \$7.95.

Performance: The Roaring Twenties whimper  
Recording: Okay  
Stereo Quality: Okay

It wouldn't be fair to say that the score of the Broadway musical *Jimmy* has been stolen from, or even styled after, other Broadway shows that came before it. It was simply born yesterday today, and seems embarrassing in its futile attempt to catch up. The

race is handicapped because the score is nailed to the boards by pig-iron cliché lyrics and an uptight classic theatrical construction. I have the feeling I've heard it all before but don't care where or when. For example, the star, comic Frank Gorshin, is forced to gargle: "You're pink roses and perfume, / You're class and you're charm. / To say that you're wild / Is really too mild, / You're cause for alarm." What creators Bill and Patti Jacob were trying to say is: "You're the top, you're the Coliseum. / You're the top, you're the Louvre museum." The comparison may not be fair, for Cole Porter's genius was unique. But this musical must have cost a bundle—somebody had to approve and then come up with the cold cash. My critique is aimed more at the taste level of those in financial command than at the creators. Bill and Patti Jacob are really innocent victims. Maybe they honestly feel the idea that New York is "a nice place to visit" but you really "wouldn't want to live there" is valid for comedy. But someone else had to say yes to their including that chestnut as a song and dance routine.

Everything about the musical numbers is predictable. We go from ballad to two-step to up-tempo show stopper to production number and back to ballad. We get jazz banjos and everything but bathtub gin slopped on us. There is just no way for the cast, including Mr. Gorshin, Anita Gillette, and Julie Wilson, to save the show or themselves. Merman, Martin, or Rex Harrison couldn't have helped. The legitimate theater, especially the musical theater, seems to have boxed itself into an anachronistic existence, and will be saved from total extinction only when the powers that produce turn to the fertile minds and talents of those who are trying to catch tomorrow. Thirty years ago Rodgers and Hammerstein caught a tomorrow. Thirty years from today, *Jimmy* will hardly rate a footnote. R. R.

Z (Mikis Theodorakis). Original-sound-track recording. Orchestra, Bernard Gerard arr. and cond. COLUMBIA OS 3370 \$5.98.

Performance: **Glossy**  
Recording: **Excellent**  
Stereo Quality: **Excellent**

Mikis Theodorakis is the composer of several film scores, the most famous being *Zorba the Greek*, and is currently in exile for his opposition to the present Athens government. He is something of a hero to other Greeks who have left their country. His score for *Z*, a film which deals with the political murder of a liberal Greek deputy, seems to me to be a trifle overwrought. Perhaps it is the arrangements of Bernard Gerard, and perhaps the melodramatic content of the film leaves no option other than suggest such overwhelming menace that after a while I thought I was listening to a Greek version of *The Cat and the Canary*. The film has won all sorts of awards in Europe, so I gather it is a good one. But the score is, on records, overproduced, overorchestrated, and overheated.

The last two bands feature Theodorakis himself singing two songs from the film to his own piano accompaniment, recorded, as the liner notes would have it, "in secret circumstances." They may be of interest to his fans but hardly to anyone else. The sound here is in all respects excellent. P. R.

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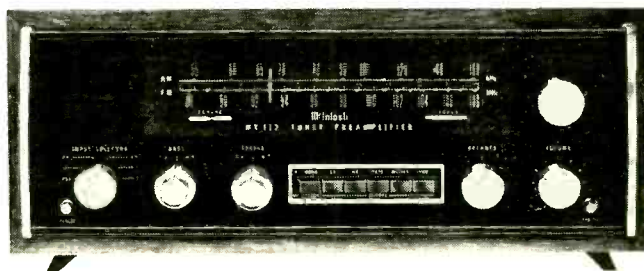
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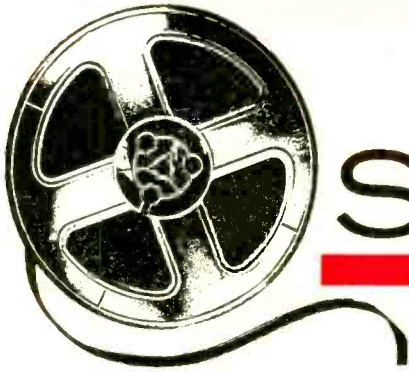
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# STEREO TAPE

Reviewed by DAVID HALL • DON HECKMAN  
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## RECORDING OF SPECIAL MERIT

**BARTÓK:** *Sonata for Two Pianos and Percussion* (1937). **POULENC:** *Sonata for Two Pianos* (1952-1953). Bracha Eden and Alexander Tamir (pianos); Tristan Fry and James Holland (percussion). LONDON ® L 80212 (7½) \$7.95.

Performance: **Top-notch**  
Recording: **A-1**  
Stereo Quality: **Highly effective**  
Playing Time: 45'17"

The Bartók masterpiece and the amiable Poulenc work make their first appearances in four-track tape format here. Happily, Eden and Tamir's performance is, in my estimation, one of the two finest available versions, and it is aided in no small measure by one of the most effective yet tasteful jobs of stereo miking I have heard in any work of chamber music. Room tone is just clean and dry enough to lend sharp point to Bartók's complex rhythms and gritty dissonances, but reverberant enough to lend ample tonal warmth to the lower end of the piano spectrum. Stereo localization works wonders here in clarifying the polyphonic interplay of the two pianos amid the alternate crackling, tinkling, and roaring of the percussion. The performance too is a marvel—one of combined precision and zest.

The same observations hold for the sharply different Poulenc Two-Piano Sonata, which, though lacking the provocative substance and linear density of the Bartók, is highly enjoyable on its own terms—those of a most attractive brand of post-Satie lyricism. All together, this is a superb tape for both the twentieth-century music buff and the stereo fancier alike.

D.H.

**CHOPIN:** *14 Waltzes (complete)*. Adam Harasiewicz (piano). WORLD SERIES ® 9034 (3¾) \$5.95.

Performance: **Crisp and lyrical**  
Recording: **Roomy**  
Stereo Quality: **Good**  
Playing Time: 49'15"

Adam Harasiewicz, born and trained in Poland and the winner of the 1955 Warsaw Chopin Competition, steers a neat middle course between classical elegance and romantic freedom of phrase in his traversal of the fourteen waltzes. There is plenty of sparkle in the more obviously brilliant pieces, but for my taste Harasiewicz excels in the more moody, purely lyrical numbers. Recorded sound is more like the concert hall in its roominess than it is like the intimate salon. The \$5.95 price tag gives this reel a slight competitive edge over the formidable challenge offered by Artur Schnabel's

reading, which comes as part of a larger Chopin package.

D. H.

**PENDERECKI:** *Capriccio; De Natura Sonoris* (see XENAKIS)

**POULENC:** *Sonata for Two Pianos* (see BARTÓK)

## RECORDING OF SPECIAL MERIT

**VERDI:** *Scenes. Aida: Ritorna vincitore; Qui Radames verrà! . . . O patria mia; Don Carlo: Tu che le vanità; Macbeth:*



GWYNETH JONES  
*A colorful and imposing Verdian*

*Nel dì della vittoria . . . Vieni! l'affretta!; Otello: Era più calmo? . . . Willow Song and Ave Maria.* Gwyneth Jones (soprano); Maureen Lehane (mezzo-soprano, in *Otello*); George Macpherson (bass, in *Macbeth*); Orchestra of the Royal Opera House, Covent Garden, Edward Downes cond. LONDON ® L 90158 (7½) \$7.95.

Performance: **Highly impressive**  
Recording: **Excellent**  
Stereo Quality: **Satisfactory**  
Playing Time: 55'06"

Gwyneth Jones, the thirty-three-year-old Welsh soprano, is one of the leading lights of the Royal Opera House, Covent Garden. Although she has appeared in this country, her name as yet is not well known—but I wager it will be within the next few years. Hers is a colorful, dramatically imposing voice—one would assume fairly large, to judge only from discs or tape—and one cannot resist predicting a grand career for this

brilliant performer. To each of the Verdi scenes and arias here she brings credible dramatic sense and no little subtlety of expression. I enjoyed the recital immensely, most particularly the way Miss Jones shapes the *Otello* scene (she is the Desdemona in the new Angel recording of the opera under Barbirolli). The supporting cast does its work capably, the conducting is sympathetic, and the recorded sound, though a trifle bass-heavy, is clean and full. No texts.

I. K.

**XENAKIS:** *Akrata* (1964-65); *Pithoprakta* (1955-56). **PENDERECKI:** *Capriccio for Violin and Orchestra* (1967); *De Natura sonoris* (1966). Paul Zukofsky (violin); Buffalo Philharmonic Orchestra, Lukas Foss cond. NONESUCH ® NSE 1201 \$4.95, ® M 81201 \$6.95.

Performance: **Stylish**  
Recording: **Good**  
Stereo Quality: **Good**  
Playing Time: 3¾ ips; 37'20"

Iannis Xenakis of Greece (b. 1922) and Krzysztof Penderecki of Poland (b. 1933) have both emerged in the past half-dozen years as powerful presences in the realm of advanced contemporary music. The more expressionistically oriented Penderecki has enjoyed a huge international public success with his *St. Luke Passion* (1966) and his *Tribute for the Victims of Hiroshima* (1960); Xenakis, whose scientific-technological background has led him to develop a music of many-layered "events" guided by statistical probability theory, has been slower to achieve acceptance outside the avant-garde audience. On this tape, the music of the two composers emerges in the sharpest contrast. Xenakis' work seems spare, delicate, and airy; the pauses in *Akrata* keep one on the edge of the chair in suspense, awaiting the next series of "Morse code" messages from the woodwind ensemble, while the uncanny sonorities of *Pithoprakta* seem derived more from the sounds of nature than the theories of mathematics. The work of Penderecki seems positively extravagant after that of Xenakis—like Kandinsky after Mondrian, or Gaudí after Mies van der Rohe. Brilliant, fluctuating densities of texture, vast swatches of tone-color cut across by glissandos, surges of rhythm emerging out of nowhere—these are the impressions conveyed in the two Penderecki works. Both were given their premieres by the Buffalo Philharmonic Orchestra, and get their first recordings here.

Not only do all four works on this tape receive highly stylish performances, but the stereo sonics are such as to make them intriguing and thoroughly interesting rather than annoying even to the ear not entirely at-

tuned to the avant-garde. My only cavil with this package is the failure to include the excellent program notes by Bernard Jacobson that came with the disc release. **D. H.**

## ENTERTAINMENT

**CAT MOTHER AND THE ALL NIGHT NEWSBOYS:** *The Street Giveth . . . and the Street Taketh Away*. Cat Mother and the All Night Newsboys (vocals and instrumentals). *Good Old Rock 'n' Roll; Favors; Charlie's Waltz; How I Spent My Summer; Marie; Probably Won't*; and five others. POLYDOR ® X 950001 (3¾) \$5.95, ④ X 954001 \$5.95, ⑧ 953001 \$6.95, ① 14651 \$5.95.

Performance: Dull rock  
Recording: Very good  
Stereo Quality: Very good  
Playing Time: 50'

Cat Mother and the All Night Newsboys won't be keeping me awake. Their occasional touches of light humor are offset by a crushingly dull rhythm section that seems to feel that swing and intensity have something to do with volume and repetition. They're wrong. Jimi Hendrix is listed as co-producer of the album, which suggests that his experience in other fields doesn't necessarily extend to musical evaluation. **Don H.**

**DELANEY & BONNIE:** *Accept No Substitute*. Delaney and Bonnie (vocals); instrumental and choral accompaniment. *Love Me a Little Bit Longer; I Can't Take It Much Longer; Do Right Woman; Soldiers of the Cross*; and six others. ELECTRA ® X 4039 (3¾) \$5.95, ④ X 44039 \$5.95, ⑧ M 84039 \$6.95, ① X 54039 \$5.95.

Performance: Canned corn  
Recording: Good  
Stereo Quality: Average  
Playing Time: 33'57"

This sullen pair of performers has provided here a can of processed corn which might be marvelous background music for feeding chickens or repairing a plow, but which left the ears of this listener twitching with an impatience that only grew more desperate as the tape unwound. Perhaps I would have liked it more if it had come with a pair of free overalls. But whether the numbers these two wailers undertake are in the form of demands for more love, or revival-meeting items like *Soldiers of the Cross*, they have a way of working themselves up that might be compared to the way a dentist's drill increases its pitch until one's poor sick tooth shrieks out in protest. Those without nerves, of course, may have a delightful time listening to "the original" Delaney and Bonnie, whoever they are, as they caterwaul on. And on. And on. **P. K.**

**HENRY MANCINI:** *A Warm Shade of Ivory*. Piano, orchestra, and chorus; Henry Mancini piano and cond. *In the Wee Small Hours of the Morning; Cycles; Moment to Moment; A Day in the Life of a Fool; Watch What Happens; By the Time I Get to Phoenix*; and five others. RCA ® TP3 1005 (3¾) \$6.95, ① P8S 1441 \$6.95.

Performance: Ideal for insomniacs  
Recording: Bland  
Stereo Quality: Smooth  
Playing Time: 33'32"

It's sleepy-time throughout in this session of wound-down windmills, slow-moving themes from movies such as *The Umbrellas of Cherbourg*, Nino Rota's score for Zeffirelli's version of *Romeo and Juliet*, a sluggish lullaby called *The Wee Small Hours of the Morning*, a sleepwalking trip to Phoenix, and a *Meditation* more yawned upon than pondered. The only thing that seems to be missing from the program is *The Japanese Sandman*. Since I drifted off long before the tape had wound its way to a snoozing finish, I never did get to savor the special arrangement of *Dream a Little Dream of Me* to which I had so been looking forward. But I did have a dream of my own: that I was holed up snug in a soundproof room safe from the tinkling piano, droning orchestra, and sleep-shop somnolences of this drowsy effort. **P. K.**



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**THE JAZZ/ROCK/SOUL PROJECT.** Cannonball Adderley Quintet; Mongo Santamaria; Nat Adderley; Johnny Lytle; David "Fathead" Newman and James Clay; Johnny Griffin Big Soul-Band; Wes Montgomery Trio; and Eddie "Lockjaw" Davis/Johnny Griffin Quintet. RIVERSIDE ® X 3048 (3¾) \$5.95, ④ A 3048 \$5.98.

Performance: Some interesting  
Recording: Variable  
Stereo Quality: Variable  
Playing Time: 44'27"

This is an omnibus of oldies, some of them goodies, assembled under the title "Great Performances That Paved the Way for Today's Pop Sound." Well, maybe. But the only two performances here that strike me as being either near-classic or very influential are Mongo Santamaria's *Watermelon Man*, which I would guess is a classic by now, and the Cannonball Adderley group's performance of *African Waltz*. Both are completely satisfying recordings. Things like *Camp Meeting* featuring Eddie "Lockjaw" Davis and the Johnny Griffin Quartet, or Johnny Lytle's *The Village Caller* seem like period pieces—even though of a recent period. So this one is a tape of only routine interest. **P. R.**

## THEATER MUSIC

**DAMES AT SEA** (George Haimsohn-Robin Miller-Jim Wise). Original-cast recording. Bernadette Peters, Tamara Long, David Christmas, Sally Stark, others (vocals); orchestra, Richard J. Leonard cond. COLUMBIA ® OQ 1196 (7½) \$9.98.

Performance: Amusing camp  
Recording: Excellent  
Stereo Quality: Excellent  
Playing Time: 51'56"

I suppose one would have to credit Sandy Wilson with pioneering the particular kind of camp musical that *Dames at Sea* represents by writing his endlessly engaging creation *The Boy Friend* of several years back. It was a delightfully spiteful re-creation of the average Twenties musical. Following along the same old camp trail came Rick Besoyan with his cheerfully dotty *Little Mary Sunshine*, a show which forever laid to rest the efforts of Messrs. Herbert, Romberg, and Friml. And now we have *Dames at Sea* which, with great affection and much expertise, depicts the old Warner Brothers film musical that gave so much employment to Ruby, Joan, Glenda, Dick, Warner, Ginger, and Busby, and which apparently gave Depression audiences hours of enjoyment in that bleak time.

Since Susan Sontag liberated the word "camp" from its almost exclusive use by homosexuals and theater people with her newsmaking essay in *Partisan Review* (which itself will someday, I predict, be "camp," or whatever the equivalent word is in future times), it crops up all over the place, and, like most vogue words, has lost much of its meaning. I have heard all of the three aforementioned shows described as parodies, which they most assuredly are not. They are however, true camp. Camp is a more affectionate look at something outdated, cliché, phony, and therefore funny. Parody, more often, is about something current which is, or has recently been, taken seriously. There is little real satire in camp; instead there are gigantic exaggerations which are used to point up the already obvious.

Theatrical camp, such as *The Boy Friend*, *Little Mary Sunshine*, and *Dames at Sea*, has to have, I think, one added and crucial element to be a commercial success: a leading lady who actually does seem young and innocent and a total believer in the often idiotic plot line. The three shows mentioned were blessed with the presences, respectively, of Julie Andrews, Eileen Brennan, and Bernadette Peters. In the recordings, I regret to say, I think Miss Peters comes off as the least appealing of the three. She sounds a little too much aware of the comedy inherent in certain points of the songs that she has been assigned.

The score itself seems to me to be a workable pastiche, but there is nothing in it that is nearly so melodic as numerous songs of the other two shows. For fanciers of this sort of thing, I might mention that there was (is?) a recording available of Sandy Wilson's attempt to send up the Thirties musical, titled *Divorce Me, Darling!* It never reached America and had only a brief run in London, but, on the basis of the recording, I have a feeling that it might have made it if it had had a more appealing female lead. Meanwhile, *Dames at Sea* provides some mildly amusing moments. **P. R.**



By CRAIG STARK

## TAPE HORIZONS

ADVANCED TAPE EDITING

**W**HETHER the recording artist is Horowitz or a ten-year-old struggling with a Chopin etude, the creative challenge to the tape editor is to put together a "perfect" musical rendition from a series of imperfect "takes." Achieving this result requires not only proper splicing equipment and a mastery of basic editing techniques (discussed in the last two columns), but an insight into some more advanced procedures—and a *lot* of practice as well.

First, if you can mount your splicer directly on the recorder—perhaps right on the head cover—you will reduce the number of times you have to remove the reels from your machine. The next step is to calibrate your splicing block for *offset* edit marking. By splicing a length of leader tape onto a few seconds' recording of FM interstation noise, or any other continuous sound, you can ensure, visibly and audibly, that you know the exact point where the splice passes the playback head gap. After jockeying the reels manually to locate this spot, mark the leader tape, not against the head, but against some conveniently located, easily marked tape guide further on in the tape path. The edge of the head cover can also be used. (Note that a spring-loaded tension arm is not suitable because its distance from the playback head varies during operation.) Now transfer the marked tape to your splicer, lining up the splice with the normal diagonal-cut line, and mark the splicer itself to correspond with the mark on the leader. Your splicer is now calibrated for offset marking.

If you have a three-motor recorder, you might consider modifying your machine by the installation of an external switch (any technician can do this) to cut off power to the take-up reel motor and over-ride, if necessary, any "tape-break" shutoff. Often it is useful to be able to "play" a section to be removed directly into a clean waste basket (for eventual recovery) until you come to the desired second take.

In deciding where to make editing cuts and retakes, don't try to replace single notes or cut into trills, runs, or anything shorter than an eighth note. Instead, follow the musical phrasing, replacing sections rather than individual false notes. The point to make your cut is right at the beginning of the first note in the section to be replaced; that way you'll preserve proper tempo and room reverberation. When jockeying the reels manually, don't count on being able to locate the *beginning* of a deep bass note. At such a slow play-back speed the note will often become so low as to be inaudible. Your best marker is the high hard note following a rest in the upper musical line. Finally, when making a second take, don't begin with the actual passage to be inserted, but start a measure or two in advance, both to get the artist back into his rhythm and to get the room itself into its reverberant state. If you don't, the first note after your splice will be, quite literally, a "dead" giveaway.

From here on, you're on your own, for there is simply no substitute for practice and for making the informative mistakes that experience so bountifully provides. Tape editing remains an art, not a science. But if you have the patience to master it, perhaps you can experience the satisfaction of making that ten-year-old of yours come across like Horowitz!

MARCH 1970

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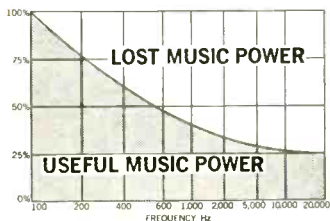
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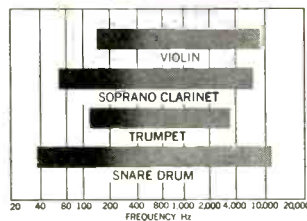
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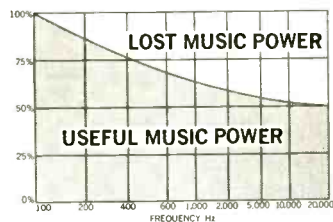
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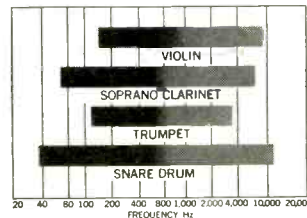
**CARTRIDGE "C"**  
at 25% Music Power



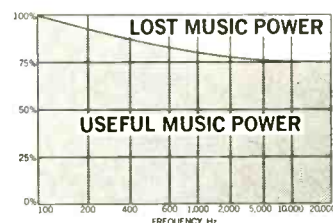
... a serious loss of definition occurs: because cartridge "C" has completely lost 75% of the Music Power at the higher frequencies.



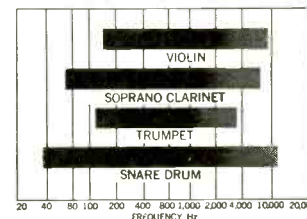
**CARTRIDGE "B"**  
at 50% Music Power



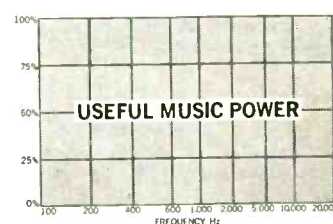
... in this case you lose definition of tone and instruments: because cartridge "B" loses as much as 50% at higher frequencies.



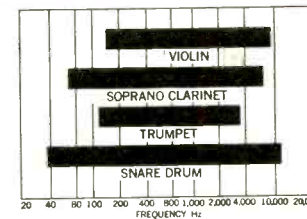
**CARTRIDGE "A"**  
at 75% Music Power



... the instruments seem a little faded in the upper frequencies: because cartridge "A" attenuates higher frequencies as much as 25%.



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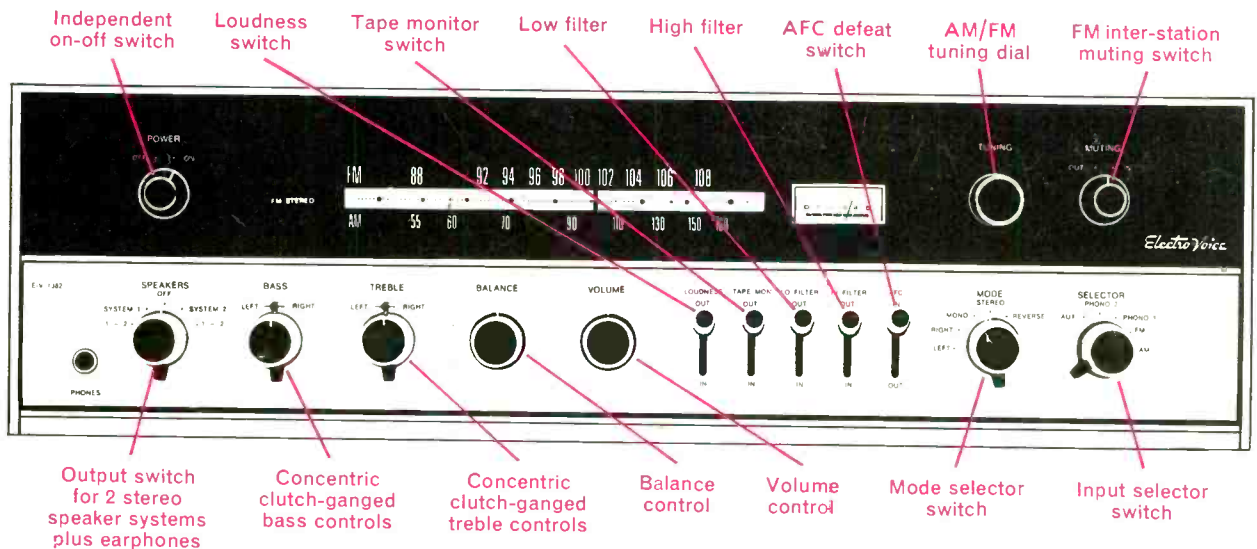
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