SPECIAL SPEAKER ISSUE

HOW TO JUDGE LOUDSPEAKER QUALITY BY LISTENING TESTS

LOUDSPEAKER FACTS AND FALLACIES

TEN WAYS TO CONNECT YOUR OWN EXTENSION SPEAKERS
MAXIMUS 7 - Illustrated without grille cloth

The MAXIMUS 7 (Size: 24" x 14" x 12") — $189.00 • Plus see the MAXIMUS 1 (Size: 10½" x 5½" x 7¼") The Original Ultra Compact True High Fidelity Speaker System — $59.50
An important new development of particular significance

MAXIMUS 7 SMASHES THE SOUND BARRIER

Until now, you couldn’t buy a speaker system like the MAXIMUS 7 ... at any price. Now, all at once, here are six sophisticated design developments in a single new system — a bold breakthrough that offers uncompromising performance to the most discriminating listener. Read why dealers call the MAXIMUS 7 the freshest, most creative speaker system to come along in many years.

Here is the incredible MAXIMUS 7, the ultimate expression of advanced design and luxury performance. There is no other speaker system, at any price, that matches it. What makes it so different? For the first time, all six of today’s most sophisticated design features are incorporated into a single speaker system, creating an instrument so lavish in sound, so elegant in craftsmanship, that it challenges any speaker system to direct comparison, regardless of name. Here’s what the magnificent MAXIMUS 7 offers you:

1. BROADEST FREQUENCY RANGE

MAXIMUS 7 delivers a frequency range of 25 to 35,000 cps at fantastically low distortion levels — virtually flat throughout the entire spectrum. No other system comes close, even at five times the price. It takes this kind of broad range capability to reproduce the harmonics that are present in the original sound. The result is a richness and roundness of sound such as you never heard before.

2. EXTREMELY LOW DISTORTION LEVELS

MAXIMUS 7 delivers its full range of sound at less than 3% distortion from 50 cps to 35,000 cps; less than 3% at 30 cps, and provides superior performance even down to 20 cps. What other speaker system can make that statement?

3. ASTOUNDING POWER HANDLING ABILITY

A speaker system’s true function is to reproduce sound faithfully without injecting its own personality. Frequently, a sudden clash of cymbals, a roll of kettle drums, and a speaker system loses its control, injecting extra, undesirable sounds of its own. Not so with the MAXIMUS 7. Its 9½ lb. ceramic magnet structure is among the most powerful ever used in a speaker system. It completely controls the magnetic field, which controls the sound output. This power handling ability is reflected in the rich, pure, luxurious sound of the MAXIMUS 7.

4. ADJUSTABLE ACOUSTIC CONTROLS

MAXIMUS 7 features two continuously variable KONTOURED ACOUSTIC controls, one for mid-ranges, one for treble. Both controls are located on the front panel, accessible in a moment. With them, you can adjust the sound precisely to your own individual taste. You get perfect personal control of the sound you want to hear.

5. (CAPS") CUSHIONED AIR PNEUMATIC SUSPENSION

MAXIMUS 7 features a heavy duty 12" pneumatic suspension woofer, based on the famous CAPS principle, an exclusive development of UTC Sound. In addition, it incorporates two shielded, back-loaded, bi-polar, mid-treble wide dispersion lens radiators and a dome lens compression type multi-cellular ultra-high treble horn. The resulting sound quality is simply superb.

6. SNAP-OFF DECORATOR GRILLE

MAXIMUS 7 provides the convenience of a distinctive, decorator-styled front grille that complements any style of decor. Snap off the grille instantly for easy access to front panel controls. Replace grille cloth with fabric of your choice. Cabinet is fully finished on all six sides in exquisite oiled walnut. Here is unquestionably the most distinguished of speaker systems, in an elegant, compact, book-shelf enclosure. Test it yourself very soon, at your favorite audio dealer. MAXIMUS 7 — designed for those who demand nothing less than the Finest.

MAXIMUS
Creative Engineering for the Sound of tomorrow

MAXIMUS — a design product of UTC SOUND DIVISION • 809 Stewart Ave., Garden City, New York
At the touch of your fingers, the cueing control built into the Garrard LAB 80 gently and precisely raises and lowers the tone arm...

1. To play a single record, you simply move the arm into position over the first groove, then, touch the cueing control ... the arm gently lowers onto the record.

2. To interrupt the music, touch the Manual tab — the arm gently rises, then, touch the cueing control ... the music will resume at the very same groove.

3. To cue to any band or to repeat a passage, place the tone arm over the desired groove, then, touch the cueing control ... the arm gently lowers to the exact groove.

Garrard incorporated this unique cueing control into the Lab 80 for your convenience...to add to your listening pleasure...and for the safety of your sensitive stereo records and vulnerable stereo stylus. The Lab 80 cueing control is simple to operate, easily accessible from any angle, and completely foolproof. It works beautifully whether you’re playing a single record or a stack of eight.

For complimentary copy of our 32-page Comparator Guide describing all the advanced features of the Lab 80, write to Garrard, Dept. GK-126, Westbury, New York 11590.
Socrates, no musician himself, was a little hesitant about deciding just which herbs and flowers might or might not be baneful. Mrs. Elva Miller, however, a clear-eyed, no-nonsense grandmotherly type from Claremont, California, suffers from no such indecision. She burst upon the pop recording scene a couple of months back, in a Capitol album entitled "Mrs. Miller's Greatest Hits," to take up a cudgel for the bane of many a parental concern prefer, while youth is with them, to fill their ears with rock-and-roll. As the domestic airwaves have most eloquently been testifying, Mrs. Miller can't sing; she is truly sorry when she misses her first album (there are bound to be more) to prove that there is no harm in young people's music—in short, to de-fuse rock-and-roll. Mrs. Miller is, if you like, a "camp": she is giving us the grandest mockery of music, the true nature of the beautiful and graceful; but those who would rather laugh at Mrs. Miller, instead of with her, are missing the point. A woman of great personal charm, dignity, and poise, she has two big interests in life: music and young people. And for them, she has three: to teach the true nature of beauty, to bring a civilization to its knees, and not even the Beatles, I'm sure, really believe that Beethoven is going to roll over. If those of the Pepsi generation prefer, while youth is with them, to fill their ears with rock-and-roll while they fill their stomachs with malts, pizza, and French fries, the older generation can take consolation in knowing that there are much better things in store for them whenever they're ready.

"We would not have our guardians grow up amid images of moral deformity, as in some noxious pasture, and there browse and feed upon many a baneful herb and flower day by day, little by little, until they silently gather a festering mass of corruption in their own soul. Let our artists rather be those who are gifted to discern the true nature of the beautiful and graceful; then will our youth dwell in a land of health, amid fair sights and sounds, and receive the good in everything; and beauty, the effluence of fair works, shall flow into the eye and ear, like a health-giving breeze from a purer region, and insensibly draw the soul from earliest years into likeness and sympathy with the beauty of reason."

Perhaps there is no such thing as "bad" music. Certainly none has ever brought a civilization to its knees, and not even the Beatles, I'm sure, really believe that Beethoven is going to roll over. If those of the Pepsi generation prefer, while youth is with them, to fill their ears with rock-and-roll while they fill their stomachs with malts, pizza, and French fries, the older generation can take consolation in knowing that there are much better things in store for them whenever they're ready.
HERE'S A FABULOUS OFFER from the world-famous Columbia Stereo Tape Club... an exceptional offer that allows you to build an outstanding collection of superlative stereo tapes at great savings!

Yes, by joining now you may have ANY FIVE of the magnificently recorded 4-track stereo tapes described here — sold regularly by the Club for up to $39.75 — for only $2.97 each.

TO RECEIVE YOUR 5 PRE-RECORDED STEREO TAPES FOR ONLY $2.97— simply fill in and mail the coupon at the right. Be sure to indicate the type of music in which you are primarily interested: Classical or Popular.

HOW THE CLUB OPERATES: Each month the Club's staff of music experts chooses a wide variety of outstanding selections. These selections are described in the entertaining and informative Club magazine which you receive free each month.

You may accept the monthly selections, or turn to the Coming 12 Months offer for up to 10 more tapes — or take NO tape in any particular month.

Your only membership obligation is to purchase 5 tapes from the more than 200 to be offered in the coming 12 months. Thereafter, if you decide to continue your membership, you may discontinue your obligation at any time.

FREE TAPES GIVEN REGULARLY. If you wish to continue as a member after purchasing five tapes you will receive — FREE — a 4-track stereo tape of your choice for every two additional tapes you buy from the Club.

The tapes you receive are mailed and billed to you at the regular Club price of $7.95 (occasional Original Cast recordings somewhat higher), plus a small mailing and handling charge. I will also receive my self-threading take-up reel — FREE!

My main musical interest is (check one):

[ ] CLASSICAL  [ ] POPULAR

I understand that I may select tapes from any field of music. I agree to purchase five selections from the more than 200 to be offered in the coming 12 months, at the regular Club price plus a small mailing and handling charge. Thereafter, if I decide to continue my membership, I am to receive a 4-track pre-recorded tape of my choice FREE for every two additional selections I accept.

COLUMBIA STEREO TAPE CLUB - Terre Haute, Indiana 47808

SEND NO MONEY — JUST MAIL COUPON!  COLUMBIA STEREO TAPE CLUB, Dept. 406-8

SEND ME THESE FIVE TAPES (fill in numbers below)

[ ] CLASSICAL  [ ] POPULAR

<table>
<thead>
<tr>
<th>Date of 13</th>
<th>on Reader Service Card</th>
<th>AUGUST 1966</th>
<th>CIRCLE NO. 13 ON READER SERVICE CARD</th>
<th>AUGUST 1966</th>
<th>CIRCLE NO. 13 ON READER SERVICE CARD</th>
</tr>
</thead>
</table>

© 1966 Columbia Records © T46/66
LETTERS TO THE EDITOR

Aaron Copland

• I was simply delighted with your June issue—principally because of the long-overdue salute to Aaron Copland. To my way of thinking, Mr. Copland is the American composer. Who else has been able to satisfy so many different musical tastes, yet without compromising his musical integrity?

As a New Yorker, I have been privileged to hear and see Mr. Copland in his various roles—as composer, conductor, and commentator—and I am grateful for this opportunity. I am glad that you are "sharing" my favorite composer with his other fans who perhaps don’t have the chance to hear and see him as often as they would wish.

P. B. HOFER
New York, N. Y.

MacDonald/Eddy

• Ray Ellsworth’s review of his frenzied youthful pursuit of “Gisla (pronounced Geesla) Fremborg” was of clinical interest, but his comments on Jeanette MacDonald and Nelson Eddy (June) were ill-taken. Plainly, Mr. Ellsworth is victim of a self-did string of associative traumata which leads him to ascribe all nature of shortcomings to two of the most fondly remembered entertainers of recent memory.

If, for Ellsworth, MacDonald/Eddy accompanied short-term frustration and ultimate rejection, for many they provided an essential immersion in a shadow world of romance in an ingenuous age when pop music was so “camp” as to contain melody! Whatever “Cast-Iron Canary” may mean, the Gene Lers syndrome seems forced and crude when directed at the recent dead, if not as a matter of taste, then for what Jeanette meant to a large but lonely public in a time of terrors.

E. D. HOAGLAN
Omaha, Nebraska

• If Ray Ellsworth would like to be a music critic, he might first exchange his copy of Westward Ha! for a good encyclopedia of musicians. On the basis of one record, Mr. Ellsworth concludes that neither Nelson Eddy nor Jeanette MacDonald could sing. A quick look beyond the record jacket would inform him that the list of people who thought Mr. Eddy could sing included David Bispham, Alexander Smallens, Toscanini, Respighi, and Howard Hanson. A working repertoire of twenty-seven opera roles and twenty years of concert appearances entitle Mr. Eddy, in my opinion, to more thoughtful criticism than Mr. Ellsworth’s sweeping dismissal.

If you cannot find “vintage” reviewers who heard the artists in opera and concerts, I suggest your review of a “vintage” record be confined to that one disc. Mr. Ellsworth might save the coy little essays on his adolescence, together with his heavy attempts at humor, for the amusement of his relatives and friends.

MRS. GERTRUDE CUNNINGHAM
Silver Spring, Md.

Mr. Ellsworth replies: “Bravo for Mrs. Cunningham’s spirited defense of a performer who has given her pleasure! Never let the jaded critics have the last word, Mr. C! All I can say is that I would not exchange my copy of Westward Ha! for anything, not even an encyclopedia of musicians, and that I regret sincerely that, unlike David Bispham, Alexander Smallens, Toscanini, Respighi, and Dr. Hanson, I cannot make Mrs. Cunningham happy.”

• If there is such a thing as a perfect review, the one of Nelson Eddy and Jeanette MacDonald by Ray Ellsworth is it. Like Mr. Ellsworth, I loved them too, and the pleasure they gave us during the dark Thirties was immeasurable. But one must be honest, and it is true that by accepted standards of criticism they didn’t sing very well. Does it matter? No.

LELAND EDWARDS
Houston, Tex.

Basic Repertoire Errata

• For the benefit of readers of “The Basic Repertoire—Updatings and Second Thoughts, Part Two” (July), we should like to point out two omissions in Mr. Martin Bookspan’s otherwise helpful and illuminating article.

First, the Mozart Clarinet Quintet in A as played by the Vienna Octet is indeed available on London-Ampex stereo tape LCL 80145, and has been for some time. Second, the Schubert Quintet in A, Op. 114 (“Trout”), featuring Peter Serkin and Alexander Schneider, has been available since May on Vanguard–Ampex stereo tape VTC 1713.

As an additional point of information, (Continued on page 8)
STOP THROWING AWAY MONEY WHEN YOU BUY RECORDS.

There are two ways you can throw away money on records. The more popular way is to buy records at full price. That's fine if you enjoy paying several dollars more per record. But the money you've thrown away could have gone towards better things. Like more records.

Then why pay full price? Necessity. Many towns don't have discount stores. And most discount stores don't have every recording in stock. That's where record clubs come in.

Some Record Clubs Can Make You Throw Your Money Away.

Record clubs can be one of the least expensive ways of buying records. They can be a means of getting the record you want by the artist you want. But they can also be the second way you throw away money.

Why? Because of the very nature of some record clubs. These clubs give you an obligatory number of records to buy during a period of time. With each unwanted record you’re forced to buy, you’re forced to throw away money.

Some record clubs give you discounts only on a chosen category of records. Or discounts only on their own label. A record club that saves you money only sometimes wastes your money the other times.

Citadel Saves You Money.

Then there’s Citadel. Citadel is a straightforward record club. There are no obligatory records to buy. No records sent to you that you didn’t ask for. No cards to return or else you get the record. You buy the records you want. Only the records you want. And as few or as many as you want. In fact, once you join the club, you don’t have to buy any records at all.

And your choice in records is limitless. You can choose any record you want. By any artist. On any label. Citadel club members have well-rounded musical tastes. So there are no record categories. And even if a record is obscure, we’ll find it for you. At no extra charge. If you collect 4-track stereo tapes we’ve got every tape in print, including auto tapes.

We’ll also give you the best discounts around. Always a minimum of 35%. That goes for always. There are never any sudden rises in cost. Never any list price purchases. In fact, we’ll regularly give you discounts on the discounts. When we ourselves get records at lower prices, we pass the savings on to you. That can save you more than half the listed price.

Citadel Has Jet-Speed Service.

Citadel has faster service than any other record club. Once we’ve received your order, we send you your records immediately. Often on the same day as received. If you’ve ordered a record that’s hard to find, we’ll send it as soon as we find it. Your other orders will go on ahead. Since there are no records you must buy, obviously you’re eager to hear those you’ve chosen. And you get to hear them almost immediately.

Once your records come, they’ll be factory fresh and free from defects or damage of any sort. That we guarantee. But if by any chance a defective record does get through our inspection, we’ll immediately replace it free of charge.

Citadel Offers Life Membership.

That’s what we mean by being straightforward. There’s no small print in our small print. No red tape. We like giving you the best deal possible in the nicest possible way. And the very best deal we can make is to give you all the benefits of our record club for life. Records, discounts, super-speedy service for the rest of your life . . . all for $5.00. Same goes for tapes.

And the very minute you become a life member in the Citadel Record Club, we’ll send you a free Schwann Record Catalog, listing over 30,000 recordings by artist, label and title. If you collect tapes, we’ll send you a free Harrison catalog listing all available tapes.

Send us your $5.00 now. It’s the only fee you’ll ever have to pay. You’ll never have to buy a single record from us. But you’ll know that Citadel’s “there.” Just in case you don’t feel like throwing away any more money on records.

CITADEL RECORD CLUB, 545 Fifth Ave., New York, N.Y. 10017

Please enroll me as a lifetime member of the Citadel Record Club. I understand that I am entitled to all membership privileges without any obligation to buy anything, ever. If, after 30 days, I am not fully satisfied, I understand that my $5.00 will be immediately refunded.

☐ I am enclosing $5.00 for Record Division membership. Send Schwann Catalog.

☐ I am enclosing $5.00 for Record and Tape Division membership. Send Schwann and Harrison Catalogs.

NAME ____________________________

ADDRESS ____________________________

CITY ______________________ STATE __ ZIP ______

S-86A
KENWOOD
TK-60 • AM/FM • 60 WATT
SOLID STATE STEREO
SILICON POWER • $239.95

featuring:
4 gang tuning condenser front-end for high sensitivity, image rejection and cross modulation ratio.
5 I.F. stages with exclusive automatic Gain Control Amplifier and wide band ratio detector for excellent selectivity and noise suppression.
Transformerless silicon power transistor amplifier with heavy heat sink for high Damping Factor and superior wide power bandwidth.
Exclusive blow-out proof automatic circuit breaker protects power transistor.

Tuner Section:
Four diodes special circuitry time division multiplex decoder for 38 db channel separation and 50 db subcarrier suppression.
Automatic FM Stereo mono mode silent switching circuit with stereo light indicator.
Illuminated pinpoint AM/FM tuning meter.

Amplifier Section:
60 watt IHF standard total dynamic power.
Very low IM distortion (no camel-back hump) — exceptional clear low level to high level listening.
Wide 20 to 30,000 Hz power band width.
Six position program source selector permits AM, FM-Mono, FM-Auto, PHONO, TAPE HD, AUX.
Five position mode switch for LEFT, RIGHT, STEREO, STEREO REVERSE, MONO.
A rocker switch VOLUME CONTROL for loudness contour.
Bass and treble controls may be used to regulate each channel simultaneously.
Front panel stereo phone jack.
Center channel output for monaural amplifier and speaker.
Direct tape monitor switch for tape monitoring without changing cable connection.

Price of $239.95 includes the handsome cabinet.
Visit your nearest KENWOOD franchised dealer, or write us for free, descriptive literature.

...the sound approach to quality

KENWOOD
3700 S. Broadway Pl., Los Angeles, Calif. 90007, AD 2-7217 • 212 Fifth Avenue, New York, N.Y. 10010 MU 3-1115
CIRCLE NO. 33 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

the Schubert Quintet in C for Strings, about which Mr. Bookspan correctly says "no tape version ... is listed," has just been released (August) as London-Ampex stereo tape LCL 80181. The performance is the same as that released on discs as London CS 6441.

WILLIAM C. BISHOP
Ampex Corporation
Elk Grove Village, Ill.

Record Critics and Liner Notes

Alas and alack, that after all these years I should be relegated to anonymity. In his review of the Bartók violin sonatas (May), William Flanagan refers to me as "an un-named critic." But it does confirm a long-held suspicion of mine: no one reads liner notes, especially not record critics (named and un-). Had Mr. Flanagan read my liner notes, not only would he have bumbled into my name, but he would have seen that the offending phrase "an intense, frenzied yet completely disciplined new world of beauty" referred to the Bartók works, not, as Mr. Flanagan assumed, to the recorded performances.

Even more important, Mr. Flanagan's misreading leaves the implication that RCA Victor, like so many Broadway producers, selected a rave statement to plug their product. Such was not the case at all.

EDWARD JABLONSKI
New York, N. Y.

Mr. Flanagan replies: "My apologies to Mr. Jablonski for overlooking his name and for my failure to recognize RCA's redundant use of a quotation from its own liner notes. Come to think of it, though, that I could be led so astray by a prominent, unidentified, review-style quotation actually taken from a sentence buried deep in the album's notes points up the fact that, implications or no implications, this practice is a dubious one. It can be argued convincingly that it's my job to read the jacket notes down to the last letter. But what about the public? It has no obligation to read anything, and could very easily be gulled by this device."

"Transistor Sound"

On reading Larry Klein's "Straight Talk on Transistors" (May), I see that your publication is promulgating a set of fallacies concerning "transistor sound," and the reasons why some believe it is better. I disagree completely with Mr. Klein's hypotheses that very high damping factors give improved sound; that ultra-wide bandwidth (with present program material) gives better sound; or that transistors have much higher instantaneous power output than can be observed by measurement. These are factors which can be proved or disproved in the laboratory—I do not think they should be offered as unexplored theories.

Further, I contend that high damping factors (up to infinity) and ultra-wide bandwidth have always been available in tube amplifiers for those who wanted such features; and there has never been evidence that they make a distinctive difference in sound such as some claim for transistor amplifiers.

Lastly, I claim that if an amplifier sounds much different from amplifiers of accepted good quality, then there is something wrong with it. For example, we have designed the Stereo 120 amplifier with solid-state devices (Continued on page 10)
MAY WE SEND YOU THIS
FREE record and catalog
WITHOUT COST OR OBLIGATION
to demonstrate a unique service for collectors of classical music

THE COLUMBIA MASTERWORKS SUBSCRIPTION SERVICE
• AUDITION IN YOUR OWN HOME the latest classical releases from Columbia Records
• ORDER ONLY THE RECORDS YOU WANT — no obligation to buy, no minimum to purchase
• CHOOSE A RECORD FREE with every record you purchase at catalog price
• PLUS a revolutionary concept — RECORD INSURANCE

Now you can save more than ever before on the classical records you want — with no minimum commitment or obligation.

As a Charter Subscriber of the new Columbia Masterworks Subscription Service, you will be entitled to choose as many — or as few — records as you wish, direct from the Columbia Masterworks Catalog, for about half the catalog price. You may even audition new releases at home. But you will never be obligated to buy.

How the Service works
When you mail in the coupon below, we will send you — free and without obligation — a copy of AUDITION, the 12” long-playing record shown above, plus the complete Columbia Masterworks Catalog. These are yours to keep, whether or not you join.

The Masterworks Catalog contains more than 2,000 of the greatest performances ever recorded. They range from Concerti Grossi to Classical Jazz. From Sweelinck to Richard Burton’s Hamlet.

If you become a subscriber, you will at once be entitled to select as many long-playing records as you wish (monaural or stereo) from the Catalog or AUDITION. A record FREE with every one you buy

With every record you buy, you may immediately choose another record free. Your records will be shipped promptly, and you will be billed — for the records you purchase only — at regular Service prices. (A small mailing and handling charge is added for each record.)

Every three months you will receive a new 12” long-playing record of AUDITION, containing passages from new Columbia Masterworks releases. The performing artist or a distinguished commentator provides spoken program notes and critical commentary for each passage.

You will continue receiving these quarterly AUDITION records, accompanied by supplements updating your Masterworks Catalog, as long as you are a subscriber — whether or not you buy any records.

Insurance against worn or damaged records
An additional benefit never before offered is our unique Record Insurance. As a subscriber, you may always replace worn or damaged records acquired through the Service for only $1.00 each. It also entitles you to order stereo records, to replace monaural records acquired through the Service, for the same nominal $1.00 fee.

Send for free copies of AUDITION and the Catalog
The annual subscription fee for the Columbia Masterworks Subscription Service is only $5.00 — but send no money now. To receive your free AUDITION record and Masterworks Catalog, just fill out and mail the coupon. They are yours to hear, examine, enjoy and keep — without obligation. Then, if you decide to subscribe, you may also select a free record from the Catalog or from the AUDITION record immediately. Mail the coupon today!
in which we believe the performance sets a new standard for transistorized equipment. We were not satisfied with this unit until the sound was not appreciably different from a good tube design of equivalent power. It seems that when distortion of transistor equipment at all levels is made as low as it is with tube equipment, the distinctive transistor sound disappears.

DAVID HAFLER, President
Dynaco, Inc.

Mr. Klein replies: "Most of the points made in the story were not my hypotheses, but rather represented an effort to report on and clarify current engineering opinion. I certainly did not mean to give the impression to any of my readers, David Hafler included, that I believe all transistor amplifiers sound better than all tube amplifiers. Although in the middle-price category a number of transistor amplifiers do sound better than many competitive tube amplifiers, in the upper-price category I suspect, with Mr. Hafler, that the very best of the transistor amplifiers can do no better than sound identical to the very best of the tube amplifiers currently available.

"I heartily second Mr. Hafler's suggestion that the various theories be subjected to laboratory assessment. Unfortunately, however, as I made clear in my article, there is still a good deal of disagreement as to how to make significant measurements."

The Electrical Era

I was happy to see Ray Ellsworth's article "The Electrical Era: Recording's Lost Generation" (May). Active collectors in this field have long hoped that the recorded legacy of this period might someday become as well-known as that of the "Golden Age."

It would like to point out a few inaccuracies in Mr. Ellsworth's article, however. First, no connection between American Decca Records and Brunswick-Polydor ever existed. Decca's classical catalog was made up of items from English Decca, Odeon, and Parlophone catalogs. While Decca acquired the rights to the popular masters of Brunswick, Columbia acquired the classical masters and revived some of the Polydor items on the Brunswick-Polydor label. Second, Mr. Ellsworth points out that the version of Grieg's "Haugtous" by Kirsten Flagstad reissued on RCA Victor LM 2825 is inferior to her other Victor recording. I certainly agree, but the performance on the RCA reissue is not the one of 1940, as Mr. Ellsworth says, but the later one of 1950.

Despite the exception I take with some of the facts in the article, I think that, on the whole, it is an excellent presentation of the material.

DENNIS D. ROONEY
Minneapolis, Minn.

Mr. Ellsworth replies: "Mr. Rooney may have gotten his information about what happened to Brunswick-Polydor from David Hafler's Record Book, page 184. If so, he should have read along a little more. Mr. Hall says, 'For a while control (of the Brunswick-Polydor) passed to the hands of Columbia, when a brief effort was made to revive the enterprise as the Brunswick-Polydor label. Later, its assets were taken" (Continued on page 14).
Caution!

To obtain the best performance from this special section, please observe the following operational sequence before opening:

1. Read all of the receiver ads in this magazine,
2. Carefully.
Now you know. Of the ‘Big Four’, only Bogen offers you a 60-watt all-silicon solid state am/fm-stereo receiver for $249.95

Bogen’s new TR100X

Modular circuitry like this makes it possible

FM/AM IF Section

Power Supply

Preamplifier

Drivers

Multiplex
Price is by no means the most important reason for you to consider a particular component. But in the case of Bogen’s new TR100X, it is especially significant because of the solid-state-of-the-art technology that has made such a significant price breakthrough possible.

In developing the 100 Series, Bogen has carried the concept of solid state modular design a most significant step forward. The essential circuitry of the TR100X is built on six copper circuit modules.

Each module board is made of the highest grade XXX-P epoxy, its components automatically inserted and wave-soldered. There’s virtually no point-to-point soldering. Thus, the most time-consuming and costly steps in component manufacture are eliminated.

Rigorously Tested

What’s more, each unit is individually inspected and tested at the stages where this can be done most meaningfully in terms of predictable reliability. During assembly, the modules are simply interconnected by means of push-on contacts. Again, no point-to-point soldering. (Another boon for service stations in the unlikely event they ever see a TR100X.) All this is your insurance against the possibility of error—human as well as electronic.

The output transistors chosen for the TR100X are so rugged, they can withstand accidental shorting of speaker leads either to each other or to the chassis—event at high signal levels of long duration: If you really tried to cause some damage, you’d simply blow the fuse. And for still more protection and increased life, the oversize heat sinks provide extremely conservative operation of the transistors.

Now, why should you care what goes on inside the chassis? Simply to be assured of two vital facts. First, that the remarkable price of the TR100X is primarily the logical result of the best techniques in solid state technology. Second, that integral to its entire design are steps that assure the fullest measure of reliability.

Full Range of Controls

Naturally, the TR100X offers a full range of controls and functions, including an oversize meter for precise FM tuning; a speaker selector switch that permits a choice of listening to local and/or remote speakers, or phones; on/off switching that allows you to preset controls just once and forget them; Bogen’s “Stereo Minder” signal light that alerts you when you’ve tuned in a station broadcasting a stereo signal (and automatically switches in multiplex circuitry).

If you’ve followed the “instructions” and thumbed through this publication, you already know exactly how much of a value the TR100X represents. In which case, we think you’ll need no urging to make your listening comparisons at any Bogen dealer.

And ... Incorporating the same advanced modules as the TR100X . . .

BOGEN TA100 — 60-watt solid state stereo amplifier, complete with walnut-textured metal enclosure. Only $129.95.

ALL PRICES SLIGHTLY HIGHER IN THE WEST. 

BOGEN COMMUNICATIONS DIV. LEAR SIEGEL, INC.
Paramus, New Jersey

AUGUST 1966

CIRCLE NO. 7 ON READER SERVICE CARD
FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.
Enjoy extra lifelike sound on FM stereo and AM radio

At $309* no other all-transistor receiver equals the AM/FM SR-400B. It faithfully reproduces frequencies you can't hear, to give you better definition of the sound you can hear. With 60 watts IHF, it delivers a flat full-power frequency response of 8 to 40,000 Hz ±1 db. The 2-system speaker selector lets you enjoy its extra realism in two rooms—separately or simultaneously!

Listen to the SR-400B against other receivers. You can hear the difference! And it sounds even better on Harman-Kardon's new speaker system.

*Slightly higher in the West.

WIDEBAND REALISM

Harman-Kardon

For Stores "Where You Can Buy" see last page.

CIRCLE NO. 25 ON READER SERVICE CARD

ENDORSED

BY ELPA

World-Wide Products of Distinction

THORENS

TURNTABLES

NEW THORENS TD-150AB

A superb turntable in the world-famous Thorens quality tradition. Features silent, two-speed operation (33 1/3 and 45 rpm), plus integrated tone arm that incorporates latest safety lowering device with pneumatic damping action. Only $99.75

OTHER FEATURES INCLUDE:

- Extra-light, low mass aluminum plinth-in-shell with exclusive adjustable vertical tracking angle. Adjusts to optimum playback stylus angle for any cartridge.
- 12-inch, 7½ lb. precision balanced, non-magnetic platter.

NEW THORENS TD-124 Series II

The Finest Transcription Turntable on the market today.

A brilliant example of craftsmanship acclaimed throughout the world. Unmatched for mono or stereo-performance. Has more outstanding features, more built-in extras. Illustrated with the Ortofon RMM-212 Tone Arm. Only $125

IMPORTANT! 15° STYLUS OWNERS!

It is an ignored fact, that any record changer or automatic turntable that locks records on a turntable, the 15° stylus will have its greatest tracking error when used for single play because of the compromising angle of its tone arm.

Therefore, for correct tracking and optimum playback performance, any stylus including the 15° stylus should be used with a non-automatic turntable.

Available from your hi-fi dealer or order book directly.

ELPA MARKETING INDUSTRIES, INC. • Dept. 110 HFSB • New Hyde Park, N. Y.

14

CIRCLE NO. 22 ON READER SERVICE CARD

FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

Over by Decca. As a 'connection,' I think ownership is a fair one.

"On the matter of the Flagstad Haugtussa, I did not mean to say the current reissue had been recorded in 1940; I wanted to lump all the current Flagstad reissues together as being from 1940—that is, none earlier, for I was intent not having the 1933 recordings available. Perhaps I should have said 'from 1940 or something.'"

"I am pleased that Mr. Rooney liked the article, and regards it (as I do) as a blow struck in a good cause!"

Although I am only nineteen, I own quite a few of those shellac discs that Mr. Ellsworth discussed in the May issue, and I can only sympathize with his plea for the release of more withheld recordings. Artists that immediately come to mind are Serge Koussevitzky, Alexander Kipnis, and Lotte Lehmann recordings (some on the market only three years), a legendary Mahler Fourth with Bruno Walter, the "1903 Grand Opera Series," and the only available solo piano performances of Bela Bartok. Clearly, the handwriting is on the wall.

John Harvith
Farmington, Mich.

 Bravo! Ray Ellsworth's article "The Electrical Era" was simply fabulous. It's about time someone said something nice about electrical recordings, and in particular about the great Alexander Kipnis, who could have held his own against any of the legendary 'Golden Age' greats or today's Christoff, Ghiaurov, and Siepi. But he, like the lovely Marjorie Lawrence, has faded into undeserved obscurity.

William Bolster
Detroit, Mich.

Readers React

In his review of "December's Children" (May), Nat Hentoff cites the Rolling Stones as being "appreciatively knowledgeable about the American Negro blues roots of their success." And indeed they are. But for music undertaken with similar aspirations, yet free of the overly commercial recording techniques of which Mr. Hentoff complains, he should listen to the Animals' albums, in particular "The Animals on Tour." Lead singer Eric Burdon's nasal, Ray Charles-inflected voice stands out clearly over gently swinging drums, jazz-influenced piano and organ work, and a musically adept combo.

Fred Morris
Tulsa, Okla.

I have just finished reading Nat Hentoff's review of the Rolling Stones, and I can only say thank you. I am about time someone recognized the real purpose of our music (yes, I am a teenager). It is also refreshing to find someone besides Gene (Continued on page 16)
Surround Yourself with SONY Sound!

Imagine yourself at the podium, surrounded by a full symphony orchestra. Hearing everything. Missing nothing. Imagine that. and you will have begun to appreciate the exhilarating experience of the totally enveloping presence of the Sony 530's XL-4 Quadradiol Sound System. This four-speaker system, two in the 530's case and two in its detachable split-lid, produces a virtual curtain of stereophonic sound. And only speakers this magnificent could complement a recording and playback instrument as superb as the Sony solid-state 530. Sensitive to virtually the entire audible range, the 530 captures exactly what it hears from 40 to 15,000 cps, and dramatically reproduces it with 20 watts of pure music power. Certainly a performance to please the audiophile. Yet the 530 achieves its remarkable performance with a simplicity that will delight the entire family. From Retractomatic Pinch Roller for almost automatic threading to Automatic Sentinel shut-off, Sony designed the 530 to make professional-quality tape recording and playback a marvelously uncomplicated pleasure. The 530's features include 4-track stereo or mono modes, three speeds, separate bass and treble controls, pause control and two famous F-96 dynamic mikes. Truly, the 530 is a complete stereo entertainment system for the home, any home. It's yours to enjoy for under $399.50.

For descriptive literature on the 530 or the rest of the best from Sony, write Superscope, Inc., Sun Valley, California, Dept. H-18.

SONY MAKES THE WORLD'S MOST COMPLETE LINE OF TAPE RECORDERS, INCLUDING THIS SOLID-STATE STEREO TRIO

MODEL 250-A PERFECT PLAYMATE STEREO TAPE DECK RECORDER: UNDER $149.50
MODEL 660 ESP-REVERSE SOLID-STATE STEREO TAPE SYSTEM, UNDER $575.
MODEL 260 RADIAL SOUND STEREO TAPE SYSTEM, UNDER $249.50
Lees who can do justice to pop music.

Thanks again, Mr. Henoff. You are truly understanding.

GREG CARLTON
Sanford, Fla.

I'm baffled. Why give Morgan Ames rock and folk records and tapes to review? She obviously has no genuine feeling for the music, and tends to treat it as some light dinner music. Sure, your reviewers should have differing "viewpoints." But if you let Miss Ames write on rock-and-roll thinking the way she does, why not have Hayley Mills do some guest classical reviews for you?

What set this letter off was the bit on the Lovin' Spoonful tape in the June issue. When all Miss Ames can say of "Do You Believe in Magic?" is one of the three or four greatest rock-and-roll albums ever made, is "I didn't mind listening to it," things are getting pretty bad.

TIM JURENS
Saratoga, Calif.

Miss Ames replies: "I agree with Mr. Jurens that things are getting pretty bad. "Do You Believe in Magic?" may be the best that rock-and-roll can come up with, but the best of the worst is still not very good."

I wish to take exception to Morgan Ames' review of Timi and Richard Farina's album "Reflections on a Crystal Wind" (May). Miss Ames has given what I consider a grossly inaccurate account of the contents of this album, not to mention her comments on the performers. It is my studied opinion that "Reflections in a Crystal Wind" represents some of the most original and lyrical music I've ever heard. The Farina's first album "Celebrations for a Grey Day," was chosen one of the ten best folk records of 1965 by the New York Times, while "Reflections" has been described as "wild, imaginative, poetic, surprising."

Richard Farina's music, as far as the lyrics go, may not be the easiest to understand, but that seems an unimportant point in judging the value of the album. Miss Ames' use of a quotation from some "well known" (army unamed) jazz pianist-singer to the effect that Farina's song is not "real" is hardly a fair device to use, considering that this pianist-singer would not be likely to have much appreciation for folk music. And saying that this music isn't real doesn't say what it is or what it lacks to make it real.

Richard Farina's death on April 30 of this year is a great loss to the world of folk music, an idiom that has much to learn to rank commerciality.

A. EDWARDS
Springfield, Mass.

For those of us who have no particular interest in popular music, Gene Lees' reviews are a constant source of entertainment. One of the first things I do after receiving your magazine is to skim down the "views" looking for such words as "indescribable," "performance" headings of Mr. Lees' reviews are a constant source of entertainment. One of the first things I do after receiving your magazine is to skim down the "views" looking for such words as "indescribable," "performance" headings of Mr. Lees' reviews looking for such words as "indescribable," "performative," or just "ordinary." Then I eagerly plunge in, hoping to find more of Mr. Lees' witty panoply. It is a disappointing issue in which he likes most of the recordings.

Miss Morgan Ames has been doing nicely also! She may even surpass Mr. Lees!

PAUL THOMSON
Toronto, Ont.

Sinatra

I generally agree with the reviews of your most controversial writer Gene Lees; however, I feel I must say something after reading his piece on Frank Sinatra (May). It is inaccurate to state flatly that Sinatra is "the greatest entertainer of our time." All the common means of measurement of greatness of an entertainer—popularity, length of career, number of records sold, and pure talent—unmistakably indicate that Bing Crosby is and has been for thirty years the greatest.

JOHN V. SYNEROCK
Wayne, N.J.

It was certainly wonderful to have an article on Frank Sinatra "the greatest singer" and also on Gene Lees "the greatest lover." I really think that Lees should be writing..." (Continued on page 20)
there is no margin for error when striving for the ultimate in stereo sound re-creation

incomparable Stereo Dynetic by SHURE

HI-FI PHONO CARTRIDGES

Tiny though it is, the cartridge can make or break a stereo system. For this breath-takingly precise miniaturized electric generator (that’s really what it is) carries the full burden of translating the miles-long undulating stereo record groove into usable electrical impulses... without adding or subtracting a whit from what the recording engineer created. Knowing this keeps Shure quality standards inflexible.

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

SHURE PERFORMANCE depends on a SHURE replacement STYLUS... Look for “Precision Manufactured by Shure”
Beware of Pickpockets

Slim, light... pocketable... perhaps too enticing. That's the only problem with the new Fujica instant load movie camera. No other problems though... and its wonderfully easy to use.

You just drop in a film cartridge. Shoot a full 50 feet of the new big picture color film. No mid-film fumble, no threading, no winding. Push button electric power drives everything. Electric eye sets the right exposure automatically... and only the Fujicas, among all the new instant loading movie cameras, have a built-in pressure plate to keep the film perfectly flat. Makes sharper color movies as simple as snapshots. Surprisingly low priced too... Fujica Instant Load Single-8 Camera... Less than $80. Reflex Zoom Instant Load Single-8 Camera... Less than $160.

Your First Movies Are On Us! Free Film & Processing!

For a limited time only, your Fujica dealer has a special price, introductory offer that includes the Fujica Single-8 camera of your choice, zip pouch case, wrist strap, batteries, plus free film and free processing!

Fujica Instant Load (Single-8) Movie Cameras for sharper color movies simple as snapshots


CIRCLE NO. 28 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

for Cosmopolitan magazine, considering his greater experience in that journal's field.

A. C. Spark
Portland Ore.

In Gene Lees' fine appraisal of Frank Sinatra, he notes that Sinatra keeps reissuing tracks from previous albums, and points to two examples in Frank's disc "My Kind of Broadway." This is true and very disturbing—and Mr. Lees doesn't go quite far enough in exposing this duplication. Everything in the "Broadway" album, except for the two songs from "Skyscraper and Golden Moment," has been lifted from earlier Sinatra discs.

Like Mr. Lees, I can't fathom why Sinatra seemingly ignores so much of the good material being written away from Broadway. Nevertheless, I'll be the first one to buy the next LP by Sinatra, "only the greatest" entertainer we have. Fall of 1958

Harold R. Dunlap
Wilmington, Ohio

Women in Music

My subscription started too late to see the article "Musical Composition: Is It for Men Only?" (February). But the lack of female composers is a phenomenon about which I have been arguing with friends for some thirty years. The excuse most frequently advanced parallels the one made by correspondent Robert Lee Tipps in your May issue, i.e., suppression, lack of encouragement, etc.

I find this hard to accept. Women have been attending music conservatories in liberal numbers for years. Accomplished female instrumentalists and vocalists have been turned out in abundance, receive every encouragement, and do very well. Arts other than music have had many successful female creators—consider the novel, poetry, and painting, for example.

Why no female composers? My own feeling is that the doctrinaire liberal position of Western society that human beings have the same intellectual potential regardless of sex (or race) has hypnotized us to the extent that we refuse to recognize or even to study the possibility that there may be biological intellectual differences between the sexes. From observation I would say that women have a relative incapacity when it comes to sustained abstract conceptual thought, which explains the dearth among them of composers, architects, mathematicians, chess players, and the like. To compensate for this, women appear to have a very great feeling for social values, which explains their relatively strong showing in a field like the novel.

Benjamin S. Loeb
Bethesda, Md.

With reference to Leonard Altman's provocative article "Musical Composition: Is It for Men Only?": Mr. Altman is no doubt acquainted with the book 'Woman in Music' by Louis C. Elson, published by The University Society Inc. of New York, but perhaps many of your readers are not. According to Mr. Elson, writing in 1918, the list of women 'really great in the creation of music, as yet,' is very small; but, if he were to give "the names of all those who have composed agreeable, pleasing, and correct music," it would be a catalog as long as a city directory, "and about as interesting."

Irving Schwerke
Appleton, Wisc.
Introducing the tuner.

We must admit that the TFM-1000 stereo FM tuner is different, even for a Fisher. It is quite literally a radical innovation: a design that goes to the roots of the problem and solves it in a new way. The result is perhaps the most exciting solid-state device created by Fisher engineers thus far. A tuner that reproduces the broadcast signal with such fidelity that we confidently call it the tuner. The standard.

Of course, most users are interested only in results—what a product will do rather than how it is done. That is why we usually concentrate on performance rather than electronics in our advertisements. But the TFM-1000 is unique, and we thought you would like to know why.

New, distortion-free detector circuit.

The most dramatic circuit feature of the TFM-1000 is the pulse counter detector. What it does is change FM to audio. All detectors do that. But this one does it by counting pulses that have been made exactly proportional to the original music or speech signal. And does it with such accuracy that distortion is eliminated to the point of defying measurement!

Precisely how this was accomplished should be of considerable interest to engineers, whom we shall fully inform about it in the appropriate technical journals in due course. For now, suffice it to say that the difference is instantly apparent.

Other unusual circuitry

In addition to the radically new detector, the TFM-1000 features the most sophisticated FM tuner circuitry from antenna terminals to output jacks. Such as the newly designed front-end utilizing a select group of Field Effect Transistors; the five-stage IF amplifier; the four-diode coincidence circuit in the multiplex section; and (another Fisher exclusive!) the symmetrical, hard limiters. A hard limiter will limit more effectively than a conventional limiter stage, without changing the signal waveform, so that distortion-free reception is greatly facilitated. (We have also established that the limiters and the detector of the TFM-1000 will never need alignment!)

The resulting performance is quite unparalleled. Usable sensitivity is 1.8 microvolts; selectivity, 70 db; capture ratio, an unprecedented 0.6 db. All measured to IHF standards.

It would seem that the TFM-1000 inaugurates a new standard of performance for FM tuners, whether transistor or tube. For only $499.50 (plus $24.95 for the optional cabinet) you can now own the tuner.

The Fisher For more information, use coupon on page 28.
NEW PRODUCTS
A ROUNDUP OF THE LATEST HIGH-FIDELITY EQUIPMENT

- Kenwood has announced the introduction of the Model TK-80 FM stereo receiver. Among the receiver's special features are front-panel switching for selection of either of two pairs of stereo speakers or headphones, automatic stereo FM switching, interstation-noise muting, and illuminated tuning-meter and program-source indicator. Specifications include a music power of 45 watts per channel at 4-ohms and 40 watts per channel at 8-ohms output impedance. The continuous power rating is 32 watts per channel at less than 1 per cent distortion at 1,000 Hz. Frequency response is 15 to 120,000 Hz ± 3 db. Hum and noise on phono are -60 db; high level, -72 db. The bass and treble controls have a range of ±10 db at 50 and 10,000 Hz, respectively. The FM sensitivity is 1.8 microvolts (IHF), signal-to-noise ratio is 60 db, capture ratio is 2 db, and stereo separation is 38 db at 1 kHz. Dimensions are 17¾ x 6 x 14 inches. Price: $289.95.

- Electro-Voice is adding two new 12-inch component loudspeakers, the MC12 and MT12, to their Michigan loudspeaker line. In addition to the dual cone of the MC12, the MT12 (shown) has a ring-diaphragm tweeter and annular horn for increased efficiency and dispersion of the higher frequencies. Both speakers have a free-air resonance of approximately 60 Hz, a power-handling capacity of 20 watts of program material, and 8-ohm impedance. The MC12 has a frequency response of 40 to 14,000 Hz and is priced at $17.50. The MT12 has a continuously variable level control for adjustment of brilliance to suit environmental acoustics. The crossover point is 4,000 Hz. The MT12 has a response of 40 to 18,000 Hz and is priced at $29.50.

- Empire has available a new line of "raw" speaker components in three separate models designed for special installations and do-it-yourself enclosures. The 9000/15W, a 15-inch woofer, is the low-frequency Grenadier driver intended for 3- to 8-cubic-foot enclosures. List price: $85. The 8000/12W is a 12-inch woofer designed to fit between wall studs; it operates efficiently in enclosures as small as 1.5 cubic feet. List price: $70. The 9000/MHX, a mid-frequency/high-frequency assembly driver, includes a mid-range radiator and an ultrasonic domed tweeter mounted on a die-cast acoustic lens for wide dispersion. Frequency response of the 9000/MHX is 450 to 20,000 Hz. List price: $90.

- JFD announces the Model LPV-VU5, a new FM antenna for urban use. Smaller and less expensive than other log-periodic designs, the LPV-VU5 has a sharp forward lobe in its polar pattern, assuring unidirectional pickup and high front-to-back ratio on all FM, TV, and UHF channels. In urban locations, although most signals originate from the same general direction, interference from a variety of electrical equipment and signal reflections from buildings are a serious problem. In this common situation, a single orientation of the LPV-VU5 provides optimum performance because of its narrow pickup pattern. The antenna is constructed of reinforced aluminum with non-corroding steel rivets, and has a gold alodized coating. Price: $17.50.

- Dustmite is a new record-cleaning device that tracks the record grooves by means of a special pile fabric installed on the bottom of a weighted disc. The disc travels in an arc across the record surface following a path determined by a length of twine fixed to a pylon. The pylon has a self-adhering base and may be attached to any reasonably flat surface. Price: $2.

- Scott has announced the introduction of the Model 382 solid-state AM/FM stereo receiver. The 65-watt 382 uses field-effect transistors in both AM and FM front-end tuning sections, thus achieving greater usable sensitivity and virtual elimination of cross-modulation and drift. Also included is an automatic variable bandwidth function on AM that automatically adjusts the tuner's bandwidth to the quality of the incoming signal. The bandwidth automatically narrows for interference-free reception of weak and distant stations and widens for full-frequency wide-range reception of stronger stations). Other features include separate bass and treble controls for each channel, remote speaker switching (with an off position for use with a front-panel stereo.

(Continued on page 24)
Direct line to Moscow, Tokyo, Beirut, and the world.

With the world's first high fidelity multi-band tuner.

No matter where in the world the excitement is, the Fisher R-200-B will bring it right into your living room. Noise-free and with pleasure. Because the R-200-B is the first multi-band tuner built to high fidelity standards.

The R-200-B is an accomplished world traveler. With its three AM bands it can receive long-wave, medium-wave and short-wave broadcasts. Everything from local news and weather to live broadcasts from concert halls throughout the world. Wide-band for full concert fidelity, regular bandwidth for normal broadcasts, narrow-band to eliminate interference.

But the R-200-B is also an elegant stay-at-home. It includes a magnificent FM-stereo tuner with automatic mono-stereo switching and the famous Fisher STEREO BEACON® multiplex decoder.

Behind the remarkable Nuvistor front end, the R-200-B is completely solid state. And completely reliable. Because Fisher is the largest and most experienced manufacturer of high fidelity components.

You would expect a tuner this fine to be very costly. But the price of the Fisher R-200-B is surprisingly modest. Only $349.50. That's really not much to pay for a direct line to the world. For more information, including a free copy of the 80-page Fisher reference guide to high fidelity, 1966 edition, use coupon on page 28.

The Fisher R-200-B

CIRCLE NO. 27 ON READER SERVICE CARD
FOR STORES "WHERE YOU CAN BUY"—SEE LAST PAGE.
a handcrafted, hand-rubbed walnut cabinet. The organ’s transistor plug-in tone generators are warranted for five years, and all parts are Thomas factory-fabricated components. Total kit construction time is about 50 hours, and no special skills, tools, or knowledge are required to do the assembling. The Model GD-325 organ kit is priced at $349.95. Circle 185 on reader service card

- Norelco’s Continental 420 is a versatile, three-speed, four-track stereo tape recorder that combines a wide range of professional features, including multiplay and sound-on-sound facilities, with easy operation. The 420 has provisions for mixing and monitoring and comes with a dual-element, cardioid, moving-coil stereo microphone for simplified stereo recording. Matched speakers are built into the slim-line teak case and the removable lid. The recorder has a frequency response of 40 to 18,000 Hz at 7½ ips, 60 to 15,000 Hz at 3⅛ ips, 60 to 10,000 Hz at 1⅞ ips—all within ±3 db. The machine measures 17 x 10 x 9 inches, its weight is 22 lbs., and a carrying handle is built into the case. The 420 comes complete with three patch cords, demonstration tape, and an empty reel. Among the accessories available are a foot-pedal control, headphones, dual microphone adapter, and telephone pickup coil. Price: Less than $230. Circle 184 on reader service card

- Heath’s kit version of the transistor Thomas Color-Glo “Artiste” ART-1 organ makes it possible for anyone to play complete songs with melody, harmony, and bass after only a few minutes of practice. Each key on the keyboard lights up with a letter and color corresponding to the letters and colors in the Thomas Color-Glo music book that comes with the organ. Bass foot pedals are marked with the same colors as the harmony notes. The Color-Glo key lights may be turned off when desired. Additional features include ten organ voices; variable repeat percussion to add banjo, mandolin, or balalaika effects; thirteen-note heel and toe bass pedals; two overhanging thirty-seven-note keyboards; a 12-inch speaker; 30-watt EIA peak music-power amplifier; two levels of vibrato intensity; manual balance control; variable expression pedal; variable bass-pedal volume; and headphones, dual microphone adapter, and telephone pickup coil. Price: Less than $230. Circle 184 on reader service card

- ELPa has introduced a well-illustrated booklet on tape recording written by Joel Tall and Martin Clifford. The 33-page booklet Your Tape Recorder is intended for the newcomer to recording and includes such subject headings as How a Tape Recorder Works, How Magnetic Tape Works, Recording from FM, How to Splice, etc. ELPa Marketing Industries, Inc., New Hyde Park, N.Y. Price: $1. Circle 186 on reader service card

- Martin has introduced the M 390, a new bookshelf speaker system utilizing special damping techniques and air-suspension operation. The M 390 is available with colored grille-cloth fabrics of cloud white, indigo, tangerine, and sienna. The system contains a new type of 3-inch closed-back tweeter with hyperbolic configuration for extra-wide dispersion and an 8-inch extended-range woofer of special design with a long-throw 1½-inch-diameter voice coil and Alnico 7 magnet structure. The high-density woofer cone has a reinforced ridge and an accordion-type linen edge suspension. The response ranges from 40 to 18,000 Hz with amplifier power of 5 to 25 watts. Nominal impedance is 8 ohms (4 ohms with direct-coupled transistor amplifiers). The system has a two-year warranty. The oiled walnut cabinet measures 18 x 10 x 9 inches. Price: $39.95. Circle 187 on reader service card

- Woy has published a thirty-five-page stereo-equipment index that lists the test reports of hi-fi equipment that have appeared in nineteen British and U.S. magazines. The years 1961 to 1965 are covered and annual supplements to the index are planned. J. Woy, P.O. Box 4216, Philadelphia, Pa. 19144. Price: $2. Circle 188 on reader service card
The most extraordinary solid-state receiver ever made.

We don't design status symbols; our purpose is performance. The best. But the new 700-T will impress anyone who loves music. Its performance is that extraordinary.

With an FM-stereo tuner of radar-like sensitivity, an exceptionally powerful stereo amplifier (120 watts!) and a complete stereo control center, the 700-T is equal to any musical assignment. Now or in the future.

Totally solid state and totally unprecedented in performance, the new 700-T is truly modest in cost. Only $499.50. Fisher reliability and solid status included.

The Fisher 700-T

For more information, use coupon on page 28.
**Hi Fi Q & A**

**By LARRY KLEIN**

**Amplifier Breathing**

_Q._ Recently I’ve noticed that when I first turn on my amplifier, the cones of my speakers move slowly in and out, even with no program material going through the amplifier. On program material there’s audible distortion. The only way I have discovered to eliminate the breathing effect is to turn the volume all the way up and then reduce it. I’ve replaced all the tubes in the amplifier to no avail. Do you have a solution to my problem?

**A._** What you refer to as breathing is actually a form of very low frequency oscillation in your amplifier. Such a condition is almost always caused by some type of positive feedback within the amplifier at very low frequencies. Rather than the tubes, I would suspect your amplifier’s filter capacitors. They may have lost some capacity and thus are not adequately performing their job of decoupling one stage from another. Also check to determine whether the mounting lugs (that are meant to be grounded) of the can-type capacitors are securely soldered to the chassis. If you built your amplifier from a kit, carefully check the lead dress (arrangement of the wires) particularly in the area of the output stages to make sure that they do not come too close to the input stage wiring or sockets.

**Tape Duplicating**

_Q._ I have access to quite a large library of prerecorded tapes, and I would like to duplicate them for my own use. I have two tape recorders, both of which will operate at 1/2 ips. Would there be any harm in playing a 1/2-ips tape at 15 ips and copying it at that speed? The way I see it, I would be able to cut the duplication time in half and still end up with a 1/2-ips tape. Suppose also that I played a prerecorded 1/2-ips tape at 15 ips and recorded it at 1/2 ips. Would I then have an acceptable 3/4-ips tape?

**A._** I know of no reason why both your schemes should not work out well. As for what is acceptable and how much quality loss would occur, that depends on your ear’s acuity and your recorder’s fidelity. One caution: if either the tape playing machine or the recording machine has marginally high wow and flutter or is slightly off speed, the interaction of the two machines may make these conditions annoyingly audible.

**Line-Voltage Problem**

_Q._ I would like to have a device that would shut down my hi-fi system when the a-c line voltage falls below a certain level. I need this because I find that when I’m tape recording and the line voltage falls and then comes back up, the recorder breaks the tape. Can you suggest some commercial unit that will shut off my system—and keep it off—when the line voltage falls below a certain level?

**A._** A device such as you require would be simple enough to construct using a 117-volt a.c. relay with a resistor (R) in series with it to lower its sensitivity. The value of R would have to be determined experimentally since it would depend on the particular relay used. The relay would be closed by a pushbutton (PB) that momentarily shorts out the resistor. The relay remains closed until the line voltage drops, then it opens and remains open until the line voltage is restored and the pushbutton is depressed. Any competent technician should be able to wire such a setup for you from the diagram shown. However, I suspect that your tape recorder also requires servicing since there is probably a problem of clutch tension on the feed and takeup reels that is causing the tape to break.

**Stylus Pressure**

_Q._ Other things being equal, doesn’t a 0.7-mil stylus exert twice as much pressure on a record as a 0.5-mil, and doesn’t a 0.5-mil exert twice as much as a 0.7-mil? The “bite” into the record, it would seem, is inversely proportional to the square of the diameter of the stylus tip. It’s the same principle, I assume, as spiked heels versus flat heels on the linoleum floor.

_Here’s one reason I ask._ Recently, in buying a child’s phonograph, I learned that it had a 0.7-mil scratcher, instead of the previously used 1-mil type. So do (Continued on page 28)
There are only a few bookshelf speakers that don’t sound like bookshelf speakers. Fisher makes all of them.

Despite their many celebrated virtues, loudspeaker systems between 1½ and 2 cubic feet in volume—today's standard bookshelf speakers—all leave something to be desired if you are looking for completely open, spacious, unconstricted sound. All except three, that is. The Fisher XP-6, XP-7 and XP-9.

This new family of three-way bookshelf speakers is based on the design principles of the incomparable Fisher XP-10, a totally original 5-cubic-foot system that ranks with the world’s finest. Among these principles is the assignment of more than three octaves of the audible spectrum to the midrange channel, with a considerably lower bass-to-midrange crossover than is conventional. This wide-band approach flattens the upper bass and lower midrange response to an unprecedented degree, completely eliminating one of the typical colorations of other bookshelf designs. Three highly specialized 5” drivers carry the midrange in the XP-9, two of the same drivers in the XP-7, one in the XP-6.

Another exclusive feature borrowed from the XP-10 is the Fisher soft-dome tweeter, whose exceptional dispersion characteristics and uniquely smooth, resonance-free response result in the most natural-sounding treble range ever achieved. In the XP-9, this 1½” soft-dome tweeter has an even more powerful magnet than in the other two models.

As for the bass, it is carried by a 10” Fisher free-piston woofer in the XP-6, a 12” woofer of similar design in the XP-7 and a very heavy-duty 12” woofer in the XP-9. In each model, the efficiency is considerably higher than previous experience with bookshelf speakers would make you expect. The end result is state-of-the-art sound in the XP-9 and something very close to it in the other two units.

You owe it to yourself as a high fidelity enthusiast to hear these new speakers at your Fisher dealer. Each has an impedance of 8 ohms and comes in handsome Scandinavian walnut. Prices: XP-6, $99.50; XP-7, $139.50; XP-9, $199.50.

The Fisher

For more information, use coupon on page 28.

FISHER RADIO CORPORATION, INC., 10 M. (5TH ROAD), LONG ISLAND CITY, N.Y. 11101. OVERSEAS AND CANADIAN RESIDENTS: PLEASE WRITE TO FISHER RADIO INTERNATIONAL, INC., LONG ISLAND CITY, N.Y. 11101.

AUGUST 1966

CIRCLE NO. 27 ON READER SERVICE CARD

FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.
If you're not impressed with these 10 exclusive features in the new Uher 9000 tape deck, listen to this.

For a demo visit your hi-fi dealer or write for literature. Martel Electronics, Los Angeles: 2356 South Cotner; New York City: 1199 Broadway; Chicago: 5445 North Lincoln Avenue. End wasted tape. Send for the new Martel "Tape Tabulator" for the timing of classical repertoires ($2.75 value). Dept. B. California office. Enclose 25 cents for postage and handling. Sound begins and ends with a Uher Tape Recorder.

CIRCLE NO. 38 ON READER SERVICE CARD
FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

Cut it out.

FREE! $2.00 VALUE! Send for your free copy of the new 1966 edition of The Fisher Handbook. This revised and enlarged version of the famous Fisher high fidelity reference guide is a magnificent 80-page book. Detailed information on all Fisher components is included.

Fisher Radio Corporation
11-35 45th Road
Long Island City, N. Y. 11101

Name ____________________________
Address ____________________________
City ____________________________ State ______ Zip ______

Because the number of queries we receive each month is greater than we can reply to individually, only those questions selected for this column can be answered. Sorry!
How to get big sound out of a small Fisher:

Turn it on.

At Fisher we don't equate performance with size. Every Fisher stereo system must be capable of producing sound as big as the music. Without compromise. And every time you turn it on.

The Fisher 95 is the most recent proof of this. We call it our baby grand because it is the next best thing to our grand grands. At a small fraction of the size and cost. Only $369.50* with standard speakers, or $399.50* with optional, larger speaker systems for even finer bass response.

The 95 includes a powerful transistor amplifier, a sensitive FM-stereo tuner, an automatic turntable and a magnetic cartridge to match. Everything you need for fine stereo.

Or, if you do not want FM, the Fisher 85 baby grand gives you the same system minus the tuner—for $269.50* or $299.50*, according to the speaker option.

**The Fisher baby grand.**

For more information, use coupon on page 28.
A NEW BREED of bookshelf speakers has lately invaded the market. They differ from their predecessors in that they actually fit on bookshelves. Some, in fact, are hardly bigger than a generous cigar box. The main surprise about these bantams is not their size, but their sound. Heaven knows we've had small speakers before, but they weren't fit to mention in a magazine devoted to hi-fi. The new generation of compact compacts, however, have proved their musical mettle with even the most acoustically demanding recordings. Granted, the lowest bass notes—say, below 60 Hz—lack weight, but the tonal balance on the whole is bright, clean, and pleasing.

The question naturally arises why it is now possible to buy a high-quality small speaker when there weren't any available before. Part of the answer lies in an engineering approach based on the premise that good bass reproduction does not depend exclusively on speaker size. The essential question is how much air is moved by the speaker and at what frequencies.

It is true that, other factors being equal, larger speaker cones have the advantage in bass response: being bigger, they simply move more air. Big cones, in general, also have a naturally lower resonance (which in effect sets the lower frequency limit of acoustic performance). But the designers of these new small woofers, cooperating with the natural laws, found that they could lower the resonance of a small cone by mounting it in a loose suspension and (in some cases) adding to its weight. The loose mounting permits the cone to travel a greater distance on each swing, thus moving a greater quantity of air. In this way, a small cone can address itself to doing the job formerly accomplished only by a big one.

The magnet structure and voice-coil assembly of the small woofers also had to be redesigned to provide proper control of speaker motion despite the wider cone swings. The ideal with any speaker, big or little, is to have the cone move in exact accordance with the electrical signal coming from the amplifier. Once the cone is loosened up, some type of restoring force must be added to keep it from moving on its own beyond the requirements of the electrical signal. In virtually all recent compacts, this force is provided through acoustic-suspension operation of the woofer. In this type of design, the air trapped in the sealed enclosure serves as a part of the cone suspension, and its compression and decompression works in a highly linear fashion to reduce the distortion inherent in all cone-suspension systems.

The merit of the new bantam speakers is not to be credited entirely to their woofers, however. Their characteristically clean, open sound stems as well from radically improved tweeters whose wide-angle treble dispersion contributes to the illusion that the sound originates from a larger source. Although none of these design factors are exclusive to the new bantams (many of the best standard systems work on the same theory), the ingenious juggling of these engineering parameters is a welcome development in speaker technology. They are no cheap and easy substitute for larger units, but they do fill a definite need wherever space is at a premium or portability a must. As a new category of equipment with its own justification, the high-quality compact speaker is an important step in the continuing evolution of the art of sound reproduction.

For a free copy of the new Basic Audio Vocabulary booklet, circle number 181 on the Reader Service Card, page 17.
WHO SAYS THE KLIPSCHORN® IS SO GREAT?

Only the people who have heard one and that takes in some pretty important people.

The Klipschorn® has been chosen as the most advanced state of the loudspeaker art at the Brussels World's Fair, at the American Exhibit in Moscow and in demonstrations to the most critical scientific and musical ears in the world. Always the response is the same. "This is the finest reproduced sound we have ever heard."

WHY IS THE KLIPSCHORN® SO OUTSTANDING?

The Klipschorn® has the lowest distortion and widest full power frequency response of any speaker system in the world...1/10 of 1% FM distortion from 30-200,000 cycles per second at over 115 decibels of sound output. It is actually able to reproduce, without distortion, and at full power, the lowest note of the pipe organ (32.7 cps). No other bass speaker of comparable power, the lowest note of the pipe organ (400 cps) to well beyond the highest fundamental on the piano. This horn, over 2 feet long with its driver attached, has gone through some 15 years of research and development. The massive cast horn is of straight-axis design and is completely free of the irritating distortion which occurs in reflected horns. The horn is mounted on a specially designed flange which effectively increases the horn's mouth area and adds measurably to its smoothness of response...less than 6 db. variation from 400 to 5,000 cps.

The HIGH FREQUENCY HORN (TWEETER)
The highly refined horn tweeter takes over at 5,000 cps and extends to 18,000 cps with variations of less than 6 db. This horn tweeter is mounted on the same flange to which the mid-range horn is fastened.

THE KLIPSCH BALANCING NETWORK

This network has been designed to provide the best match between the 3 horns in the system and also to act as a dividing network.

ONLY THE KLIPSCHORN® REPRODUCES THE FULL RANGE AND DYNAMICS OF A SYMPHONY ORCHESTRA

A special concert was staged in which Klipschorn® reproduced, at original loudness, the Hartford Symphony Orchestra. This was a live vs. recorded concert and the majority of the large listening audience could not tell the difference between the live orchestra and the sound of the orchestra as reproduced by Klipschorn®.

To the best of our knowledge, no other commercially available high fidelity loudspeaker has passed such an arduous test.

KLIPSCH HIGH EFFICIENCY ALLOWS YOU TO USE LOWER POWERED AMPLIFICATION

The sound output of the Klipschorn® is approximately 10 decibels higher than the best direct radiator enclosure type systems and is 20 decibels higher than typical systems. A 10 watt (2 for stereo) amplifier is adequate for home use and has proved ample for audiences of 900 people.

In reproducing the full Hartford Symphony Orchestra, only 2 watts peak power feeding each of two Klipschorn® in stereophonic array were used. This may seem difficult to believe if you are accustomed to the typical loudspeaker system, but you will be quickly convinced once you hear a Klipschorn® Wide Stage Stereo System.

OUR PHILOSOPHY: TRY IT BEFORE YOU BUY IT!

We sincerely hope you will listen to many systems before you purchase. Don't be fooled by advertising claims. We are confident that once you have heard the Klipschorn®, you will be satisfied with nothing less.

Please send me complete information on the Klipschorn® loudspeaker system. Also include the name of my nearest Klipsch Authorized Audio Expert.

KLIPSCH & ASSOCIATES
Box 280
Hope, Arkansas 71801

NAME

ADDRESS

CITY

STATE

OCCUPATION

AGE

*In Klipsch speakers all forms of distortion are minimized—especially AM and FM distortion which are many times as objectionable as simple harmonic distortion. Technical papers available on this subject.
When tracking at 0.5 gram with the Dual 1019, and without Tracking-Balance Control, the Skate-O-Meter registers 60 milligrams of excessive tracking force against the inner groove wall, and, consequently, 60 milligrams insufficient force against outer groove wall.

With Tracking-Balance Control applied for 0.5 gram tracking, Skate-O-Meter registers 0, showing stylus now restored to center of groove and tracking with equal force on each wall.
Dual created the Skate-O-Meter to show exactly what happens to the stylus when tracking stereo records. It tells a lot about anti-skating.

It tells even more about Dual.

Dual's Skate-O-Meter is a precision test instrument. We use it on every Dual 1019 to detect and correct any deviation of the stylus from perfect balance in the stereo groove.

The Dual 1019 was designed in every aspect for 0.5 gram tracking. This dictated that the bearings in the tonearm pivot had to be well nigh friction-free. The friction is actually under 0.04 gram. This added a new dimension to an old problem.

Whenever tonearm bearing friction is less than 12% of tracking force, any stylus mounted in an angled tonearm head tends to run toward the center of the record. This is caused by friction between stylus and rotating record, and deflects the stylus against the inner groove wall and away from the outer wall. And this is what skating is all about.

How serious is skating?

Every audio expert agrees that skating is undesirable because it introduces distortions, among other problems. Yet some tend to minimize skating as a problem because the distortions aren't always audible on normal program material.

Thus, some feel that any attempt to eliminate skating is carrying precision too far. But to Dual, it seems clear that the sole responsibility of the turntable manufacturer is to provide the best possible tracking conditions for the stylus. In this case, to eliminate the undesirable effects of skating by restoring the balance of the stylus in the groove. This is exactly what the Tracking-Balance Control of the 1019 accomplishes.

How Tracking-Balance Control works

A precisely calibrated counterforce to skating is applied around the pivot of the tonearm ... parallel to the skating force, but in exactly the opposite direction. Since skating force varies with stylus radius as well as tracking force, Tracking-Balance is applied in a continuously variable range from 0 grams up.

Tracking-Balance Control is applied by turning continuously variable direct-reading dial that is calibrated to match tracking force dial.

Yet, all you have to do to bring all of these interrelated forces under control is to dial a precalibrated number. This simple, foolproof and utterly precise solution to a complex problem is, perhaps, Dual's most impressive achievement of all.

Why the Skate-O-Meter?

Until Dual invented the Skate-O-Meter as a production tool for quality control, no existing test instrument could meet the precision of the 1019 tonearm on its own terms. Such as making sure that its bearing friction was indeed under 0.04 gram, that it would skate when tracking as low as 0.5 gram, and that Tracking-Balance Control is absolutely accurate.

The Skate-O-Meter tests all this—and more—on any stereo record, with the sides of the stylus tracing the walls of the groove. (A grooveless record, though it isn't too much, doesn't exceed 1 1/2 grams by a split hair.)

So does the rotating single play spindle

"All" it does is go around with the record, just as an on the most expensive manual-only turntables, but on no other automatic. By eliminating potential motion or potential friction between record and spindle, it improves wow, flutter and rumble a bit over the 1009. Not a great deal. There just isn't too much room for improvement on the 1009.

But nothing tells you as much as a visit to your franchised United Audio dealer. That's where you'll learn exactly how Dual's total precision achieves its total performance superiority. Scrupulous attention to every detail tells you why every major high fidelity authority claims the Dual 1019 as the finest record playing instrument of all time. And why so many of them have long since purchased the 1019 for their own systems . . . personal and professional.
MAN--YOU GOTTA HEAR THIS NEW action! SPEAKER.

UNIVERSITY'S NEW UR-4 COMPACT 2-SPEAKER SYSTEM

This is it! The action speaker! University's new UR-4 2 speaker system! Full of go! Full of action! Full of big lively sound! It doesn't miss a thing! Delicate highs — rich, full bass, the action speaker handles them all without distortion! This mighty midget (only one cubic foot) goes anywhere! In a book case! A headboard! On the wall! On the floor! And you get all that lively University Sound for less than $60.00! Man, you gotta hear this one to believe it! Go to the shop where the action is — your University dealer and listen to the action speaker.

SPECIFICATIONS

- Frequency Response: 30 Hz to beyond
- Power Handling Capacity: 30 watts RMS, Music Power
- Impedance: 8 ohms
- Crossover Network: High-pass coupling network, 2 objecive electrical design
- Crossover Frequency: 2000 Hz
- Speaker Complement: 1-8" ultra-linear response, high-compliance woofer, edge resonance damped operation, high-compliance tweeter, edge resonance damped operation, closed back, cone tweeter
- Enclosure Design: University's exclusive design for extended low frequency response
- Dimensions: 19" x 10½" x 9" (H x W x D)
- Shipping Weight: 14 lbs.

LISTEN—UNIVERSITY SOUNDS BETTER

UNIVERSITY SOUND
A DIVISION OF LTV LING ALTEC, INC
9500 W. Reno
Oklahoma City, Oklahoma 73101

CIRCLE NO. 58 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

HIFI/STEREO REVIEW
MORE SPEAKER TESTING: A recent letter from a reader raises some questions that are worthy of comment, most particularly his request for more detailed data in loudspeaker reports. I have described some of our test procedures at various times in this column, and while I am aware that the equipment reports themselves are not always as detailed as some readers would like them to be, a complete description of test conditions and procedures in each case would occupy more space than the report itself, so it is impractical to include it.

In the case of speaker tests, we publish only tone-burst photos in addition to the text of the report, omitting graphical data. The reason is that loudspeaker specifications, when presented simply as numbers and curves, tend to become as meaningless as cigarette and detergent advertising. There is no single parameter that will describe the sonic performance of a loudspeaker.

It is easy to say that a wide, smooth frequency response, even polar dispersion, and good transient response are characteristics of a good speaker, and certainly a pronounced weakness in any one of these areas will be reflected in its audible performance. But the frequency-response specification of a speaker, for example, is practically meaningless in the context in which it is usually used in advertising. The best speaker made cannot compare in bandwidth or smoothness with even a mediocre amplifier. Frequency response measured in a free-field or anechoic environment is only an indication of that portion of a speaker's total output that impinges on a small microphone at one arbitrary location relative to the speaker. In general, a different response curve will be obtained for every change of microphone location.

A family of frequency-response curves, taken at different angles to the speaker's axis, might give a reasonable description of its total output, at least in the middle and high frequencies, but it is folly to expect that the average layman could interpret such a mass of data correctly. In any case, the low-frequency response of a speaker (below about 100 Hz) cannot be measured meaningfully in this manner, since room acoustics have a profound effect on low-frequency response and cannot be divorced from final evaluation of the speaker.

In the usual home environment, a large part of the sound reaching the listener's ears is reflected from the walls, the ceiling, and the floor. His ultimate impression of a speaker's sound is derived from a summation of the energy reaching him from many directions. Since the listener rarely sits directly in front of a speaker, the usual axial response curve is of little more significance than that measured at any arbitrary angle to the speaker's axis.

There are various techniques for measuring the total output from a speaker using reverberant chambers, but they call for special technical facilities that are not necessary for a realistic appraisal of what a speaker is going to sound like in the home. Our measurements are made in a room of about 2,700 cubic feet, with the speaker located on a shelf or on the floor, according to its manufacturer's intention. If a microphone is placed at any point in the room, and the speaker is driven with a sine-wave test signal (of constant strength) whose frequency sweeps through the audio-frequency range, the output from the microphone will vary over wide limits. The various reflected signals, slightly delayed because of their longer travel at different frequencies, are out of phase with the direct signal and result in cancellations. This tends to mask the inherent response of the speaker.

Figure 1 shows the response of a speaker at three different microphone locations (the absolute levels are displaced for clarity). The upper curve was taken with the microphone directly in front of the speaker (on axis) and 12 feet away. The other two were taken at a distance of 6 feet, 45 degrees to the right and left of the speaker. These measurements were made with an oscillator sweeping in three ranges (20 to 200 Hz, 200 to 2,000 Hz, and 2,000 to 20,000 Hz), so that each curve effectively represents three successive sweeps plotted consecutively.

Obviously, these three curves do not give a clear picture of the speaker's response. However, by moving the microphone to a large number of different places in the room and repeating the measurements in the three sweep ranges, the data may be averaged to obtain the single curve shown in Figure 2. Most of the irregularity due to room reflections disappears, and the true response of the speaker begins to emerge. Ideally, a number of micro-

REVIEWED THIS MONTH

Garrard SP 20 Record Player
ADC 10/E Phono Cartridge

AUGUST 1966
phones should be used simultaneously, and their outputs electrically averaged, but we make our measurements consecutively (if less efficiently) and average the data numerically for the same end result.

The final step in the process is to correct for the known low-frequency roll-off in the listening room and in the test instruments. By plotting the averaged curves from dozens of different speakers, a clearly defined trend can be seen. This correction is then applied to all speaker measurements.

It might be asked how valid these measurements are. For our test purposes, they are quite satisfactory: they are repeatable (generally to well within 3 db over the whole frequency range) and the curves are not seriously affected by the number of averaged sets of data as long as such sets number more than six. We normally use eight microphone positions. The actual positions have almost no effect on the final result.

Below 200 Hz, the resonances in our testing room have an unavoidable effect on the response, and usually produce small "bumps" at 40 and 60 Hz. Disregarding these known effects, the shape of the final curve agrees very closely with our listening checks (listening tests are also made on the same units by Technical Editor Larry Klein). We consider the measurements to be a back-up for the judgment of our ears, which are somewhat more sophisticated in design than laboratory instruments. In the example shown in Figures 1 and 2, the speaker under test had a distinctly heavy sound in listening tests, and this was confirmed by the elevated response below 100 Hz revealed by our instruments.

I am of the opinion that publishing these test curves, without a complete explanation in every case of the process by which they were obtained, would result in more confusion than enlightenment. The verbal interpretation of the test data, I feel, is much more communicative, and does not, moreover, place an unfair burden on the reader.

~ EQUIPMENT TEST REPORTS ~

By Hirsch-Houck Laboratories

GARRARD MODEL SP 20 RECORD PLAYER

GARRARD's lowest-priced record changer, the Model 50, has been used as a prototype for their new Model SP 20 manual player. The SP 20 has the same motor, turntable, and arm as the Model 50, but lacks its record-changing mechanism. However, the automatic trip feature has been retained, so that after a record has been played, the arm returns to its rest and the motor shuts off automatically.

The SP 20 record player has a four-pole motor and a 101/2-inch aluminum turntable platter. Four speeds—16 2/3, 33 1/3, 45, and 78 rpm—are provided. The cast-aluminum arm is counterweighted to provide an approximate balance for most cartridges. An adjustable spring provides the necessary tracking force.

The SP 20 is a compact player, requiring a 121/2 x 14 3/8-inch motor board. It extends only 27/8 inches below the board and about 3 1/2 inches above it, permitting installation in restricted spaces.

The detachable cartridge shell is supplied with hardware for mounting practically any modern cartridge. The SP 20 comes with an integral power cord and a pair of detachable signal cables fitted with phono plugs, and requires only the addition of a cartridge and a motor board or base before being used.

In our laboratory measurements, the Garrard SP 20 had very low rumble, comparable to that of many more expensive players. Measured according to NAB standards, the rumble was -31 db (combined vertical and lateral) and -35 db in the lateral plane only. The flutter was only 0.04 to 0.05 per cent, and the wow was an equally negligible 0.08 to 0.14 per cent, depending on the speed. The operating speeds were slightly fast.

(Continued on page 38)
Wharfedale gives small speakers big futures with new, investment-guarding Expandules.

See how you can convert your present bookshelf speaker to a full-size system in three simple steps.

Wharfedale's exclusive Expandules convert bookshelf speakers into magnificent-sounding floor models, preserving your investment when you are ready to improve upon the original speakers in your music system. Each Expandule contains a high-compliance, low-resonance woofer of appropriate size, plus the correct matching network to extend bass response and improve sound projection into the room...complementing the performance of the original bookshelf speaker. Expandule enclosures are table-top (30") height, and of slim-line design. Finished in oiled or polished walnut, they blend perfectly with present home-decorating trends. The handsome appointments and tasteful styling completely conceal the fact that the Expandule also contains the bookshelf speaker. Matching legs are optional.

Wharfedale is a smart investment, because you can start your music system with Wharfedale Achromatic bookshelf units (W30, W40, W60) and add the Expandules (E35, E45, E65) when you are ready...or now! Of course, we also offer the splendid W90 and W70 integrated floor-standing models for the finest realization of the Wharfedale sound, at highly attractive prices.

Mail this coupon for the Wharfedale Comparator Guide, a description of the Expandules, and a list of other speaker systems which they accommodate.

Write Wharfedale, Dept. WK-126, Westbury, New York 11590.

[Address fields for name, address, city, state, zip]
Although the turntable itself was quite satisfactory in all respects, the arm’s tracking error was undesirably large, amounting to 1.2 to 1.8 degrees per inch of radius near the inner grooves of a record. (A tracking error of 0.5 degree per inch is usually considered to be a reasonable value.) The downward tilt of the arm, a carryover from the record-changer prototype which had to accommodate a stack of records, negates some of the advantages of a modern cartridge with a 15-degree vertical stylus angle. If desired, however, a foam turntable mat or shim could be used to bring the cartridge and platter into the correct relationship.

Aside from these criticisms, the Garrard SP 20 is an excellent choice for a low-priced music system, due to its fine turntable operation. It performed well, and we were not aware of any significant degradation of sound quality traceable to the arm design. The Garrard SP 20 sells for $37.50. A walnut base for the SP 20 is available for $3.90 additional.

For more information, circle 188 on reader service card

ADC 10/E PHONO CARTRIDGE

The ADC 10/E cartridge is the newest and the most refined of that company’s series of “induced-magnet” stereo cartridges. Similar in design concept to the ADC “Point Four” cartridges, the 10/E’s magnet and coils are embedded in the body of the cartridge. The stylus assembly, which can be slipped off without tools, contains a small soft-iron armature that pivots close to the pole pieces in the cartridge body. The stylus cantilever is a light, rigid, non-ferrous tube that transmits the stylus motion to the armature which modulates the magnetic flux linking the coils, thus generating an output voltage.

The ADC 10/E features an exceptionally tiny, low-mass moving system. The jewel itself is a so-called “nude” diamond cemented to the end of the cantilever. The diamond has a polished elliptical tip, with radii of 0.3 and 0.7 mil. According to ADC, the effective moving mass of the 10/E stylus assembly is one third that of any other magnetic cartridge. Setting the correct tracking force is simplified by the fact that the stylus assembly weighs just 3/4 gram. If the arm is balanced with the stylus assembly removed, replacing it automatically assures a tracking force of 3/4 gram.

Our laboratory measurements revealed that the ADC 10/E has an exceptionally flat frequency response, with no peaks between 20 and 20,000 Hz. Its overall response was within ±2.5 db over that range. The square-wave response of the ADC 10/E when playing the CBS STR110 test record reflects its smooth, wide frequency response. Only a single low-amplitude cycle of ringing was evident on the leading edge of a 1,000-Hz square wave. Channel separation was better than 20 db up to 10,000 Hz, and about 15 db at 20,000 Hz. In the middle-frequency range, where most of the stereo effect occurs, the separation averaged better than 30 db.

The intermodulation distortion at a 1-gram tracking force was under 1 per cent up to 11.5 cm/sec velocity, reaching 4 per cent only at the extremely high velocity of 22.5 cm/sec. A 1-gram force was necessary for lowest distortion and optimum tracking of very high velocities, but 3/4 gram should suffice for practically any stereo record. The output of the ADC 10/E was somewhat lower than most stereo cartridges, about 3.9 millivolts at 3.54 cm/sec velocity. This is sufficient for driving any modern amplifier. The hum shielding was average in effectiveness, and no difficulty should be experienced in a proper installation.

In listening tests, the ADC 10/E was extremely smooth, with an effortless quality. On most program material, it was difficult to hear differences between it and other premium-quality cartridges, but any such differences were generally in favor of the ADC 10/E. It is unquestionably one of the handful of top-quality cartridges that typify the present state of the art. The ADC 10/E sells for $59.50.

For more information, circle 189 on reader service card

A limited number of reprints of THE CALENDAR OF CLASSICAL COMPOSERS which appeared in the April issue are still available. The calendar lists the most important composers from 1400 to the present and groups them according to the major stylistic periods—Renaissance, Baroque, Classic, Romantic, etc. Printed in color on heavy stock, it is suitable for framing. The calendar will be sent rolled in a mailing tube to prevent creases . . . we pay the postage... all you do is circle number 180 on the reader service card on page 17. But hurry—supply is limited.

For more information, circle 189 on reader service card
**Jazz Group**

Jim Robinson, Ernie Cognolotti, and Louis Cottrell participate in a Riverside Records recording session in New Orleans. The AR-3 in the background (one of a stereo pair) is being used to monitor recording quality.

---

**AR-3 LOUDSPEAKERS ARE USED ALONGSIDE THE LIVE INSTRUMENTS THEY REPRODUCE.**

**Symphony Orchestra**

During rehearsals the San Diego Symphony Orchestra pauses now and then to listen to a taped recording of the passage they have just played. AR-3 loudspeakers were chosen for the stereo playback system because of their lifelike, uncolored reproduction of orchestral timbres.

**String Quartet**

Members of the Fine Arts Quartet listen to the first playback of a Beethoven Quartet, checking both their performance and the fidelity of the recording. The AR-3 speakers being used as monitors were chosen by the musicians themselves, who felt that AR-3's would create musical carbon copies of the live performances, free of hi-fi gimmick effects.

AR speakers ($51 to $225) are often used professionally as shown here, but they are primarily designed for natural reproduction of music in the home. Literature will be sent on request.

ACOUSTIC RESEARCH, INC., 24 Thorndike Street, Cambridge, Massachusetts 02141

AUGUST 1966

CIRCLE NO. 1 ON READER SERVICE CARD
FOR STORES "WHERE YOU CAN BUY"—SEE LAST PAGE.
Why Settle For Contrived Sound
When Bozak Offers So Many Beautiful
Ways To Listen Realistically?

If you've ever had to compromise between sound and appearance in selecting loudspeakers, you know how disappointing such a compromise can be to a serious music listener.

Compromises are not necessary with Bozak.

In Music
Every Bozak speaker, regardless of size, purpose or price is designed, built and tested to reproduce sound as realistically as possible for your investment. Bozak's goal is to let you hear music exactly as though you were in the concert hall.

In Appearance
Bozak offers you the broadest selection of furniture styles available from any manufacturer of quality loudspeakers. Choose from among such traditional moods as French Provincial, Italian Provincial or Moorish or such contemporary impressions as Urban or Century. You are bound to find one that adds a note of interest to your decor.

BOZAK—The Speakers That Look As Great As They Sound.
ONE of the more prominent citizens in the town of Salzburg, Austria, during the latter half of the eighteenth century was Sigmund Haffner, son of a wealthy former burgomaster. In the spring of 1782, Haffner (some authorities have said it was his father, but recent research seems to show that the elder Haffner died in 1772) wanted a serenade for a special festivity, perhaps a celebration of his ennoblement that year, and he apparently asked Leopold Mozart to provide him the music. Leopold, in turn, promptly wrote to his son Wolfgang in Vienna, urging him to compose the score. But the younger Mozart was very busy at the time. He was working on an arrangement for wind band of music from his recently produced opera *The Abduction from the Seraglio*, he was putting the C Minor Serenade for Wind Octet (K. 388) into final form, and his head was full of other plans. Nevertheless, a commission from Haffner was not to be taken lightly. Six years earlier Mozart had composed a large-scale work for the marriage of Haffner's sister Elisabeth; this—the "Haffner" Serenade—had turned out to be a very ambitious project for which the composer was presumably generously paid. Money was a constant problem with Mozart, and never more so than in 1782, the year of his marriage. And so, during two weeks in July, he produced a serenade in six movements for Haffner, and then forgot about the piece.

Six months later Mozart was faced with the need to produce a new symphony for a concert he was to conduct in Vienna. As time was short, he wondered whether there might not be material in the serenade of half a year earlier that he could turn to good use for the new work. In a hastily dispatched letter to his father in Salzburg, Mozart urgently requested the score of the serenade. Another letter to Leopold, written after the score arrived in Vienna, reveals just how casual and off-hand Mozart was in the creation of much of his most sublime music. "The new Haffner Symphony has astonished me," he wrote, "for I no longer remembered a word of it; it must be very effective." He took four of the six original movements of the serenade, added clarinet and flute parts to the existing...
scoring for oboes, bassoons, horns, trumpets, timpani, and strings, and came up with the Symphony No. 35, in D Major, one of the enduring masterpieces of the literature. Because of its origin, the score has been known as the “Haffner” Symphony almost from its inception.

At the first performance, on March 22, 1783, the symphony was loudly applauded and had to be repeated. Mozart had remarked to his father that in performance the first movement should “strike real fire” and that the concluding one should go “as quickly as possible.” The festive atmosphere created by the opening proclamation is maintained throughout the symphony: the slow movement is all grace and elegance, the Minuet is a particular charmer among Mozart’s creations in this form, and the concluding Presto is abundant wit and dash.

Eleven different recordings of the “Haffner” Symphony are listed in the current Schwann catalog. Eight of them are recent enough to exist in stereo as well as mono. I must begin this discussion of the “Haffner” Symphony recordings, however, with a brief mention of a performance that is no longer available and yet is one of the great landmarks in the history of musical art—the “Haffner” Symphony recording made in 1929 by Arturo Toscanini and the New York Philharmonic-Symphony Orchestra. After countless hearings, this performance still amazes me. Its spirit is one of exuberant vitality and freshness, the orchestral playing is sheer perfection (there is one point in the slow movement when the entire first-violin section phrases in unison like sixteen Fritz Kreislers), and Toscanini’s supreme dedication to the beauty of the music is apparent everywhere. This recording, originally on 78’s, of course, was re-issued on LP for a brief while, a decade or so ago, on the RCA Camden label. Clearly it should be made available again, particularly since the available Toscanini recording of the score, made much later with the NBC Symphony Orchestra (RCA Victor LM 1038), is a harsh, hard-driven performance that is vastly inferior to the earlier one.

Among current recordings of the score, the leading choices in my estimation are those by Otto Klemperer (Angel S 36128, 36128—tape Y3S 3662), Carl Schuricht (Richmond 29062, 19062—tape E 40006), George Szell (Epic BC 1106, LC 3740, not available on tape), and Bruno Walter (Columbia MS 6255, ML 5655—tape MQ 436). Also listed in the catalog is a performance by the Israel Philharmonic conducted by Josef Krips (London CS 6081, CM 9220), but a considerably more ebullient Krips performance with the Royal Philharmonic Orchestra is included in the Reader’s Digest “Treasury of Great Music” album. The Klemperer, Szell, and Walter performances are coupled with another Mozart symphony (the “Linz” in Klemperer’s case, Number 39 in Szell’s, and the “Jupiter” in Walter’s); the coupling for Schuricht’s performance is Schubert’s “Unfinished” Symphony.

The Klemperer performance may not be to everyone’s liking. As is his wont, the conductor endows the music with a larger-than-life monumentality. I find it a stimulating approach, the more so because the playing and the recording are both first-rate. (Incidentally, the tape version, a 3 3/4-ips release, also contains Klemperer’s performances of the other five of Mozart’s last six symphonies.) Both Schuricht and Szell offer what may be termed more conventional performances: the mood is gay and sprightly, thoroughly outgoing and vivacious. The Szell performance especially is marked by extraordinary snap and élan in the orchestral playing.

But it is the performance conducted by Bruno Walter that is my own preference among the available recordings. By now it is certainly a commonplace to remark that Walter injected into his music-making qualities of geniality and serenity that seem all the more treasurable because they are generally absent in the performances of standard concert and operatic fare today. Walter’s “Haffner” Symphony recording is a perfect example of the conductor’s unique musical personality. He did not hesitate to caress a phrase or to point up an inner voice when it is turning a meaningful phrase. As few conductors have done, Walter made us acutely aware of the love he felt for the music he was conducting. Some may find his way excessively “romantic,” but I do not. The great works of the symphonic literature should be dynamic and vital shared human experiences; Walter’s “Haffner” Symphony recording assuredly is. The playing of the Columbia Symphony and the reproduction are both fine.

REPRINTS of the 1966 review of the complete “Basic Repertoire” are available without charge. Circle number 179 on reader service card.
**Now, look at the **NEW** Sherwood specs!**

<table>
<thead>
<tr>
<th>Model</th>
<th>V-Tube</th>
<th>S-Audio</th>
<th>T-Germanium</th>
<th>Power (IHF) 2 channels 4 ohms</th>
<th>Sensitivity Microvolts</th>
<th>Price Dollars/Watt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sherwood S-8800</td>
<td>S</td>
<td>T</td>
<td>S</td>
<td>140</td>
<td>1.6</td>
<td>$359.50</td>
</tr>
<tr>
<td>Altec 711A</td>
<td>S</td>
<td>S</td>
<td>T</td>
<td>100</td>
<td>2.2</td>
<td>$378.00</td>
</tr>
<tr>
<td>Bogen RT8000</td>
<td>T</td>
<td>V</td>
<td>T</td>
<td>70</td>
<td>2.5</td>
<td>$319.95</td>
</tr>
<tr>
<td>Dyna FM-3, PAS-3 &amp; S-70</td>
<td>V</td>
<td>90</td>
<td>4.0</td>
<td>394.85</td>
<td>4.38</td>
<td></td>
</tr>
<tr>
<td>Fisher 600T</td>
<td>V&amp;T</td>
<td>T</td>
<td>T</td>
<td>120f</td>
<td>1.8</td>
<td>459.50</td>
</tr>
<tr>
<td>Fisher 440T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>70</td>
<td>2.0</td>
<td>329.50</td>
</tr>
<tr>
<td>Harman-Kardon SR-900B</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>100</td>
<td>1.85</td>
<td>449.00</td>
</tr>
<tr>
<td>McIntosh 1500</td>
<td>V&amp;T</td>
<td>V</td>
<td>V</td>
<td>85</td>
<td>2.5</td>
<td>469.00</td>
</tr>
<tr>
<td>Marantz BB 7, 10B</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>75</td>
<td>2.0</td>
<td>1170.00</td>
</tr>
<tr>
<td>Scott 348</td>
<td>V&amp;T</td>
<td>T</td>
<td>T</td>
<td>120</td>
<td>1.9</td>
<td>479.95</td>
</tr>
<tr>
<td>Scott 342</td>
<td>T</td>
<td>V</td>
<td>T</td>
<td>65</td>
<td>2.5</td>
<td>299.95</td>
</tr>
</tbody>
</table>

- Reference 'V' and 'T' designations may include some silicon transistors.
- Figures above are manufacturers' published specifications except 'T' which are published test findings. Power is 4 ohms, 2-channel output except noted.
Amazing tower test proves superiority of Scott FET design!

New 342 receiver has greater sensitivity, better selectivity, less drift, and exceptional freedom from cross modulation.

The toughest place to test a solid-state FM tuner is right at a strong transmitter site. Being this close to the overpowering signal of the station causes ordinary tuners to "cross modulate." Powerful stations will appear at many points on the dial, obliterating other FM signals listeners want to receive.

To prove the superior cross modulation rejection of Scott's new Field Effect circuitry, the 342 FM Stereo Receiver was tested right at Boston's WHDH-FM transmitter tower. Here the radiated energy from the multi-kilowatt transmitter is at maximum level, and any susceptibility of a receiver to cross modulation would be drastically evident. Not only did the Scott 342 reject cross modulation exceptionally well, but, equipped only with the normal FM dipole antenna supplied with the unit, the 342 picked up 31 stations loud and clear in spite of impossible reception conditions.

Until development of Field-Effect circuitry by Scott engineers, it was impossible for an all-solid-state FM receiver to provide the listener with both high sensitivity and freedom from annoying cross modulation. This test strikingly demonstrates achievement of both desired results. Cross modulation rejection is at least 20 db better than conventional designs... and there is no sacrifice of sensitivity.

Outstanding Specifications of New 342

Controls include tape monitor, speaker switching, stereo balance, bass, treble, and volume, automatic stereo switching, and front panel stereo headphone output. Specifications: Usable sensitivity, 2.5 μV; Frequency Response, 18-25,000 cps ±1 db; Cross Modulation Rejection 85 db; Music Power Rating (4 ohm output), 32.5 watts per channel; Stereo Separation, 35 db; Capture Ratio, 6.0 db, price $299.95

Write for Scott's informative new booklet on field-effect transistors.

H. H. Scott, Inc., Dept. 245-08, 111 Powdermill Road, Maynard, Massachusetts

Export: Scott International, Maynard, Mass. Prices and specifications subject to change without notice. Prices slightly higher west of Rockies.
LOUDSPEAKERS: FACT AND FALLACY
MYTHS AND FAIRYTALES OUT OF THE BENIGHTED PAST
STILL HAVE A HOLD ON MANY SPEAKER BUYERS

By John Milder

Once upon a time, in the not-so-long-ago, most hi-fi loudspeakers were so bad that they demanded the most imaginative kind of thinking in order to explain away their failings. Unfortunately, a good deal of the audiophile scuttlebutt about speakers today seems to have survived intact from that myth-making period. The result is that, even with the healthy number of really excellent speakers now available, many shoppers find their showroom visits unnecessarily complicated by all sorts of poppycock passed on to them uncritically by friends, salesmen, and (heaven help us) popular writers about speakers.

By taking a hard look at some of these highly persistent fairytales, it should be possible (hopefully without sounding too sanctimonious) to dispose of those that have caused the most confusion for buyers. To deal properly with some of the following propositions, I have no honest choice but to give a brusque back-of-the-hand to a few theories that are still taken very seriously in some quarters.

In advancing one man's version of the whole truth, I can only suggest that you test each conclusion for sense, and that you check the Letters to the Editor column a couple of months from now for possible retorts. If anything that follows deeply offends your own theoretical sensibilities, I strongly advise that you write an angry letter to Gene Lees.

PROPOSITION ONE: Only big speakers produce big sound.

We might as well handle this one at the outset. It is a venerable idea, advanced in many formidable variations. First, it is obvious that the better bookshelf-size speakers can deliver as much undistorted bass power as is needed for any home application. It is true that a small driver in a sealed enclosure must make long cone excursions if it is to move enough air to produce good bass, and since it gets no help from bass-reflex or horn action, more amplifier power is therefore required. The lower the frequency
The only thing missing from the sound of a good small speaker or a good big one (all bets are off, of course, for bad speakers of any size) is the larger-than-life, boom-box upper-bass response that once was the curse of practically all speakers. This kind of "big" overly resonant sound, which is nothing other than harmonic distortion, is something to avoid in speakers of any dimension. (See Larry Klein's article in this issue on some listening tests for this brand of sonic horror.)

PROPOSITION TWO: Two (or three or four) speakers in an enclosure are better than one.

The numbers game in speakers is primarily the creation of the mass-market phonograph manufacturers. They like easy "step-up" features that will incline customers toward the more expensive models, and nothing could be more useful toward that end than to plant the idea that the number of speakers in their boxes is an index of quality.

By now, most experienced listeners know that one good speaker in an enclosure will sound better than half a dozen poor ones. But there is still a tendency, even among otherwise knowledgeable buyers, to interpret an extra woofer, mid-range, or tweeter as a sign of extra refinement in the design of a high-priced system. Not so. While there is general agreement that at least two speakers (woofer and tweeter) are needed for wide-range frequency coverage, any number beyond two is simply an indication of a manufacturer's particular design approach and is not necessarily synonymous with added quality.

PROPOSITION THREE: You can't really measure a speaker's quality. It is all a matter of taste.

A loud Bronx cheer for this one. Measurements can tell a manufacturer more than he ever wanted to know about his loudspeaker. The problem is how to interpret the measurements. Does a graph of high-frequency response represent the total treble energy the speaker pumps out in all directions, or just the amount of energy measured directly in front of the speaker? (If the latter, the graph isn't telling you much.) Is a speaker's bass-response curve qualified by any statement of its harmonic distortion at low frequencies, or is there a chance that the output that appears to be present at 30 Hz is actually mostly 90-Hz harmonic output representing distortion?

But you can tell something from the way in which a manufacturer faces up to the measurement problem. If he is conscientious, he will try to furnish the most complete set of data he can; or, on the other hand, he may choose not to specify frequency response at all. Unfortunately, advertising and sales departments frequently force otherwise conservative engineers into the numbers game, so it is best to quietly ignore grandiose claims of a 20- to 20,000-Hz frequency response—the speaker may be worthwhile despite them.

The notion that, in speaking of speakers, everything is a matter of taste assumes that there is no original sound reality for a speaker to reproduce. This may be true if you listen only to electronic organs and other inherently electronic sources of music, but if you listen to live music, you do have a standard by which to judge any speaker. Once you have taught yourself to resist the siren song of the boomier, brassier, or more brilliant speakers—those that sound much bigger than life—your own taste should come into play, and you should listen for the speaker that best reproduces the widest variety of program material without adding its own nickel's worth.

PROPOSITION FOUR: The best way to listen to speakers in a showroom is to make direct A-B switching comparisons.

There are a couple of reasons why the A-B speaker comparison frequently isn't a valid test. One is that the varying efficiencies of speakers are seldom if ever evened out by the dealer's speaker switchboard. (I have never been in any showroom where all speakers played at the same level for comparison.) If no adjustment is made for efficiency differences, the louder of two speakers in an A-B test almost always sounds better. No matter how acute your critical faculties, you may not be able to overcome this problem in making an instantaneous comparison.

The other problem with the A-B test is the varying placement of speakers in a showroom. Speakers placed nearest to intersecting surfaces will seem to have more bass; those placed away from the walls and floor will sound the least weighty. There is a danger as you run through quick A-B comparisons that you will dismiss a good speaker simply because of its placement. It is far better to rely on repetition of musical material at some length on various speakers to sort out your impressions and then, when you have narrowed your choice, to repeat your listening with the speakers similarly placed.

PROPOSITION FIVE: To have "balanced" response, a speaker must have high-frequency and low-frequency limits that match each other.

The notion that a speaker with bass limitations should also have treble limitations (and vice versa) in order to deliver good sound is a wonderful relic of the era when
If your budget dictates that you must compromise... practically all speakers had serious deficiencies in their frequency response. What it meant then was that a shrill speaker really sounded shrill if it didn’t also sound boomy, and that a boomy speaker—but let’s forget the whole thing. If your budget dictates that you must compromise in your speaker ambitions, settle for less bass and get as smooth and extended a treble as you can. As mentioned earlier, high frequencies provide all-important breadth of sound and definition of musical instruments. And many budget-price speakers now offer remarkable high-frequency response; their deliberate compromise of bass response and power handling is not crucial (or even particularly noticeable) to many ears.

PROPOSITION SIX: Some speakers made of new materials approach the ideal of the “perfect piston,” combining rigidity with light weight.

When the wave length of the frequency a speaker is reproducing becomes significantly shorter than the radius of its cone, the cone, whether made of new plastic, old paper, or pancake batter, no longer moves back and forth as a perfect piston. Much of the really interesting design work that goes into a good low-frequency speaker is directed toward improving the speaker’s response at frequencies above the range of piston action. Above that point, sound energy ripples out from the center of the cone to its outer edge, and great care is needed to prevent that energy from being reflected back along the cone to meet the next wave of energy heading outward, thus causing peaks and dips in the speaker’s mid-range response. The more “live” the cone material, the more it encourages excess energy and spurious response. A maker of good speakers is challenged both to minimize uncontrolled response and to hold tolerances in cone materials and construction to the point where the inevitable small peaks and dips are uniform from one speaker to the next. Small differences in construction can mean striking differences in sound quality. As a point of interest, most of today’s good woofers are still made of not-too-new combinations of paper, wool, and asphalt.

PROPOSITION SEVEN: The bigger the magnet, the better the speaker.

It has always been a popular assumption that the bigger a speaker’s magnet, the greater its control over speaker motion, and thus the greater the speaker’s overall accuracy. This is true (if in not quite those terms), but only up to a point. The chief function of a hefty magnet is to control a speaker’s behavior at or near the speaker’s natural resonant frequency (the frequency at which its particular combination of mass and elasticity tends to make it vibrate excessively). As the speaker’s voice coil moves back and forth in the field of the magnet, it cuts the magnetic lines of force and generates a voltage that opposes the incoming signal from the amplifier. The greater the movement of the coil (at lower frequencies and louder amplitudes) and the greater the field strength of the magnet, the greater the opposing “damping” voltage becomes. But as the size of the magnet is increased beyond the point needed to control the speaker near its resonant frequency, all that happens is that the opposition to motion at low frequencies increases until bass response begins to roll off too much and too soon. Once a speaker is properly (“critically”) damped, a larger magnet will simply restrict bass response.

PROPOSITION EIGHT: The electrostatic (or ionic or induction) speaker is the wave of the future.

The demise of the moving-coil speaker is predicted fairly regularly, but its supreme advantage over all of its oft-heralded successors remains that it is a very effective way to produce a lot of sound. A cone of just about any convenient shape or size can be attached to the coil that vibrates in a speaker’s magnetic field, and a good deal of air is thus moved. And because the trick is to build accuracy into this process, the challenge really boils down to just how much accuracy (including the range of frequencies covered) can be achieved for a given price. All of the other “new” types of speakers begin as very accurate reproducers that must be built up carefully—and very expensively—to move enough air to make the sound audible in a living room. Whatever difficulties are involved in getting the conventional moving-coil speaker to behave properly, and however abstruse the theories about its behavior, it is likely to be around for a long while to come. It’s a great music maker.

John Milder is a regular contributor to these pages on audio matters, speaking with an authority gained from his experience at both the retail and the manufacturing ends of the industry.
Whatever their merits in other respects, it must be admitted that transistor amplifiers have introduced complications in the wiring of extension speaker systems. Because they lack output transformers, transistor amplifiers usually have only one pair of output terminals per channel; whatever speaker or combination of speakers you want to use must be connected to those terminals. Furthermore, transistor amplifiers may have difficulties with a combined speaker load significantly less than 4 ohms. For example, a 4-ohm and an 8-ohm speaker system can be connected in parallel to the 4-ohm terminals of a tube amplifier without risk, but such a combination may damage a transistor amplifier.

Five of the diagrams shown below are for use with tube amplifiers only, and five are for transistor amplifiers. In each case, diagrams are given for (1) 4-ohm main speakers with identical 4-ohm extension speakers; (2) 4-ohm main speakers with one and two sets of 8-ohm extension speakers; and (3) 8-ohm main speakers with one and two sets of 8-ohm extension speakers. In all cases, the same switching arrangement can also be used with 8-ohm and 16-ohm combinations: for tube amplifiers, simply use the 0, 8-, and 16-ohm terminals instead of the 0, 4-, and 8-ohm terminals. If a transistor amplifier has an output-impedance switch or tapped terminals, connect the speaker leads only to the 4-ohm terminals or have the switch set for 4 ohms. If you make a mistake with a tube amplifier, it either won't work or won't sound right; if you make a mistake with a transistor amplifier, you may damage it.

Note that, in some cases, fewer sets of speaker systems can be used simultaneously with transistor amplifiers than with tube amplifiers. (The switching setups for transistor amplifiers are so designed that you can't make a mistake in this regard.) If your amplifier or receiver has a built-in speaker-selector switch, check with the manufacturer if in doubt as to the practicability of any particular setup. (Note that all diagrams are for stereo extension speaker setups, not for single mono speakers used with a main stereo system.)

Each set of speakers can be switched independently at the amplifier location. When a rotary switch is shown for controlling two sets of speaker systems, the order of switch positions is MAIN-EXTENSION-BOTH for clockwise rotation when the switch is viewed from the knob end. The rotary switches specified have their shafts notched so that they can be broken or hacksawed to the desired length.

In each of the diagrams for two sets of 4-ohm speaker systems, the main and extension speakers are wired in series when the switch is set to the BOTH position. Connecting speakers in series does not degrade their performance as long as they have identical impedance characteristics. If the two speakers are not identical, each will upset the frequency distribution of amplifier power delivered to the other and may cause a deterioration in transient response.

Before installing extension speaker systems you should consider whether or not your amplifier has enough power reserve if you expect to play all the speakers simultaneously and at high levels. In that case, the amount of power

---

**Diagram 1**

For tube amplifiers only.
Do not use with transistor amplifiers.
Main speaker systems: 4 ohms
One pair of extension speakers: same type as main speakers
Either pair of speakers can be used alone, or both pairs simultaneously. (Will also serve for 8-ohm speakers if amplifier leads are connected to the 8- and 16-ohm taps.)

R = 50-ohm, 5-watt resistors
Switch = six-pole, three-position, non-shorting rotary switch (Mallory Type 32631)

Note: Leave indexing plate under lock washer in same position as supplied by manufacturer.
required per channel is the sum of the manufacturer's minimum recommended power requirements for all the speakers used in that channel. On the other hand, if you expect to use only one set of speakers at a time, or if you plan to play only background music when the extension speakers are being used, your amplifier power requirement will not be increased at all.

No L-pad or T-pad speaker-level controls are shown in the diagrams. In many cases such controls will do no harm, but in other cases they may cause excessive bass output or shrillness. The principal disadvantage of pads, however, is that they consume amplifier power. If they are left turned down even slightly, and the amplifier volume control is turned up to increase loudness, amplifier overloading or distortion may occur.

Ordinary No. 18 plastic- or rubber-insulated lamp cord ("zip cord") is perfectly suitable for use in wiring speaker systems, provided the wire length is not more than 60 feet or so. For longer runs, 16-gauge zip cord should be used. Both types of cord are available at electrical and hardware stores. Lamp cord contains a pair of wires covered by insulation. The two wires can be separated for whatever length is necessary, in order to make the proper connections, by making a knife cut in the center of the insulation between the two wires and pulling them apart a few inches. The insulation should then be stripped off the ends of the wires for a distance of \( \frac{1}{4} \) to \( \frac{3}{8} \) inch, and the strands of each wire twisted together. If you have a soldering iron, it is a good idea to lightly tin the ends of the wires to keep loose strands from causing shorts.

One wire of the pair is usually coded by some means—a colored thread inside the insulation, or a ridge or flat along the outside of the insulation on one side. Some types of zip cord have one conductor colored silver, and the other copper. If a particular coded wire of the pair (the black wire in the diagrams below) is connected as shown from the switch lug or "C" amplifier terminal to Terminal 1 on all speakers (or to the speaker lug identified by a color dot), uniform and correct phasing of the speaker systems will be achieved.

Connection from one switch lug to another, when required, can be done with any type of insulated hookup wire or by using short lengths of zip cord. Note that protective resistors of the same size are used throughout. Their specific values are not critical: any resistor from 40 to 60 ohms and from 4 to 10 watts will do.

Double-pole, double-throw toggle switches are available with either screw-terminal lugs or solder lugs. Either type can be used, but if more than one wire must be attached to a screw terminal, twist the bare ends of the wires together before wrapping them clockwise around the screw threads. The rotary switches have solder-lug terminals. The bare wire end is put through the lug and wrapped around one side of it, then soldered. If more than one wire must be attached to a lug, attach both wires before soldering the first one. Be certain to use radio solder (rosin core), not acid-core solder for all connections.

Roy Allison is Plant Manager of Acoustic Research, Inc., and also author of Dover's High Fidelity Systems: A User's Guide.
3
For tube amplifiers only.
Do not use with transistor amplifiers.
Main speaker systems: 4 ohms
Two pairs of extension speakers: 8 ohms
Any pair of speakers can be used alone, or any two pairs can be used simultaneously, but not all three pairs simultaneously.
R = 50-ohm, 5-watt resistors
Switches = double-pole, double-throw toggle switches

4
For tube amplifiers only.
Do not use with transistor amplifiers.
Main speaker systems: 8 ohms
One pair of extension speakers: 8 ohms
Either pair of speaker systems can be used alone, or both pairs simultaneously.
R = 50-ohm, 5-watt resistors
Switch = four-pole, three-position, non-shorting rotary switch (Mallory Type 32431)

5
For tube amplifiers only.
Do not use with transistor amplifiers.
Main speaker systems: 8 ohms
Two pairs of extension speakers: 8 ohms
All speaker systems can be used simultaneously, or one pair at a time, or any two pairs at a time.
R = 50-ohm, 5-watt resistors
Switches = double-pole, single-throw (or double-throw) toggle switches

6
For transistor amplifiers.
Main speaker systems: 4 ohms
One pair of extension speakers: same type as main speakers
Either pair of speakers can be used alone, or both pairs simultaneously.
R = 50-ohm, 5-watt resistors
Switch = four-pole, three-position, non-shorting rotary switch (Mallory Type 32431)
7
For transistor amplifiers.
Main speaker systems: 4 ohms
One pair of extension speakers: 8 ohms
Either pair of speaker systems can be used alone, but not both pairs simultaneously.

R = 50-ohm, 5-watt resistors
Switch = double-pole, double-throw toggle switch

8
For transistor amplifiers.
Main speaker systems: 4 ohms
Two pairs of extension speakers: 8 ohms
Any pair of speakers can be used alone, or both pairs of extension speakers can be used simultaneously with the main speakers.

R = 50-ohm, 5-watt resistors
Switches = double-pole, double-throw toggle switches

9
For transistor amplifiers.
Main speaker systems: 8 ohms
One pair of extension speakers: 8 ohms
Either pair of speakers can be used alone, or both pairs simultaneously.

R = 50-ohm, 5-watt resistors
Switch = four-pole, three-position, non-shorting rotary switch (Mallory Type 32431)

10
For transistor amplifiers.
Main speaker systems: 8 ohms
Two pairs of extension speakers: 8 ohms
Any pair of speakers can be used alone, or any two pairs can be used simultaneously, but not all three pairs simultaneously.

R = 50-ohm, 5-watt resistors
Switches = double-pole, double-throw toggle switches
Behind the scenes in
CLASSICAL RECORDING

BRINKMANSHIP, DIPLOMACY, AND COMPROMISE PRESERVE THE TRUCE BETWEEN
THE LIMITATIONS OF TECHNOLOGY AND THE DEMANDS OF MUSICAL TRADITION

By Jack Somer

THE LIBERTIES taken by some record companies in
making their classical recordings are "... entirely
unmusical. They prove either that the company
making such recordings lacks artistic understanding or
that it places economic considerations above the musical.
Such policies may perhaps bring an initial profit, but they
will surely embarrass their perpetrators in the end, when a
gradually awakening public begins to recognize the im-
possibility of such instrumental manipulations."

This critical lament might possibly have been written
yesterday, but the year was, surprisingly, 1909, and the
German critic, Max Chop, was referring to the then-
common practice of changing symphonic instrumentation
to suit the severe limitations of the acoustic recording
devices of the day. Early recording engineers found that
the high-energy, low-frequency output of string basses
and cellos could not be handled by the simple recording
diaphragms available at that time without blotting out
the rest of the orchestra. So, string basses and cellos were summarily tossed out of the orchestra and replaced with bassoons, and though these gave the early discs a strangely kazoo-like bass, it was recognized by most (if not all) as a necessity. It was the replacement of violins with woodwinds, however, that really made Chop's hair stand on end and inspired his passionate cry of foul. Unlimited substitution may be okay on the football field, but it is of no help in playing a Beethoven symphony!

The serious artistic implications of that controversy are still with us, and whether the perpetrators are embarrassed or not, the art of recording remains still full of compromises. Although comparably primitive orchestral manipulations are not required today, electronic techniques are infinitely more sophisticated than the old acoustical ones, and a host of new manipulations has been born of the technical evolution of recording. Today's classical record maker has many tools available to him—tools designed and provided by engineers—and it is the design, maintenance, and imaginative use of these tools that determines the quality of any record. Just what use is to be made of these tools is of course up to the record producer, and while the purists among them strive simply for "concert-hall realism," the experimenters try to transcend tradition and to succeed on their own terms without doing violence to the music.

The lucky a&r man working in the pops field is not hampered by these strictures of tradition. Each time he steps into the studio he is, in the creative sense, reborn. He has masses of new material available to him. Even when an old song is cut for the umpteenth time, it is newly arranged with melodic and harmonic alterations, new instrumentation, and a fresh interpretive slant. Thus, the pop market can sustain three hundred and fifty versions of Begin the Beguine, three hundred of Jealousy, dozens of Beatle tunes, and, in the first two years of its life, over two hundred recordings of More, the theme from the motion picture Mondo Cane. Virtually all popular music written and arranged today appears on records first, and that includes Broadway shows and film themes.

The classical repertoire, as its somewhat tired name implies, has been around a long time, is steeped in tradition, and was not written with the recording studio in mind. The bulk of the classical repertoire now in the catalog was given to us during the eighteenth and nineteenth centuries. In view of the fact that recording is a distinctly twentieth-century phenomenon, the poor classical a&r man must devote his life to combining those irresistible forces of technical advance with that most immovable of objects—tradition. In the following discussion it will be seen how this impossibility is achieved, and how forces larger than men can and do make themselves felt and, of course, heard.

Having had a symphony orchestra of about one hundred men dropped in his lap, the first problem the a&r man faces is where to put them. This has usually already been "solved" by the founding fathers of the orchestra who have built a fine concert hall, with plush maroon and gold interior—and terrible acoustics for recording. The brilliant Philadelphia Orchestra, for example, doesn't make its recordings at home in the Academy of Music because the men of Columbia Records find the hall too "dry" (lacking in reverberation) for recording. Although the Chicago and Cleveland orchestras are more fortunate, Pittsburgh's is not. The New York Philharmonic also has had its acoustic dilemmas. In recent years (before the completion of Philharmonic Hall) the orchestra made its records in Manhattan Center, an old ballroom and union meeting hall noted for its spectacular reverberation. When the orchestra moved to Lincoln Center and faced the much-publicized acoustic mess, Columbia Records gamely tried to make a go of it but was forced to return to Manhattan Center for record sessions until improvements were made atop. The Philharmonic has now returned to recording in the reworked hall, but there is little doubt that at some time when the Columbia staff feels the need for a grander, nobler acoustic for some large-scale work, they will return to Manhattan Center and obtain a sound that, alas, may never be attainable in Philharmonic Hall.

In Boston, the Symphony's recordings are made "at home" in majestic Symphony Hall, whose acoustics are among the best in the world. However, a brief history of Boston's quest for brilliant sound serves to illustrate the further problems faced by record makers: location of the orchestra within the hall, placement of microphones, and acoustic adjustment of the hall itself. Early Boston records were made with the orchestra on stage, seated as in concert. The microphones were placed above and in front of the orchestra to best translate the music and hall acoustics. During the sound-conscious Fifties, the men of RCA Victor found that by moving the orchestra out onto the floor of the hall (after removing twenty or thirty rows of seats) the microphones picked up more of the hall's splendid reverberation, and the result was a more exciting and sumptuous sound. Under the leadership of Charles Munch, the orchestra thus made some of its finest recordings (though there were ensemble problems at first resulting from the wider separation of sections). At the insistence of Erich Leinsdorf, the orchestra was returned to the stage for recordings. He felt more at home there, and the introduction of risers under the rear sections of the orchestra helped the orchestra project more into the hall and regain some of the lost reverberation. Since the summer of 1965 (when Lohengrin was taped in Boston) the Boston Symphony has once again been recorded on the floor because of the general recognition that the most brilliant, powerful, and vivid sound can be obtained only that way.

From the above, it should be obvious that the most
important factor in creating a rich classical sound is the control of the ratio of direct to reverberant (reflected) sound. Insufficient reverberation creates a "small," dry sound, unsatisfying in scope and brilliance. Excessive reverberation produces a washed-out quality, lacking in presence and solidity. In the case of halls with long, full reverberation, it is often necessary for the engineers to deliberately destroy some of that quality by hanging absorptive drapes and covering over the reflective surfaces. This is often required to compensate for the absence of a sound-absorbing audience, which affects concert-hall acoustics considerably. And, as if there aren't enough headaches in making records, it must be remembered that atmospheric conditions—the weather—seriously affect hall acoustics as well, and these day-to-day variations must be compensated for. Finally, the music itself will dictate sensible acoustics: a Mozart symphony will not float amid if too much reverberation is pulled in by the microphones, but a Berlioz work can hardly have enough.

Ultimately, it is the number and the placement of microphones that define the sound character. Most recording is done on three-track tape or film, so the minimum number of microphones for that—three—has become a standard. The microphones are hung 10 to 20 feet above the orchestra and in a pattern that simply divides the musicians into left, center, and right groups, corresponding to the tracks on the tape. When placed well, three microphones will amply translate the full, balanced power of an orchestra (or chamber group or piano solo) to tape. Often, it is necessary to add supplementary microphones within the orchestra. These extras, called "touch-up" microphones, are operated at lower output levels than the main set of three, and are used to add a bit more presence and control to the instruments in the rear of the orchestra (brasses, percussion, and string basses). The more complex the score, the greater the need for touching up.

"Purist" producers prefer to use only two or three microphones. The rest, like their popular-music brethren, will use any number that will give them the sound they want. The recent Columbia recording of Charles Ives' Fourth Symphony, conducted by Leonard Stokowski, required as many as twelve microphones, and the brilliant score was done great justice. Naturally, concertos and vocal-orchestral works require an additional solo microphone. And an opera, that most monstrous of recording undertakings, demands a complex of microphones, particularly if it is to be staged.

Even though the forces are more complex in classical recording than in pops, the operation itself is simpler. Usually, the performers are at home with the music to be played—unlike the pop orchestra, which is usually seeing the musical arrangement for the first time at the recording session. The orchestra sets right to work by recording a portion of the music for a test, which is played back to the conductor. Any differences are ironed out between conductor and a&r man, who will either agree upon changes in the physical setup or compromises in the performance. If the balance, for example, is not satisfactory to the conductor, changes can be made either by the engineer or by the conductor. Mutual experience and confidence will dictate which method will work best. Some conductors prefer to record as much as possible, listen to playbacks, and then remake those portions that can stand improvement. In this way, the final master (after editing) consists of a complete "take" with small inserts. Others prefer to record progressively—they begin at the beginning, stop when the going gets bad, and resume at a point just before the breakdown.

Reduced to an absurd simplification, the object of a recording session is to cut enough takes so that every measure (and every note) to be recorded is covered by at least one take in which it is played correctly and, hopefully, beautifully. The session isn't over until this is accomplished, the exception being the occasion when too many dollars of overtime would have to be spent to correct a minor mistake or two. In this latter case, the prudent a&r man will make do with what he has, even over the protests of the artist. Of course, the biggest artists will sometimes prevail, and the money will be spent.

Editing can easily require more of the a&r man's time than any other step in the recording process. The fussiest men will spend days just listening over and over to all takes to be sure that they have chosen the best ones. When the final choice is made, the tedious splicing operation begins. This consists of the delicate excision of passages that are not up to the high standard of the remaining performance, and their replacement by the "improved" passages from other takes.

This process is both remarkable and controversial. It is remarkable because the engineer is dealing with tolerances of a very few thousandths of an inch. In order to make a splice work, both pieces of tape must be cut at the identical instant in time. However, no orchestra made up of human beings can be expected to play twice with identical precision just for the sake of editing, and it is a test of the surgical and musical skills of the engineer and a&r man to find the literal split second that will make two tapes match. The success of this fantastic and precise operation is best illustrated by a recently released opera recording in which there are well over four hundred splices—and not one of them is detectable. The controversy over whether to splice or not boils down to this: does the record-buying public want musical performances that are studded with obvious bobbles and goofs which will be there to be heard and winced at for the life of the record? The record companies obviously think not.

The final step in making a record is the mastering or remixing. With popular records, it is a matter of fine ad-
justment of balances, sound quality, and special effects that makes a record more "commercial." In making classical records this adjustment is usually not required. Very little is done to levels and balances even in the studio, although the practice of remixing to set balance between a soloist (on a single track) and orchestra (on the other two) has often been abused. Why, then, do most record companies habitually remix their product, and what are the advantages—and disadvantages—of this process?

Remixing began, historically, as a protective measure. In the early days of tape recording, acetate tape was found to be too vulnerable to use—the inevitable mishandling and simple human error could ruin a whole tape. Thus, all tapes were copied and (as was often necessary) the "protection copies" were used to replace whole or damaged portions of master tapes. Inevitably, some imaginative producer found that he could "improve" his efforts during the copying, and so remixing was born. Today, remixing is further required because most original recording is done on half-inch-wide three-track tape which is not easy to handle in mass-producing disc masters. The remix process produces quarter-inch tapes with all the desired qualities of sound and balance, and the original tape is saved as a protection.

This is unfortunate. Perhaps some day all record companies will realize that the less done to a record, the cleaner, the better it will be. The fact is that the remixing process can do more harm than good. This has been proved by those few companies that have dropped the process entirely—at the cost of some inconvenience, but with great strides forward in quality. Strictly speaking, every extra step in the making of a record tends to reduce quality somewhat. Every microphone, electron tube, coil, transformer, tape-recording head, and reel of tape is imperfect in some small degree and introduces minute distortions into the musical signal. The most imperfect devices in the chain are the transducers, and the by-passing of the remix step eliminates two tape heads in the chain, not to mention numerous electronic stages.

In a very sophisticated recording process (see accompanying figure), it is likely that the sound impinging on any microphone will have to pass through no less than six transducers (one microphone, four tape heads, and a disc cutter), twenty to thirty transformers, and forty to fifty stages of amplification. If each of these devices introduces even an infinitesimal quantity of frequency-response alteration, waveform, harmonic, or phase distortion, and also a bit of system noise, it is easy to see how a signal can deteriorate as it is processed. This not only is a clear argument for the elimination of steps and stages in the process, but also indicates the tremendous importance of equipment quality and maintenance in the recording studio.

Another important personage in the already crowded chain of command is the chief engineer, who selects and buys every microphone, tube, tape head, amplifier, cutter, etc. He also designs the circuits in which the components operate and modifies commercial components to suit his own or his firm's electronic "philosophy." The total effect of his work produces a distinct "company coloration" in the recorded sound. The company sound is simply derived from the total of the characteristic imperfections of its equipment, and is eminently recognizable. All record buyers have avoided the purchase of some particular label's product from time to time because there was something...
characteristically unpleasant about its sound. And many have also become "fans" of a particular company's sound, finding it ingratiating no matter what the repertoire or who the artist.

Without question, the most universal responsibility of the engineering brains in a company is the setting and apparently inevitable pushing up of recording levels. For some inexplicable (or badly explicable) reason, there is a common equation accepted by many engineers, a&r men, and record-company executives: high level equals high sales. As a result there has been raging a "battle of levels" since the year one, and hardly any company or artist has been immune to its ravages. One good result of the battle has been to force manufacturers of home equipment, particularly of cartridges, to improve their product to do justice to the increasingly higher-level discs. Unfortunately, the battle has also forced the record manufacturers to take misguided expedient steps in order to maintain their competitive position. One tendency has been the use of limiter's in the cutting of discs. Although acceptable in the pop market, this trick has fallen unhappily on the ears of classical record buyers. Worse, there is a tendency to alter the frequency content of disc masters in order to increase allowable levels. The most common method is the shaving off of very high frequencies (which are the primary limiting frequencies for cutting levels) or the shaving off of very high frequencies to reduce the problem of tracking distortion.

Undoubtedly the single most publicized and controversial process, designed primarily to increase apparent levels and improve sound quality, is the RCA Victor Dynagroove system. Dynagroove is a collection of improvements and innovations designed to reduce record distortion and heighten presence and realism—in short, to sharply improve the performance of the phonograph record in the home. Critical and public reactions have been by no means universally favorable, and it is worth a quick look at RCA's system to see just what has been done and how.

Among the indisputable improvements that the Dynagroove process represents is the use of a 30-inch-per-second tape speed. The industry has with good economic reason been reducing tape speeds (for home use) as equipment has improved. For many years the standard professional tape speed has been 15 ips, while home equipment operates at 7 1/2, 3 3/4, and even slower. A daring but simple logic dictated to Victor engineers that a remarkable improvement in sound quality could be obtained by reverting to the superior 30 ips speed (higher level capacity, better high-frequency resolution, improved signal-to-noise characteristics). They were right. At 30 ips, an original master recording has a breathtaking clarity and lack of distortion and noise that seems to remove a large part of the barrier that has long existed between recorded sound and the listener, as some other companies had already discovered.

At the other end of the process, RCA has introduced a new device that also has great merit: the anti-distortion disc-cutting "computer." Reduced to its fundamental function, this "computer" is an amplifier that deliberately distorts the electrical signal being fed to the disc cutter. The distortion is the theoretical inverse of the normal tracking distortion resulting from the inherent mis-match between a ball-tipped playing stylus as it rides through a groove cut by a chisel-shaped cutter. This, under ideal conditions, is most effective in cleaning up record sound, particularly near the center of the record where inherent distortion is most severe.

The real cause of the fuss over Dynagroove as it was applied to classical recordings was the addition (admitted for the first time by a major label) of equalization in the mixing process. The Dynagroove dynamic equalizer is a device that (unlike the standard static equalizers used throughout the industry) is capable of changing the degree of equalization in response to the musical signal input. It enhances the low frequencies during low-level musical passages so that at normal home listening levels the bottom will not drop out of the sound, and also enhances the middle and high frequencies during high-level passages to give a feeling of expansion. Thus, the process helps to some degree to compensate for the ear's well-known variability of response to loudness over the frequency spectrum (the Fletcher-Munson effect) while judiciously controlling those portions of the frequency spectrum that present the highest degree of tracking difficulty. But, unfortunately, theory does not always make good sound, and the overriding effect of equalization (even when applied dynamically) gives the impression at times of compressed dynamics (from the low-frequency manipulation) and of shrillness (from the addition of mid-range boost).

But such efforts nonetheless demonstrate a vital interest in the progress of sound recording and in the improvement of a unique and growing art. Once again, as I noted in my previous article on popular recording techniques, it is the use of the tools, not the tools themselves, that gives character and individuality to recorded sound. Credit or blame must be given to the men who use the tools—the a&r men, engineers, and musicians—those whose daily lives are spent in the pursuit of excellence in the studios. The modern phonograph record is a marvellous achievement, whether it is being played or being studied under a high-power microscope (a fascinating experience), and critics and public alike can profit from an understanding of the complex of efforts and compromises that are required to produce them.

Jack Somer is a veteran of many years of record producing, both popular and classical, with major companies. His article on the techniques used in popular recording appeared in the May issue.
OPEN-AND-SHUT STEREO

The installation of Larry Paulson, a writer for the Valley Times, North Hollywood, California, reflects an audiophile's approach to high fidelity. A major point of interest is the ease with which the setup can be concealed (with wood panels—see the picture below) from the view of those who do not share Mr. Paulson's interest in equipment. The wood panelling job was a do-it-yourself project, and required a year's (somewhat sporadic) effort to complete.

The equipment lineup includes a pair of James B. Lansing LE-10 loudspeaker systems seen at the upper right and left corners in the photograph above, a Concertone 505 stereo recorder that records half-track and will play both half and quarter-track tape, and a Fisher Model X202 amplifier. The Dual 1009 turntable is equipped with a Pickering cartridge.

Accessories include a Kinematix stereo-balance meter, a Switchcraft four-channel microphone mixer, and a reverberation unit by Holt Stereo. The front panels of all these are seen to the left of the panel-mounted Concertone tape recorder. Below the tape recorder is a switch-and-jack setup that enables Mr. Paulson to tap off, feed in, and mix signals from various sources. A Wollensak mono tape recorder is hooked into the system and can also be unplugged for portable use. The switch panel below the Concertone tape recorder also controls stereo extension speakers in the living room and mono extension speakers for patio, garage, kitchen, and bathroom.

AUGUST 1966
MANY YEARS AGO, when I was young, innocent, and unmarried, I decided that any well-rounded bachelor should have at least a passing acquaintance with the fine art of gourmet cookery. A great believer in the printed word, I immediately betook myself to a local bookshop, where I learned that an important part of almost every serious cookbook is devoted to the purchase of meat. Invariably, after a short essay on what part of which animal produces what cuts, each cookbook made the point that a good beef steak—of prime interest to us all—is "well marbled" with fat. Knowing that no novice in the steak-purchasing art would have in his mind an accurate mental image of a well-marbled steak, the editors of the cookbooks were usually kind enough to provide a badly reproduced color photograph of an adequately fat-marbled cut of meat. That was many years ago, but to this day I have yet to see in any butcher's showcase a steak that resembles in whole or in part any of those illustrations.

What has all this to do with speaker shopping? The relationship is closer than you might think: how many times have you been advised in the pages of this and other audio publications to listen for a speaker that has a "smooth, uncolored sound"? Or a speaker that has a "non-peaky mid-range," a "non-boomy bass," a "good transient response," and so on? None of these terms, I'm afraid, adequately convey the particular subjective-objective phenomena that the author is seeking to describe. For unless the reader already has in his mind's ear the sound of a "smooth, uncolored" speaker, he is in no better position to select a pair off the showroom shelf than I am to select a well-marbled steak from a butcher's showcase. This has nothing to do with the much-abused subject of psychoacoustics, but simply relates to the very real question of how one can judge whether a speaker is doing a good job of reproduction when one does not have available for comparison the original sound the speaker is attempting to reproduce.

There is a popular (but fallacious) notion that it is enormously helpful, as a preliminary to speaker shopping, to attend a concert of live music. Then, with the live sound still reverberating within your cerebral cortex, a quick after-trip to a hi-fi showroom will permit you to make instant and accurate distinctions between "real" and "unreal" speakers. Unfortunately, the average mind's ear cannot be expected to isolate the distinguishing features of live sound under concert-hall conditions in the first place. And in the second place, the mind's ear is a notoriously leaky vessel and cannot retain the memory of what it has heard for more than a few seconds even under the best of circumstances.

Some experts maintain that A-B listening comparisons of equipment are of limited value: they are rather like attempting to evaluate the accuracy of two reproductions of a painting, each differing from the other in color values, without having the original painting at hand. This view has merit, I feel, only when you are dealing with very subtle differences among several very good loudspeakers or when you are attempting to educate an untrained ear. These exceptions aside, I have not found the task of speaker evaluation by listening at all difficult with the usual run of speakers that find their way into my living room. The average speaker buyer, of course, will seldom have the opportunity of hearing a large number of models in his own listening room, he almost certainly does not have an A-B-C-D switch-
ing setup built into his hi-fi system, nor is he likely to have made up a test tape of program material chosen specifically for speaker evaluation. Nonetheless, it is possible to make a valid judgment of the sound quality of a speaker in home or showroom once you become aware of what to listen for and how to listen for it.

Most speaker manufacturers seem to have pretty well licked the bass- and treble-reproduction problems: fewer systems are now being produced with woofers whose bass is lacking or overly boomy, and similarly, fewer systems have tweeters whose treble output is inadequate or screechy. Both bass and treble performance can be evaluated in the showroom with a few simple checks. In my own listening tests I find it easier to make discriminations if I’m listening to one speaker rather than a stereo pair. However, one runs the slight risk, when auditioning a single speaker in a showroom, of having its location influence its frequency response. This can be easily checked by switching to the other member of the pair, which probably will not be installed in as advantageous (or disadvantageous) a location.

An important aspect of a speaker system’s bass performance is its freedom from spurious resonances. This can be tested simply by tuning in several FM stations and listening carefully to the various announcers on the speaker(s) under consideration. One or two of the announcers may have naturally deep voices, but if every one of them sounds as if he were addressing you from the bottom of an oil drum, you can be sure that the loudspeaker under test (not the announcer) has a bass resonance peaked somewhere in the 100-Hz region. This resonance provides for some a pleasant overlay of bass on classical material and enhances the beat on pop stuff, but the price paid for this is loss of upper-bass clarity and (usually) absence of genuine low bass.

A speaker system that is inherently unable to reproduce low bass has a choice of how to react: when fed, say, 40 Hz, it may either not make any sound at all (which is considered preferable), or produce sound that has within it a small amount of the original 40-Hz signal, some 80-Hz, and a lot of 120-Hz noise. The spurious 80- and 120-Hz harmonic signals are products of a phenomenon known as doubling or tripling that occurs when a speaker cone exceeds the linear limits of its suspension. With such a speaker, the sonic difference between a kettle drum and a trap drum, for example, is completely obscured.

As far as the high-frequency performance of the speaker system is concerned, a good test is to listen to recordings of music that includes cymbals or triangles and try to isolate the ringing or shimmering sound that is typical of these instruments. You will probably have to listen carefully for this quality in several speakers before you can easily distinguish between those that have it and those that don’t. Note also, while listening for shimmer, the amount of record-surface noise or tape hiss present. You’ll find that some speakers will have the shimmer plus a liberal helping of hiss or surface noise, and that some will have the shimmer without the noise. Emphasized tape hiss or disc surface noise is usually the result of an irregularity in the speaker’s high-frequency response, which may or may not audibly affect other aspects of its performance.

Another quality essential to good tweeter performance is wide dispersion—its ability to spread the high fre-
cony said, "Gee, I wonder what they're thinking out there as we're playing." The audience laughed. The spot shifted to the other player. "Boy, are these pants tight." Laugh followed laugh throughout *Clair de Lune*. The wind up was *Slaughter on Tenth Avenue*, and the house-lights went on. It was a good house—only four hundred seats out of the thirty-eight hundred not sold, with tickets from $1.80 to $3.80.

It wasn't a rock 'n' roll audience—no blue jeans, no leather jackets. It wasn't a jazz audience either—Washington may be 55 per cent Negro, but there were only a few colored faces. Nor was it a concert audience—no solitary spinsters, no pairings of bachelors, no threadbare students. It was a Ferrante and Teicher audience, the women carefully coiffed and dressed in the final editions of last year's fashions, the men freshly pressed and fragrant with after-shave. They looked like the pleasant people you see in airline terminals.

After intermission, Ferrante and Teicher returned in red dinner jackets threaded with gold, first tackling Khachaturian's *Sabre Dance* and then a medley of tunes from Broadway musicals—*Roar of the Greasepaint, Fiddler on the Roof, People from Funny Girl*, and *Hello, Dolly*. At that point Teicher got up and read a mock fairy tale while Ferrante went through the barrack-smashing routine of a British lieutenant. They played the *Blue Danube Waltz* forward and backward. Couples held hands through *Love Is a Many-Splendored Thing* and Liszt's *Hungarian Rhapsody No. 2*, and part of a piano pedal fell off. Temporary stage manager Gaston Plantiff, in dinner jacket and patent leather oxfords, came out to do the repairs. Ferrante and Teicher kept their cool. *After Greensleeves*, they added strips of Masonite, cardboard wedges, wads of paper, sticks, and rubber tuning stops to make the piano sound like gongs, castanets, vibes, and harpsichord in turn. They closed with the *Exodus* movie theme.

When the curtain came down the show went on. There was an encore and then a post-encore encore—the audience filed backstage where "The Movie Theme Team," now in sedate navy dinner jackets, sat at a table smiling and signing programs. A bucktoothed girl confided, "I'm majoring in music," a brush-cut boy said, "Sir, will you autograph this for my folks?"

This was my first exposure to "The Movie Theme Team," and it started me asking around about them. I learned that if you mention the names Ferrante and Teicher, ninety-nine out of one hundred hi-fi addicts will say, "Who are they?" or "Sounds familiar. Who are they?"

Ferrante and Teicher have more than thirty albums listed in the current Schwann catalog. Six of these have been gold records.
But if the hundredth person makes his living in pop music, he'll say, "Most successful piano team since Steinway set up shop." If that hundredth person just happens to work for United Artists Records, he may jump up and down before he says, "Why, in four years, they have sold over seven and a half million singles and three and a half million LP's. Every ninety days or so, United Artists offers a new Ferrante and Teicher release and just as regularly it hits the best-selling lists."

And if the hundredth person, to stretch coincidence beyond its normal elasticity, is with the William Morris talent agency, he may leap across the room before he settles down to explain that Ferrante and Teicher play to standing-room-only crowds in concert halls throughout the United States, Canada, and Europe. They have appeared on television shows with Dinah Shore, Perry Como, Garry Moore, Steve Allen, Danny Kaye, Dick Clark, and a few others.

None of this fits the usual pop music pattern. Duo piano teams usually have all the box office appeal of your maiden Aunt Matilda reciting Hiawatha, but Arthur Ferrante and Louis Teicher, now both toupeed and admitting to forty, play music with feeling. Make that a capital F. As arranged by Ferrante and Teicher, movie music, simplified versions of the more popular Chopin, Tchaikovsky, and Beethoven classics, traditional such as Dark Eyes and Gershwin's Rhapsody in Blue, glide along in a rippling syrup of simple, well-defined rhythms. They back up their already lush sound with a still lusher orchestra (Nick Perito, their conductor, usually assembles eighteen strings, four French horns, a rhythm section of bass, drum, guitar, percussion, and occasionally woodwinds). It's not the kind of music to make you sit up and listen; you can go right on washing dishes, worrying about taxes, or making a pass.

All these deviations from the classical norm disturb their old colleagues at the Juilliard School of Music. (Sample crack: "If you like Liberace, with Ferrante and Teicher, you've got two.") It was at Juilliard that the two met and began studying piano at the age of six. (Ferrante is a native New Yorker; Teicher comes from Wilkes-Barre, Pennsylvania.) In the natural course of events they became friends. (Teicher explains: "When you're eight or nine, who are you going to pal around with—girls?") Also in the natural course of events, their teachers teamed them for duo-piano work. After having studied with the late great Carl Friedberg, they were the youngest men in the history of Juilliard to begin teaching. Their subjects were theory and composition.

In 1947 they began barnstorming around the country, playing concerts in gyms, churches, cafeterias, ball parks, even a boxing ring. At that stage, it was Bach, not boogie; Mozart, not Mantovani. Audiences were sparse. Since many towns could not provide two concert grands, they carted around their own pianos in a truck they drove themselves. Ferrante handled repairs; Teicher changed tires. "Once we were so broke," Ferrante recalls, "we couldn't afford a cab. We drove the truck right to the hall." But despite the concerts, records, and teaching, money never flowed in any faster than a trickle. To balance budgets Mrs. Ferrante worked as a travel consultant while Mrs. Teicher fiddled in the pit of the old Roxy movie theater.

Although the Movie Theme Team may not be full-blown celebrities, their concerts have drawn capacity audiences throughout the United States, Canada, and Europe.
Then Ferrante and Teicher began to notice that their audiences seemed to prefer their pop encores to the recitals themselves, especially when they used prepared pianos. At that point the maraschino cherry became the whole meal. They recorded their gimmick music for Westminster. A Hollywood producer swallowed the cherry and had them write the score for a twenty-minute short, Underwater Conquest. The music won a prize at the Cannes Film Festival, and this in turn led to radio-commercial assignments (their products: tires, shampoo, hair pomade). United Artists assigned them to record the theme music from The Apartment. It was their twentieth album, and it sold a million copies, six times all their previous sales combined.

Since then, it has been hit after hit. Six of their albums have been gold records. Informed sources estimate their million copies, six times all their previous sales combined.

Artists assigned them to record the theme music from The Real Thing. Atlantic, and this in turn led to radio-commercial assignments (their products: tires, shampoo, hair pomade). United Artists assigned them to record the theme music from The Apartment. It was their twentieth album, and it sold a million copies, six times all their previous sales combined.

Since then, it has been hit after hit. Six of their albums have been gold records. Informed sources estimate their million copies, six times all their previous sales combined.

The switch from classical to pops wasn’t heart-rending, according to Ferrante. “Pop audiences come to hear us. Before, we were known to a very small segment of the concert-going public.”

Will they ever return to The Real Thing? “We’d rather fight than switch,” Teicher says. “Art for art’s sake pays off in peanuts.” These days they play Brahms, Rachmaninoff, and Liszt only for kicks.

Success keeps them busy and on the road seven months a year. Between last January 6 and May 29, for instance, taking off only Easter week, the two played ninety-six one-night stands, or about five cities a week, starting in Scranton and ranging as far south as Mississippi and Texas, west to Los Angeles, Portland, Seattle, and Vancouver, north to Duluth, and then back East again.

On tour a typical day consists of flying from one city to another, checking into a hotel, practicing at least two hours, dining lightly, dressing for the concert, playing, meeting fans, sleeping, and leaving by nine the next morning. When the tours end, there are albums to record, music to arrange, television performances to make, time to give their firm, Glissando Enterprises, which handles real estate and fledging talent. All these demands chip away at their spare time. Ferrante has given up his boat and Teicher his sailboat and the truck driving; Ferrante and Teicher fly between engagements.

The switch from classical to pops wasn’t heart-rending, according to Ferrante. “Pop audiences come to hear us. Before, we were known to a very small segment of the concert-going public.”

Will they ever return to The Real Thing? “We’d rather fight than switch,” Teicher says. “Art for art’s sake pays off in peanuts.” These days they play Brahms, Rachmaninoff, and Liszt only for kicks.

Success keeps them busy and on the road seven months a year. Between last January 6 and May 29, for instance, taking off only Easter week, the two played ninety-six one-night stands, or about five cities a week, starting in Scranton and ranging as far south as Mississippi and Texas, west to Los Angeles, Portland, Seattle, and Vancouver, north to Duluth, and then back East again.

On tour a typical day consists of flying from one city to another, checking into a hotel, practicing at least two hours, dining lightly, dressing for the concert, playing, meeting fans, sleeping, and leaving by nine the next morning. When the tours end, there are albums to record, music to arrange, television performances to make, time to give their firm, Glissando Enterprises, which handles real estate and fledging talent. All these demands chip away at their spare time. Ferrante has given up his boat and Teicher rarely opens his stamp albums. Now and again both men lift weights and snap pictures. They may vacation in August, but then again maybe not.

What keeps such successful men from becoming full-blown celebrities? Perhaps a reluctance to make their private lives public. With many show-business people, a little gentle questioning unfolds a steamy panorama of love, marriage, divorce, angst, and psychiatry. The star speaks, and the reporter humbly records. In this respect Ferrante and Teicher are delightfully un-show biz. It takes prdding, prdding, and prdding again before they consent to reveal even their first names. Any inquiry about their families releases an abrupt “Do we have to go into that?” They may allow as how Elaine Teicher tends her three children and plays with an amateur chamber music group while Maybelle Ferrante paints as a hobby, but no amount of questioning will unlock further details.

Not being celebrities may be part of what has made them survive success. Iron constitutions also count, and so does indestructible good will. Although they see each other day in and day out, they get along well. Ferrante says, “We don’t have arguments, just discussions.” And Teicher agrees: “Every year it’s better. We’re closer than brothers.”

But they don’t push brotherhood too far. They take separate hotel rooms, sometimes on different floors, and sit in different parts of the plane.

More important is a large helping of wry humor. They can be funny even without comic Charlie Hanna writing their lines.

At lunch one time their press agent, Larry Penzell, was starting to load his pipe when Ferrante interrupted. “Larry, you should use a tamper.”

Penzell dumped out the tobacco and loaded again with the tamper.

Ferrante picked up the tobacco tin and shook his head.

“You should switch to another brand.”

Penzell lit his pipe.

Ferrante shook his head again. “Don’t you know it’s not considered polite to smoke a pipe in a restaurant?”

Penzell put out his pipe.

Naturally, success hasn’t made the team’s lives easier. Teicher explained, “When you’re an unknown quantity, you don’t worry, but when you’re a success you’re pre-sold. People expect something of you.”

Whether or not the audiences care about their technique, Ferrante and Teicher do: “We practice whenever humanly possible.”

Humanly possible means anywhere between two and four hours a day, whether they’re in New York or on the road, whether they’ve had enough sleep or flown half the night. They keep on practicing so that they can remain what they are—superb craftsmen. But their concert audiences are not won by the musicianship but by that intangible and underestimated quality—niceness. They tell jokes on themselves, their talent, and their loud jackets, and they’re not such good jokes either. Ferrante and Teicher are nice. They are regular. They are so nice and so regular that no one in the audience need ever feel beyond his depth. When they perform, what might have been a formidable recital becomes a comfortable evening out. That’s not a bad thing to tuck under your pillow any night.

Carol Schwalberg is a freelance observer of the passing scene. She has studied many aspects of American life and culture and has published her views in a wide variety of national magazines.
I often think that a phonograph record, in addition to being something to listen to, to treasure, to collect, and occasionally to clean, is an ignitive device to start a train of thought. I was enormously impressed and dutifully attentive the first three times I listened through Elaine Schaffer’s new Angel recording of the Bach flute sonatas, but the fourth time, quite in spite of myself, my mind began to follow a tangent. Has anyone, even in jest, referred to our era—say, the last couple of decades—as “The Age of the Flute”? We have had the days of the tenors, and the days of the castrati, the era of the violin virtuosos, and of the great organists. Today we live—so most music critics agree—in an era of pianism. Why not the flute? Irving Kolodin, the esteemed music editor of Saturday Review, once wrote that if Jean-Pierre Rampal only played the violin or piano rather than the flute he would be one of the world’s most celebrated virtuosos. True enough, I’m afraid, and a pity. And Rampal himself, deferring to his father, is probably the only musician around today who would say that there were better flutists at some other time than there are now.

We tend to haggle so much over the slight differences in quality between performances that we frequently forget how minuscule those differences may be and how high the general level of accomplishment is. Interpretively, certainly, each man may have his individual preferences; but it is almost frightening to realize that one may, for example, walk into a record store and buy, quite blindly, any set of the Bach flute sonatas, and be sure, almost without exception, of bringing home a masterly performance. With flutists of the stature of Rampal, Severino Gazzelloni, Julius Baker, Elaine Schaffer, Samuel Baron, and Doriot Dwyer (to name only, perhaps, the most immediately familiar) active today, it is no wonder. And yet the situation itself is cause for wonder. What would Bach himself have given for any one of them in his orchestra?

Of course, it is of—more probably, because of—this situation, I must find something particularly special about this new Angel set of the flute sonatas. I do, but before this train of thought can return to its home station it must travel another slight detour. The Bach flute sonatas belong to that area of music that we tend still, however unconsciously, to reckon as the domain of the musicologist. Mozart and Beethoven, of course, belong completely to us, as does almost everyone who succeeded them. But Vivaldi and Torelli live at the library still (making frequent guest appearances outside), and Bach himself has one foot still inside the archive door. The flute sonatas demonstrate this as yet unescapable paternal influence, for recent research has disclosed that three of the sonatas cannot be considered to be by Johann Sebastian Bach. The three (G Minor, BWV 1020; E-flat Major, BWV 1031; and C Major, BWV 1033) contain some magnificent music, and only
the fact that Bernard Fliess' Wiegenlied is still called Mozart's Wiegenlied (despite the facts) and, more important, remains in the repertoire, prevents me from greeting this latest musicological research with dismay. Still, it is disheartening to have to describe the beautiful Siciliana from the E-flat Sonata (famous, as well, in its piano transcription) as one of the loveliest melodies Bach never wrote.

To record companies the Bach flute sonatas long ago became an indivisible group and, I am happy to say, this new set, although it admits recent scholarship, includes the usual seven sonatas. (The sonata for unaccompanied flute, BWV 1013, is not here, though included in some sets; it is also available with other couplings.) The A Major Sonata, of which the original manuscript (presumed lost during World War II) was incomplete, is played here without its first movement rather than attempting to recompose the missing pages.

Now to get to the main matter at hand: the playing on this new set. It is, in brief, little short of miraculous. Schaffer tends toward slightly slower tempos than Rameau and, if my ears are not lying, she plays at a slightly lower pitch. Her sheer technical accomplishment would be staggering were it not that others too are capable of it. As it is, one can only say that if she had any difficulties with the music they are nowhere apparent. Her playing is totally relaxed, superbly rhythmic, and anything but mechanically metronomic. Her melodic lines tend to float over the pulse and across the bar lines in a way few solo musicians ever achieve. Her ornaments are scrupulously correct, her breath control completely up to the almost impossible demands of the music, and her tone something far too beautiful to come out of a length of pipe. She is a superb musician.

But the flute here is only half of the music; the harpsichord—aided here in five of the seven sonatas by a viol da gamba—is quite as important. George Malcolm, who can be quite the flashiest player around when he so feels, devotes the whole of his enormous talent to simply bringing to light everything there is in the music. His registration changes, while manifold, are used structurally and with superb taste. It is as if at each change, to use an old, old jazz expression, the music drops into a new groove. He provides magnificent rhythmic impetus too—in the dancing rather than the driving sense—and his realizations of the skeletal harpsichord parts in three of the sonatas are fascinating and perfectly in style. Gauntlett's gamba playing is impeccable and by its very presence represents a musicological rightness not found on most other sets of the sonatas.

In sum, then, this set of the Bach (et al.) flute sonatas is one of those rare accomplishments that teach one by their example just why the phonograph was invented. The recording, in its perfectly calculated microphone distance, is particularly pleasant to the ears.
elicited from Rameau a work of considerable dramatic
extituation, in spite of the fact that dance movements
play a large part in the stage production. These many
dances, in fact, are among the more obvious delights of
the piece. But one cannot help being impressed also by
the orchestral tone painting—a scene in the underword
à la Gluck, storms, and a hunt—as well as by Rameau's
plan of action, which seems always to move the story
steadily ahead without getting held up by the typically
static Baroque aria.

The plot, dealing with the two lovers of the title,
Hippolytus' step-mother Phaedra (who is in love with
Hippolytus), and her husband Theseus, is both com-
plex and colorful. The performances are for the most
part highly commendable, with Janet Baker and John
Shirley-Quirk, in particular, providing dramatic impact
not often heard in performances of Baroque opera today.
Most of the lesser roles are also well handled, although
neither the Pluto nor the Neptune seems to me to be
a sufficiently weighty basso.

The direction is exceptionally stylish, and if the play-
ing is not supremely polished at all times, there is still
far more to praise than to criticize in a production that
must have been most difficult to accomplish. Thurston
Dart's harpsichord continuo, as usual, is a joy, and the
recording, if a bit dry, is extremely well managed. Al-
together, it is a notable achievement, down to the elab-
orate booklet containing the complete text. Igor Kipnis

© © RAMEAU: Hippolyte et Aricie. Angela Hickey
(soprano), Aricia; Robert Tear (tenor), Hippolytus; Sylvia
Rhys-Thomas (soprano), High Priestess of Diana; Janet
Baker (contralto), Phaedra; John Shirley-Quirk (bari-
tone), Theseus; Gerald English (tenor), Tisiphone; Roger
Stalman (bass), Pluto; Christopher Keyte (bass), Neptune;
other soloists. Thurston Dart (harpsichord continuo);
English Chamber Orchestra and St. Anthony Singers,
Anthony Lewis cond. L'OISEAU-LYRE SOL 286/7/8 three discs
$17.37, OL 286/7/8* $17.37.

THE STARTLING MUSIC OF
COLONIAL LATIN AMERICA

Selections from a forgotten musical heritage
brilliantly performed by the Roger Wagner Chorale

Angel's remarkable collection of old music from the
New World brings to light a body of musical works
which have endured oblivion for an unconscionable
length of time: music by Mexican, Guatemalan, and
other Latin American composers of the Renaissance
and Baroque periods. Extending from Mexico's Hernando
Franco (1532-1585) to Peru's José de Oreyón y Aparicio
(1705-1765), the program includes the Salve Regina of
the Mexican Juan de Lienas, and two excerpts from La
Purpura de la Rosa, which appears to be the first opera
ever to be staged in the New World (Peru, 1701).

A more detailed study could perhaps elaborate on the
amount of original inspiration present in these selections.
To my ears they sound entirely au courant with contem-
porary European models. Thus, if Franco's Magnificat
bore the name Gabrieli as its author, I would accept it
unsuspectingly; and Oreyón's Mariposa is so hauntingly
beautiful that Bach or Vivaldi could have written it. On
the other hand, no European source could have produced
the equivalent of the Peruvian-Indian Hanacpach or
Araujo's Los Negritos, a zesty Peruvian villancico in
Negro dialect. The latter proves the existence of a sig-
nificant Negro musical heritage preceding and inde-
pendent of North American manifestations, one that may
be entirely unknown to all but the most highly special-
ized scholars.

Considering its ear-opening educational value, the disc
—produced under the auspices of the Latin American
Center, University of California, Los Angeles—cannot
be praised too highly. The performances by the Roger
Wagner Chorale and the assisting instrumental ensemble
(a string quintet and harpsichord) could not be bettered.
Special compliments are in order for the spirited and
admirable solo contributions of Salli Terri and Maurita
Phillips (mezzo-sopranos), and of Melvin Brown
(tenor). The recording is excellent and the stereo treatment richly detailed.

George Jellinek


ANTON CHEKHOV'S IVANOV

Sir John Gielgud directs a key work in the Russian dramatist's artistic development

When Russian dramatist Anton Chekhov wrote Ivanov in 1886, he was still trying to find a way to demonstrate on stage the pettiness, boredom, and cruelty of Russia's middle-class rural society. One of the fascinations of listening to RCA Victor's new recording of Ivanov (the play has just finished a run on Broadway), for anyone acquainted with the later and more fully realized plays (The Sea Gull, Uncle Vanya, and The Cherry Orchard), is to catch the author almost in the process of inventing those self-revealing and self-deceiving speeches his characters make, those airless stretches of weary banality in overstuffed drawing rooms, those conversations in which the participants are really each pursuing a monolog on some isolated course, those sudden melodramatic actions born of desperation and despair. Later there was to be far more depth, subtlety and tension, but in Ivanov the technique is still evolving.

The self-pitying protagonist, a "full-time member of the Department of Peasant Affairs," neglects, insults, and degrades his tubercular Jewish wife; is greedy to get on to a new life with the wealthy Sasha, daughter of the Chairman of the Rural Council; is selfish, irritable, and destructive. In fact, Ivanov is a perfect example of the power of the weak to undermine the strong. In his own mind, however, the man is a helpless, sensitive, misunderstood underdog who cannot comprehend why he casts a blight on the people around him. Sir John Gielgud brings out Ivanov's preoccupied isolation by the tone of detachment and dejection he preserves through the four acts of the play, although the total portrait is perhaps a thought too colorless.

As the young country doctor Lvov, who confronts Ivanov with his sins at every turn like a mercilessly clinical conscience, John Merivale is suitably stiff, and Edward Atienza spreads himself around as the extrovert Count Shabelsky whose fanciest dream is to win a lottery in order to go to Moscow. Vivien Leigh gets very little chance to make an impression here as the dying wife, and is not terribly affecting when she does. Jennifer Hilary is an undistinguished Sasha, Ronald Radd a cartoon version of Borkin, the vulgar estate manager. The best acting is done by Roland Culver as Lebedev, by Paula Lawrence as his wife, by Ethel Griffies as a knowing old marriage broker, and by Dillon Evans as a card player who can talk only of cards.

In his direction, Gielgud has done wonders to overcome, by means of a brisk pace, many a long grey stretch, to emphasize the ironies of the piece, and even to take the curse off the corn of such situations as a wife surprising her husband in the midst of an adulterous embrace, and a groom who shoots himself at his own wedding. It is a tribute to Sir John's skill that matters are, despite the limitations, kept moving flowingly and amusingly.

Paul Kresh

The E-V SEVEN was born in the eerie silence of an anechoic chamber — the world's largest devoted to high fidelity design. This vast sound absorbing room let E-V engineers get right down to basic engineering. Nothing disturbed their silence — or their concentration on the subtle differences that distinguish a great speaker.

After months of experimentation, the E-V SEVEN met every design objective. Then expert listeners were invited to judge the sound — again and again — until engineers and critics were fully satisfied with E-V SEVEN performance.

But superb sound, once established, can easily slip away in the routine of mass production. We don't let it. A completely equipped anechoic chamber — right on the production line — measures every speaker against perfection. And it's ruthless. All this may seem rather elaborate for a $66.50 compact system...and it is. You can hear the difference!

Any fine component amplifier can display the E-V SEVEN at its best, but the new E-V 1144 stereo amplifier is uniquely suited to the purpose. Like the E-V SEVEN, the E-V 1144 is compact, handsome, and modest in cost (just $134.50).

We threw tradition to the winds when we built the E-V 1144. Tossed out "old-hat" ideas about size and weight. Put 50 watts of stereo power in an attractive walnut-paneled cabinet no taller than a coffee cup. It's easier when you can start from scratch — yet have years of experience in miniature solid-state electronics behind you. The young tigers in the E-V lab took it on as a personal challenge — and solved it beautifully.

So plug in any stereo phono, tape recorder, or matching E-V stereo tuner. Connect a pair of E-V SEVENS. Then turn up the volume of your E-V 1144. Natural sound? Absolutely. And that's what high fidelity is all about!

Window-shop through our complete high fidelity catalog for the answer to your high fidelity needs. It's free.

Big sound.
A natural for these compact E-V SEVENS.
All you need is a very good amplifier...

like this one.
The new E-V 1144.
The new KLH Model Twelve is the result of some pointed questions about what kind of improvements might go into a speaker system designed for perfectionists.

The KLH Model Twelve is the finest moving-coil loudspeaker we have ever made. Not by a spectacular margin (there just isn't that much room for improvement in today's best speakers), but by some important degrees.

Before we began to design the Model Twelve, we asked ourselves some pointed questions. We knew we would not be willing to settle for just a set of more impressive measurements. What real improvements could we conceive of for a speaker designed unabashedly for perfectionists? Which of the improvements that we could make on paper would, in fact, be audible and meaningful? Above all, how could we design a speaker that would be useful under the widest range of conditions?

A few answers

We decided that there were a few absolute factors we could improve upon or change significantly in a system for the perfectionist. We could supply a bit more response at extremely low frequencies. We could offer the potential for more very-high-frequency response—for use only with exceptionally good program material. We could make the overall impedance of the system eight ohms for optimum performance with today's transistor amplifiers.

By using an acoustic-suspension enclosure slightly larger than usual, we could also provide a bit more speaker efficiency. The amount we could gain would be just enough to allow the listener a choice of many excellent amplifiers of less than super-power.

A final step

With the aim of usefulness uppermost in mind, what else could we do? We could offer the listener the opportunity to make adjustments in the speaker's overall sound quality—subtle but important adjustments. Adjustments that would allow the listener to modify the speaker's musical balance to account for differences in program material, associated equipment, room acoustics, and personal musical judgments. Instead of the usual mid-range or "brilliance" controls, we could provide the listener, for the first time, with an effective way to tailor the speaker to his own needs.

This is why the Model Twelve comes with a unique series of four multi-position control switches. These adjust the level of broad segments of the frequency range: 300-800 cps; 800-2500 cps; 2500-7000 cps; and 7000-20,000 cps. They are housed in a remote switchbox (connected to the speaker by a thin four-conductor cable) that can be placed next to your favorite seat for maximum effectiveness and ease of use. The amount of adjustment from each switch is limited so that you can make only meaningful adjustments. The Model Twelve cannot be made to sound bad under any conditions. It can only be made better for your own requirements.

Perfectionist's speaker system

We think our approach to the Model Twelve makes sense only for a perfectionist's speaker system. And the Model Twelve is just that. It will reproduce the highest and the lowest frequencies of any conceivable musical interest. Its very-high-frequency capabilities are actually in advance of most of today's program material; as the noise content drops on future recordings, the 7000-20,000 cps control can be turned up for ever more realistic music reproduction.

The Model Twelve's four speakers are used conservatively (in a three-way design) to cover a range at least an octave short of their upper and/or lower limits. The mid-range drivers are housed in special sub-enclosures that are acoustic-suspension in principle. The cabinet is made of one-inch plywood, with quarter-sliced walnut veneer selected for beauty and uniformity of grain. The overall design of the 29" x 22 1/4" x 15" enclosure has been understated to make the cabinet as unobtrusive as possible in any room.

We believe we have done everything we can to make the Model Twelve the best moving-coil speaker system we have ever made. If you are an unabashed perfectionist, you should go hear the Twelve. It's at your KLH Dealer now.

For more information, write: KLH, 30 Cross Street, Cambridge, Mass. 02139, Dept. 700.

Suggested Retail Price: $275.00

A trademark of KLH Research and Development Corp.

CIRCLE NO. 34 ON READER SERVICE CARD
orchestral direction is, by and large, highly
Gluck. Perhaps this lack of Baroque quality
gan); the Wiener Solisten, Anton Heiller
Stephen, Op. 117. London Symphony Or-
D Major, Op. 36; Overtures: Fidelio; King
Flute Sonatas (see Best of the Month, p.
I. K.
the organ obbligato in
some poor diction as an after-effect, espe-
ciallly in the lower register. Anton Heiller's
hears here. Virtually her entire vocal pro-
sameness of tonal color in everything one
certainly sensitive to the musical require-
detail in phrasing both in the orchestra and
thing of an adventure in itself until we come
to the currently available list.
John Browning's approach to Beethoven's
tonal panorama is that of a master architec-
tural planner. Once senses that he has taken
the measure of every bar of the work long
before traversing its lengthy course on the
piano, and the resulting performance is a
masterpiece of poise, rhythmic impetus, beau-
tiful articulation, and finely calculated re-
lationships of dynamics and tempo. It is a
little lacking in spontaneity, however.
Compared to Browning's beautifully exe-
cuted opening, Barenboim's seems almost
hopelessly helter-skelter, and there seems
less of a tendency for him to be overawed by
the sheer grandeur of Beethoven's accomplish-
ment. Thus, each variation becomes some-
thing of a giant human comedy and the kind of
stylistic time traveling made familiar to us
in our own day through the metamorphoses
of Stravinsky.
My first encounter with this remarkable
work was via the Artur Schnabel prerecorded
78-rpm discs, which I trust will be trans-
ferrfed to LP someday soon. Meanwhile, there
seems to be no lack of good and varied re-
corded performances of the Diabelli Vari-
ations in LP format—Browning's and Baren-
boim's being the fifth and sixth to be added
to the currently available list.
A hearing of the Serkin Columbia record-
ing (ca. 1959) reveals a performance su-
perior to either of those above in terms of
effective contrast and sheer nervous energy,
and, on the whole, is for me the most satis-
factory in the current catalog. D. H.
BEST RECORDING OF SPECIAL MERIT
BEETHOVEN: Thirty-three Variations on a Waltz by Diabelli, Op. 120. John
Browning (piano). RCA Victor LSC 2877, $5.79, LM 2877® $4.79.
BEETHOVEN: Thirty-three Variations on a Waltz by Diabelli, Op. 120.
Daniel Barenboim (piano). WESTMINSTER WST 17107 $4.79, XWN 19107 $4.79.
Performance: Browning poised; Barenboim
lyrically expansive
Recording: RCA sound fuller
Stereo Quality: Good enough
As Robert Offergeld implies in his notes for
the RCA Victor album, Beethoven's Thirty-
three Variations on Anton Diabelli's silly
but eminently malleable waltz constitute both
a gigantic human comedy and the kind of
stereo recording. For Beethoven fanciers,
this is certainly a best buy. D. H.
HIFI/STEREO REVIEW'S CHOICE OF THE LATEST RECORDINGS
CLASICAL
Reviewed by WILLIAM FLANAGAN · DAVID HALL · GEORGE JELLINEK · IGOR KIPNIS · PAUL KRESH

THE LATE Pierre Monteux was surely in top
form at the recording sessions that pro-
duced these heretofore unreleased Beethoven
performances. The Second Symphony is
done with surging brío, humor, and tenderness;
the Fidelio Overture has loads of sparkle and high spirits; and a fine sense of
the ceremonial and joyous is brought to the
little-known King Stephen Overture, which
Beethoven wrote for a play about Hungary's
saint-king.
The London Symphony winds sound es-
pecially good in this spacious and brilliant
recording. For Beethoven fanciers,
this is certainly a best buy. D. H.

BEETHOVEN: Trio No. 6, in B-flat
("Archduke"), Op. 97. Istomin/Stern/Rose
Trio. COLUMBIA MS 6819 $5.79, ML 6219
$4.79.
Performance: Intense
Recording: Clear and present
Stereo Quality: Strongly localized
While the present recording brings to nine
the total of currently available recorded ver-

NOTICE: The 1966 Artist Issue of the
Schwann Catalog, a listing by performer
of currently available classical LP rec-
ords as contained in the "Composer" and
"Collections" sections of the May 1966
Schwann Long-Playing Record Catalog, is
now on sale in record shops throughout
the U.S. and in many foreign countries.

Explanation of symbols:
= stereophonic recording
= monophonic recording
* = mono or stereo version
not received for review

AUGUST 1966

71
sions of Beethoven's magnificent 'Archduke' Trio, it comes as a surprise to find that this is only the fifth to be done in stereo format.

In common with its previous Columbia recordings of the Schubert B-flat and Brahms C Major trios, this reading of the Beethoven 'Archduke' by the Istomin-Stem-Rose team stands out for its bigness of architectural conception and expressive intensity, and in this respect, the first movement may come as something of a shock to those accustomed to the more classically poised mono versions by Cortot-Thibaud-Casals or Rubinstein-Hefetz-Feurmann. Be that as it may, this disc is, for the moment, the only currently available version of the 'Archduke' worthy of comparison with those giants.

The recorded sound in stereo calls for more than passing note, inasmuch as the instruments are rather distinctly localized—piano center, violin left, cello right. If this makes for a somewhat less than realistic blend in terms of live listening experience, it does bring into effective relief the dialogue aspects of Beethoven's musical texture. For those who prefer blend to wide separation, the mono pressing is recommended. D.H.

**RECORDINGS OF SPECIAL MERIT**

- **BEETHOVEN: Violin Concerto, in D Major, Op. 61.**
  - Performer: Henryk Szeryng, violin; Paris Conservatory Orchestra, Jacques Thibaud cond.
  - Monitor: MCS 2093 $1.98, MC 2093* $1.98.
  - Performance: Classically poised
  - Recording: Intimate
  - Stereo Quality: Negligible

- **BEETHOVEN: Violin Concerto, in D Major, Op. 61.**
  - Performer: Yehudi Menuhin, violin; Philharmonia Orchestra, Wilhelm Furtwängler cond.
  - Orson: SMO 90065 $5.79, E 90065* $5.79.
  - Performance: Rhapsodic
  - Recording: Spacious
  - Stereo Quality: Moderately effective

Jacques Thibaud (1880-1953), one of the great French violinists and interpreters of his generation, is known to record collectors especially for his chamber-music collaborations with Cortot and Casals, but he conducted the accompaniment for his up-and-coming young colleague Henryk Szeryng in one of his last performances before his death in a plane crash. The renowned Wilhelm Furtwängler (1886-1954) too died within a year after conducting the London recording sessions that produced this performance of the Beethoven Violin Concerto with Yehudi Menuhin. Angel released this disc here in 1954, and the original release of the Szeryng-Thibaud reading was on the French Pathé Marconi label in 1953. Thus the stereo in both instances is electronically reprocessed

Szeryng and Thibaud contribute one of the most elegantly poised classical readings of this music that it has ever been my privilege to hear. And it is far from cold. Indeed, this work's seemingly endless wealth of melodies takes on a rather special lambency enhanced by a warmly intimate recorded sound that lends to the performance the quality of a great chamber-music collaboration. Szeryng's intonation, even through the hair-raising difficult cadenzas by Joachim, is absolutely impeccable.

The Menuhin-Furtwängler achievement is of a different order. Neither artist was a perfectionist in terms of mechanics. Each sought (and in Menuhin's case, still seeks) for the innermost melodic-expressive essence of the music—in Wagner's term, the *melos*. The result is a looser-limbed treatment of the score than the Szeryng-Thibaud one, but it is wholly convincing if you choose to view the Concerto as sheer expressive song. Yet, with all the freedom they employ, Menuhin and Furtwängler never overstep into vulgarity or self-indulgence. As I have mentioned on previous occasions in these pages, this particular kind of brashmanship was always one of the most breathtaking aspects of Furtwängler's interpretative art.

The recorded sound of the Menuhin-Furtwängler disc is more spacious and also more diffuse than that of the French recording, but it is perhaps suitable to the broader dimensions in which the artists view the music. D.H.

**Selections from Igor Stravinsky's vast recorded repertoire on COLUMBIA RECORDS**

- **COLUMBIA SYMPHONY ORCHESTRA CONDUCTS**
  - STRAVINSKY: ORCHIPUS VEX
  - PRELUDE TO THE BURIAL OF THE OUTCAST
  - A CANCELED MOMENT
  - LE FASION DE L'OEIL
  - THE FIRE BIRD
  - THE RITE OF SPRING

In common with the other orchestral arrangements of the piano works mentioned on previous occasions...
With the help of Giovanni Pergolesi.

An unusual alliance? Certainly. Stravinsky—an iconoclastic 20th-century Russian, whose Rite of Spring caused one of the most notorious scandals in music history. And Pergolesi—an 18th-century Italian, known primarily for church music and the first opera buffa to achieve international fame, La Serva Padrona.

Yet from this alliance emerged the score of Pulcinella, one of the most charming ballets the world has ever known.

The seed was planted one day in the spring of 1919, when Stravinsky and the famous impresario Diaghilev were strolling in the Place de la Concorde. “I have an idea that I think will amuse you,” Diaghilev said to his friend. “I want you to look at some delightful 18th-century music with the idea of orchestrating it for a ballet.”

“When he said the composer was Pergolesi,” Stravinsky recalls, “I thought he must be deranged.”

However, Stravinsky promised to study Pergolesi’s music. “I looked,” says Stravinsky, “and I fell in love.”

In a small attic room of the Maison Bornand in Morges, Switzerland, Stravinsky set to work enthusiastically. “I began by composing on the Pergolesi manuscripts themselves, as though I were correcting an old work of my own,” he writes. “I began without preconceptions or aesthetic attitudes, and I could not have predicted anything about the result.”

The result was what Stravinsky calls, “my discovery of the past, my epiphany through which the whole of my late work became possible. It was a backward look, of course—the first of many love affairs in that direction—but it was a look in the mirror, too.”

Pulcinella is now yours to discover. In a new Columbia Masterworks performance conducted by Stravinsky himself—the first stereo recording of the complete ballet.

Igor Stravinsky—The Sound of Genius on COLUMBIA RECORDS.

(Quotations taken from Expositions and Developments, Igor Stravinsky and Robert Craft, Doubleday and Company, Inc., 1962)
that any records and tapes reviewed in this issue can be purchased through the HiFi/Stereo Review Record Service?

To order, simply fill out the coupon below. Orders can be accepted only for recordings reviewed in this issue, and must be received no later than the date indicated at the bottom of the coupon.

HIFI/STEREO REVIEW RECORD SERVICE • DEPT. SC
ONE PARK AVE. • NEW YORK 16, N.Y.

Please send the following records and/or tapes reviewed in this issue.

Check or Money Order for $_______ is enclosed.

C.O.D. Within the Continental Limits of the United States only.

ALL RECORDINGS ARE FULLY GUARANTEED

<table>
<thead>
<tr>
<th>PAGE NO. OF REVIEW</th>
<th>TITLE</th>
<th>RECORD (TAPE NUMBER (SEE REVIEW)</th>
<th>MANUFACTURER</th>
<th>PRICE (SEE REVIEW)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N.Y. State residents please add local sales tax.

Total

Name (please print) ____________________________________________

Address ___________________________________________________

City ______________________ Zone ______ State ____________ 866

866

in my apartment and think, "My! What a striking effect! It sounds exactly like a rattling Venetian blind." Now, I ask you . . .

Fontana Mix is a "realization" by Mimari-glue, for magnetic tape alone, of a 1958 piece by Cage. While I prefer it in my recollection of Cathy Berberian's lunatic "live" vocal version, I am here struck again by the fact that Cage, even at his most outré, is so gifted a man, so imbued with a sense of theater, that everything he does—electronic aleatory, or merely silent—is better than the work of any of his rivals.

Berio's Violage is a charmer. To a background of electronic hissing and popping, the voice of Cathy Berberian is heard in grim monologue, uttering such sounds as might be made by a cruelly intimidated psychotic in an unenlightened mental institution. If you think my metaphor unpleasant, let me quote the liner notes: "The vocal events from inarticulated or articulated speech, from laughter to crying and to singing, from patterns of inflections molded upon specific language to 'aphasia.' etc. . . ." Webster defines "aphasia"—for those who might be unfamiliar with it—as "loss or impairment of the power to use or understand speech, resulting from brain lesion or, sometimes, from functional or emotional disturbance."

In other words, a sort of Marat/Sade for the turntable.

W. F.

® @ BRAHMS: The Liebeslieder Waltzes, Op. 52 and Op. 65. The Robert Shaw Chorale; Saramae Endich (soprano); Florence Kopleff (contralto); Seth McCoy (tenor); Theodor Uppman (baritone); Claude Frank and Lilian Kallir (pianists). RCA VICTOR LSC 2864 $5.79. LM 2864* $4.79.

Performance: Excellent
Recording: Lacks clarity
Stereo Quality: Appropriate

The Liebeslieder Waltzes are justly called 'vocal chamber music,' and Philip L. Miller properly observes in his liner notes that their charm is considerably enhanced by "the beauty of the uttered words." Here, however, the parts normally handled by a vocal quartet are given to a chorus with the result that the music's captivating intimacy suffers, as does textual clarity. Fortunately, the soloists are properly highlighted in Op. 65, for a more faithful realization of the composer's intentions.

It goes without saying that the Robert Shaw Chorale is in top form. All four solo singers are good, and the piano team is exceptionally so. In all, we have a high artistic effort in this performance, but the setting is not ideal for the music. The recorded sound is rich but somewhat thick-sounding. Texts and translations are supplied. G. J.

® @ BRITTEN: The Young Person's Guide to the Orchestra. PROKOFIEV: Peter and the Wolf. Sean Connelly (narrator); Royal Philharmonic Orchestra, Antal Dorati cond. London SPC 21007 $5.79. PM 55005 $4.79.

Performance: Emphatic
Recording: Excellent
Stereo Quality: Overwhelming

Larger than life and twice as loud are these Phase 4 super-duper transcriptions of two (Continued on page 76)
FINCO introduces 75 ohm FM Antennas
NOW AVAILABLE FOR 75 OHM COAX CABLE OR 300 OHM RIBBON

MORE GREAT NEWS!
If you already own a Finco FM Antenna, you can up-date it to a shielded coax system with Finco's new FM-STEREO KIT.

Model 7512-AB
$8.95 list for complete kit.

ALL FINCO CX SERIES (75 OHM) ANTENNAS COME WITH A FREE INDOOR TUNER-MOUNTED MATCHING TRANSFORMER!

Discover the big sound difference a famous, award-winning Finco Antenna makes in FM reception from your tuner. You'll never hear a signal that's cleaner, clearer, purer. Installation is quick and easy. With Finco's 75 ohm model, simply attach the FREE indoor transformer behind your tuner and run a length of RG-59/U (Finco CX Series) coaxial cable to the antenna. Hook-up is complete. Regardless of your location, you bring in more stations — with exacting separation — free from multi-path reflections. Maximum forward gain means a substantially greater signal over the full 88 to 108 MC band.

Install a superb FINCO FM Antenna soon... it's the one to look for when you want the very best in FM reception!

THE FINNEY COMPANY, 34 WEST INTERSTATE STREET, DEPT. H.D., BEDFORD, OHIO

AUGUST 1966

CIRCLE NO. 26 ON READER SERVICE CARD
hardy perennials that continue to fascinated audiences of all ages. Both these exercises in musical wit and tonal color call so thoroughly upon the resources of the modern orchestra that it is exceptionally satisfying to hear them this way. Antal Dorati takes advantage of the technological opportunities of the occasion by offering hard-driving performances, sometimes a little stiff-jointed, but never commonplace or dull. When the wolf snarls and snaps, the brass and percussion fairly lunge at you from the stereo speakers, and for the first time (in my experience) it is possible to hear the duck quacking away inside the dead villain during the final procession. C. Cory abandons his insinuating James Bond tones here to provide readings that are actually rather dry at times. The narration in Peter has been built up for Connery beyond what is strictly necessary to keep the story going, but he certainly has the voice for it, and manages to rival most of his counterparts in the twenty-odd other versions currently available.

In Britten's entertaining survey of the instruments of the orchestra, each glitters in a highly directional way to reveal its full individuality. Many, like myself, will relish Britten's own elegant reading of The Young Person's Guide (London) to Dorati's over-emphatic one, but musical thrill-seekers and lovers of sound for its own sake never had it so good.

P. K.

CAGE: Fontana Mix (see BERIO)

RECORDING OF SPECIAL MERIT

* CALDARA: Missa sanctissimae Sancti Ioannis Nepomuceni. Anna Penas-
vova (soprano); Vera Soukupova (contralto); Zdenek Svihla (tenor), Dalibor Jedlicka (bass); Ladislav Vachulka (organ). Philharmonic Choir of the Czech Philharmonic Orchestra, Jose Maria Franco cond. MUSICA SACRA AMS 62 (compatible stereo) $5.98.

Performance: Commercially Recorded
Recording: Very good
Stereo Quality: Satisfactory

Antonio Caldara (1670-1736), a pupil of Legrenzi, enjoyed his greatest fame as conductor of the Imperial Court in Vienna (the first Kapellmeister was Johann Fux), where he worked during the last twenty years of his life. The present work was written in 1726 to celebrate the canonization of the fourteenth-century Prague martyr John of Nepomuk.

Caldara's music is appropriately festive and grand in scope, not unlike Bach's B Minor Mass, although more predominantly plain and manages to rival most of his counterparts in the twenty-odd other versions currently available.

In Britten's entertaining survey of the instruments of the orchestra, each glitters in a highly directional way to reveal its full individuality. Many, like myself, will relish Britten's own elegant reading of The Young Person's Guide (London) to Dorati's over-emphatic one, but musical thrill-seekers and lovers of sound for its own sake never had it so good.

P. K.

RECORDING OF SPECIAL MERIT

* FALLA: El Retablo de Maese Pedro. Teresa Tourné (soprano); Renato Cesari (baritone); Pedro Lavirgen (tenor); Orquesta de Conciertos de Madrid, Pedro de Freitas Branco cond. Harmonie Concerto, Genoveva Galvez (harpischord); instrumental ensemble, José Maria Franco cond. EPIC BC 1519 $5.79, LC 3919 $4.79.

Performance: Good
Recording: Sharp and clear
Stereo Quality: Ideal

These two works of Manuel de Falla seem as if born to share the same disc. Both date from the middle 1920's, both are representative of the composer's neo-classical period, and both seek a musical expression of the "spiritual essence of Spain" (in the words of Gilbert Chase). Furthermore, both are conceived in a spirit of deliberate abercism, which is underlined by the relative spareness of the orchestration and by the significant part allotted to the harpsichord in their scoring. In their own highly individual ways, both El Retablo and the Concerto are brilliant achievements, but they are apparently not destined for wide popularity. Several recordings of this identical pairing have passed in and out of the catalog during the past decade—in their transitory recorded existence sharply contrasting with those of the same composer's sensual, evocative, and fiery scores El Amor Brujo and Nights in the Gardens of Spain. El Retablo is a very endearing operatic tour de force, and though it is a singularly impractical opera to stage, it lends itself well to recording. It is a decidedly inspired treatment of one of the pathetische episodes in Don Quixote, in which the gallant Knight interrupts a puppet show to rescue a fair marionette maiden from her puppet pursuer. Both the vocal writing and the exquisite scoring subtly evoke the spirit of seventeenth-century Spain. The present performance is faithful to Falla's meticulous directions and has an excellent atmosphere. Except for some strain in the top notes, Renato Cesari handles the role of Don Quixote with dignity and sonority, and the interpreters of Maese Pedro and the narrator are excellent, quite in keeping with Falla's explicitly non-lyrical requirements.

Most musical authorities agree that the Harpsichord Concerto is something of a masterpiece, but, after several hearings over the last few years, just about the strongest feeling I am able to summon for it is dutiful respect. The technical skill involved in the scoring is nothing short of phenomenal, and the treatment of the harpsichord in this quasi-chamber context of five other instruments—has a novel fascination. But I am sure I shall not hear the work again until a new performance of it is assigned to me for review—a purely subjective view that should not cloud the merit of this praiseworthy and excellently engineered recording.

G. J.

RECORDING OF SPECIAL MERIT

* GOUNOD: Messe Solennelle St. Cecile. Irmand Seefried (soprano); Gerhard Stolze (tenor); Hermann Uhde (bass). Czech Singers Choir and Czech Philharmonic Orchestra, Igor Markevitch cond. DEUTSCHE GRAMMOPHON SLPM 13911 $5.79, LPM 189111 $5.79.

Performance: Affecting
Recording: Good
Stereo Quality: Good

While German soloists in a Czech locale may not seem ideal components for a Gounod mass, the compelling art of Igor Markevitch makes this a formidable work. The Paris-originated Angel 36214 (in which, incidentally, the soloists are also German artists). Although Jean-Claude Hartemann's conducting (on Angel) is more than satisfying, Markevitch achieves more contrast between the sections through a wider variety of tempos without ever losing the thread of continuity. Furthermore, by stressing the
Listen!
How to put bigger sound on your bookshelf

It doesn't take a lot more room, but you do need a lot more product. And that's what you get in the Jensen PR-200 3-way bookshelf loudspeaker system.

This unit delivers new brilliance and depth in full range, yet it's really very small as bookshelf systems go.

The compact PR-200 cabinet (14" x 25" x 11") provides a perfect acoustical chamber for a 12" FLEXAIR® woofer, ASPHERIC SONO-DOME® mid-range, and SONO-DOME® ultra-tweeter.

Jensen engineers have put together a compelling combination of size, sound and price that you will find hard to resist.

The price is less than $180.00 in oil finished walnut veneer. The sound is at your Jensen dealer.

Or for information, write to Jensen Manufacturing Division, The Muter Company, 6601 South Laramie Avenue, Chicago, Illinois 60638.
TELEX Acoustic Products Division, headsets, microphones and listening accessories, 3054 Excelsior Blvd., Minneapolis, Minnesota 55416

TELEX

For sound that suits you to a "T" from the TELEX CORPORATION

TELEX Division. Professional quality tape recorder/reproducers. P. O. Box 1526, Tulsa, Oklahoma 74101.

Write today for free literature on the complete line.

MAGNECORD Division. Professional quality tape recorder/reproducers. P. O. Box 1526, Tulsa, Oklahoma 74101.

Write today for free literature on the complete line.

MAGNECORD

MAGNECORD

CIRCLE NO. 36 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

* * *

FOR SOUND THAT SUITS YOU TO A "T" FROM THE TELEX CORPORATION

MAGNECORD Division. Professional quality tape recorder/reproducers. P. O. Box 1526, Tulsa, Oklahoma 74101.

Write today for free literature on the complete line.

MAGNECORD

MAGNECORD

CIRCLE NO. 36 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

* * *

For sound that suits you to a "T" from the TELEX CORPORATION

TELEX

For sound that suits you to a "T" from the TELEX CORPORATION

TELEX Division. Headsets, microphones and listening accessories, 3054 Excelsior Blvd., Minneapolis, Minnesota 55416.

Write today for free literature on the complete line.

MAGNECORD Division. Professional quality tape recorder/reproducers. P. O. Box 1526, Tulsa, Oklahoma 74101.

Write today for free literature on the complete line.

MAGNECORD

MAGNECORD

CIRCLE NO. 36 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

* * *

For sound that suits you to a "T" from the TELEX CORPORATION

TELEX

For sound that suits you to a "T" from the TELEX CORPORATION

TELEX Division. Headsets, microphones and listening accessories, 3054 Excelsior Blvd., Minneapolis, Minnesota 55416.

Write today for free literature on the complete line.

MAGNECORD Division. Professional quality tape recorder/reproducers. P. O. Box 1526, Tulsa, Oklahoma 74101.

Write today for free literature on the complete line.

MAGNECORD

MAGNECORD

CIRCLE NO. 36 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

* * *

For sound that suits you to a "T" from the TELEX CORPORATION

TELEX

For sound that suits you to a "T" from the TELEX CORPORATION

TELEX Division. Headsets, microphones and listening accessories, 3054 Excelsior Blvd., Minneapolis, Minnesota 55416.

Write today for free literature on the complete line.

MAGNECORD Division. Professional quality tape recorder/reproducers. P. O. Box 1526, Tulsa, Oklahoma 74101.

Write today for free literature on the complete line.

MAGNECORD

MAGNECORD

CIRCLE NO. 36 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

* * *

For sound that suits you to a "T" from the TELEX CORPORATION

TELEX

For sound that suits you to a "T" from the TELEX CORPORATION

TELEX Division. Headsets, microphones and listening accessories, 3054 Excelsior Blvd., Minneapolis, Minnesota 55416.

Write today for free literature on the complete line.

MAGNECORD Division. Professional quality tape recorder/reproducers. P. O. Box 1526, Tulsa, Oklahoma 74101.

Write today for free literature on the complete line.

MAGNECORD

MAGNECORD

CIRCLE NO. 36 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

* * *

For sound that suits you to a "T" from the TELEX CORPORATION

TELEX

For sound that suits you to a "T" from the TELEX CORPORATION

TELEX Division. Headsets, microphones and listening accessories, 3054 Excelsior Blvd., Minneapolis, Minnesota 55416.

Write today for free literature on the complete line.

MAGNECORD Division. Professional quality tape recorder/reproducers. P. O. Box 1526, Tulsa, Oklahoma 74101.

Write today for free literature on the complete line.
Emil Gilels in his recent RCA Victor recording brings out the coldly satanic aspect of the Liszt B Minor Sonata. And Clifford Curzon on London stresses its darkly romantic drama. Now the indefatigable and seemingly infallible Artur Rubinstein reveals, in this new recording, yet other facets of the music—in particular, the contrast of extreme rhythmic tension and uninhibited lyrical release implicit in the sonata scheme worked out by Liszt. But, be it said to Rubinstein's everlasting credit, his reading is no mere study in contrast; it is a remarkable exhibition of a fine sense of musical proportion at work. So canny is his sense of how to relate tempos and dynamics properly that the music never seems hysterically hectic or sentimentally dragged out, as so often happens. This is a marvelously satisfying performance of music that I normally find hard to tolerate.

The Schubert "Wanderer" Fantasy has its problems for pianists, too. The opening movement can be pounded out to unbearably monotonous effect, while the fugal sections sound appalling thick in texture. Rubinstein not only avoids these pitfalls, but brings to the Wanderer variations some of his choicest singing tone.

RCA's piano recording is splendidly true-to-life throughout. Congratulations are in order here not only for a fine musical accomplishment, but also for the idea of coupling these two works for the first time. 

D. H.

Thomen MIMAROGLU: Agony (see BERIO)

*Mozart: Clarinet Quintet, in A Major (K. 581); Oboe Quartet, in F Major (K. 370). Karl Leister (clarinet), Lothar Koch (oboe), Berlin Philharmonic Soloists. Deutsche Grammophon SLP 138996 $5.79, LPM 18996 $5.79.

Performance: Fine Oboe Quartet
Recording: Oboe Quartet better
Stereo Quality: Generally okay

Not only does the lovely Clarinet Quintet fail to breathe as naturally and poetically here as in the Angel and London stereo recorded performances, but there seems to be something curious about the microphoning which makes the solo clarinet uncomfortably obtrusive to the ear while seeming to keep the strings under wraps. Instead of emerging from, then merging into, the total texture, the clarinet never seems to let go of one's attention for an instant—something not endemic to the German playing throughout is sensitive and sparkling..."

—RECORDS & RECORDING

Bartók: BLUEBEARD'S CASTLE
Christa Ludwig, Walter Berry—The London Symphony Orchestra—Istvan Kertesz
Stereo OSA-1158 Mono A-4158

"...must count as one of London's great operatic recordings...a thrilling recording of a great work."

—The GRAMOPHONE

Mozart: REQUIEM MASS IN D MINOR (K. 626)
Elly Ameling, Marilyn Horne, Ugo Benelli, Tugomir Franc—The Vienna State Opera Chorus—The Vienna Philharmonic Orchestra—Istvan Kertesz
Stereo OSA-1157 Mono A-4157

"Spectacular...it is a word in which many ways sums up Kertesz's reading of the work, for it is a full-blooded, expansive performance..."

—RECORDS & RECORDING

Schumann: FANTASIA IN C MAJOR (Op. 17)
ETUDES SYMPHONIQUES (Op. 13)
Vladimir Ashkenazy (piano)
Stereo CS-8471 Mono CM-9471

"His artistry, technique and musicality are proved once again to be one hundred percent reliable."

—RECORDS & RECORDING

Dvořák: SYMPHONY NO. 8 (4) IN G MAJOR (Op. 88)
The Vienna Philharmonic Orchestra—Herbert von Karajan
Stereo CS-9443 Mono CM-9443

"...how dynamic and vivid Karajan's direction and how beautiful the sound."

—The GRAMOPHONE

Verdi: NABUCCO
The incomparable TITO GOBBI, the sensational new soprano ELENA SULIOTIS, Bruno Prevedi, Carlo Cava and other soloists—The Vienna State Opera Chorus—The Vienna Opera Orchestra—Lamberto Gardelli
Stereo OSA-1382 Mono A-4382

"...this Nabucco comes closest to our ideal of a Verdi performance...the whole score, the whole opera, brought glowingly to life as a dramatic music."

—The GRAMOPHONE

Bach: THE ART OF FUGUE
The Stuttgart Chamber Orchestra—Karl Münchinger
Stereo CSA-2215 Mono CMA-7215

"...the German playing throughout is sensitive and sparkling..."

—RECORDS & RECORDING

...how dynamic and vivid Karajan's direction and how beautiful the sound."

—The GRAMOPHONE

AUGUST 1966
ANOTHER STUNNING DICHTERLIEBEN

SINCE Schumann's Dichterliebe cycle represents just about the summit in song literature, it is entitled to something very special in the way of recorded representation. But even with this in mind, the record buyer may find that what the catalog offers is nearly staggering: Fischer-Dieskau, Haefliger, and Prey available domestically, Pánzéra and Schütz to be had on imported discs. Every one of these offers superior artistry, and all can be wholeheartedly recommended—an endorsement which must not be extended as well to a magnificent new version by Fritz Wunderlich.

As his recording of Die schöne Müllerin has already demonstrated, Wunderlich's considerable abilities as an operatic tenor serve to enhance his work in lieder. He is blessed with a ringing and expressive voice, controlled with ease and firmness, and his style of delivery is flowing, effortless, and refreshingly unmanipulated. Dichterliebe is really a tenor's cycle, even though three of the sixteen songs lie in a somewhat uncomfortable range for the high voice. Wunderlich handles two of these ("Im Rhein, im heiligen Strome" and "Die alten bösen Lieder") as skillfully as any tenor I have ever heard. The same is generally true of the third, "Ich hatte nach," even though it does not have the cumulative impact it should have—this is the emotional climax of the cycle. In the remainder of the songs, Wunderlich is simply superb.

Owners of other Dichterliebe discs will be pleased to learn that the second side here contains material that is not only well chosen but also unlikely to be duplicated on competing versions. Beethoven's appealing Adagietto is sung meltingly, with an exquisite legato and perfectly turned ornamentations; its difficult tessitura is surmounted without effort, and its concluding section displays emotional intensification without any lessening of tonal elegance. The other Beethoven songs are musically less significant. Der Kuss is the most interesting among them (if only to show that Beethoven's lovely voice is not only well chosen but also unlikely to be duplicated on competing versions). The cycle concludes with the two most accomplished, and he has the benefit of London's finest recorded sound. The off-stage effects at the beginning and end of the pirates' scene come off particularly well.

I supervised the first complete recording of Daphnis and Chloe with Antal Dorati and the Minneapolis Symphony for Mercury, and am understandably fond of it. I also own the 1961 Munch-Boston Symphony recording. But I'm going to listen to this new Ansermet version many times, too.

RAMEAU: Hippolyte et Aricie (see Best of the Month, page 66)

RECORDING OF SPECIAL MERIT


Performance: Richly poetic Recording: Full and spacious Stereo Quality: Excellent

Ernest Ansermet's new recording of the complete Daphnis and Chloe not only represents an enormous improvement over his 1953 effort from the standpoint of sound, but it gives us an extraordinary synthisis of the poetry and drama inherent in the music and the story.

When it comes to drama and excitement, there can be no doubt that the Charles Munch-Boston Symphony recording still tops them all, and the late Pierre Monteux brought to his 1959 London recording a special poetic touch, if not very much dramatic tension. Ansermet here has managed to combine the best features of both approaches, and he has the benefit of London's finest recorded sound. The off-stage effects at the beginning and end of the pirates' scene come off particularly well.

I supervised the first complete recording of Daphnis and Chloe with Antal Dorati and the Minneapolis Symphony for Mercury, and am understandably fond of it. I also own the 1961 Munch-Boston Symphony recording. But I'm going to listen to this new Ansermet version many times, too.

SCARLATTI: Salve Regina (see BACH)

SCHUBERT: Fantasia, in C Major (D. 934); Sonatina No. 1, in G Minor (D. 408). Zino Francescatti (violin), Eugenio Bagnoli (piano). COLUMBIA MS 6829 $5.79, ML 6229 $4.79.

Performance: Good Francescatti Recording: Intimate Stereo Quality: Piano, left, violin, right

Recordings of Schubert's elaborate and emotionally expansive Fantasia have been relatively few; and therefore it seems a little incredible to carp at this obviously loving performance by Zino Francescatti with his able accompanist, Eugenio Bagnoli. However, it might well be that a collaboration with pianist Robert Casadesus, after the manner of the complete Beethoven violin sonata recordings for Columbia, might have produced a far more convincing result, for the Schubert Fantasia is chamber music par excellence—to be played by both violinist and pianist as one collective executant, heart, soul, and intellect.

Inevitably, my negative impression of the total musical result here is conditioned by the fact that the violin and piano were recorded on separate channels—thus creating an unintegrated musical fabric. All things considered, I prefer the Fantasia in the recordings by环境污染了. The sonatas as played by Alexander Schneider and Peter Serkin on Vanguard 71128/7128. D. H.

SCHUBERT: Wanderer Fantasy (D. 760) (see LISZT)


Performance: Businesslike Recording: Excellent Stereo Quality: Good

Shostakovich's Sonatina No. 2 for Piano, which is a product of the Forties, is one of the few of this composer's works good or bad, that I would be prepared to call re-considerable. Its lovely slow movement speaks clearly in the composer's personal accent; the rest of the piece, however, runs a little to the structuralizing of the conservatory sonata. There need be nothing bad about this, if the composer can lend it something of a "new look." But here almost everything proceeds according to the book—or, what is perhaps more important, sounds as though it does. I would much rather hear Shostakovich running on and on in his personal, rather Mahleresque manner—as in the big symphonies—than doing this sort of thing.

The crispness and clarity of Gilels' playing on the whole, while entirely admirable, seem only to stress the excesses of its structural orthodoxy. Gilels, as John Gruen points out in his sleeve annotation, is a
pretty cool and detached man at the piano, and again in the Bach French Suite No. 5 one might look, in a day when we are tolerably permissive about such matters, for a little more expressive "give."

The recorded sound and stereo treatment are admirable and judicious. Iff. F.


Performance: Remarkable
Recording: Excellent
Stereo Quality: Excellent

The third complete recording of Soler's concertos (the previous versions were by E. Power Biggs and Daniel Pinkham on Columbia and by Erna and Anton Heiller on Vanguard) may have an unusual appeal because of the use of the two organs of the Basilica of San Petronio at Bologna, instruments dating originally from the fifteenth and sixteenth centuries. The music itself, charming though not especially significant (especially when several concertos are heard consecutively), was intended for the entertainment of Gabriel de Bourbon, who presumably played it with his teacher, Soler, on the organs of the Church of Escorial. The very resonant acoustics of San Petronio have obviously required a close-miking technique, and the results, mainly because of the excessive clutter of the organs' mechanics, are not entirely successful. There is still a muddying effect from the reverberation, and yet the action noises tend to distract one from the music. I wonder whether another pair of instruments might not have been found that would have been more satisfactory for such a project.

Concerning the playing, both Alain and Tagliavini present stylishly accurate performances that are technically precise and properly spirited. Reproduction is clean, and, because of the antiphonal effects involved in the scores, the stereo version is very obviously to be preferred. J. K.

© R. STRAUSS: Elektra: Wart willst du, fremder Mensch (Recognition Scene); Die Frau ohne Schatten: Barak, mein Mann—Mir anvertraut: Der Rosenkavalier: Herr Karaiter (Finale of Act II); Christa Ludwig (mezzo-soprano); Sieglinde Wagner (contralto); Walter Berry (baritone). Chorus and Orchestra of the Deutsche Oper, Berlin, Heinrich Hollreiser cond. EURODISC S71187 $5.98, 71187a $4.98.

Performance: Very good
Recording: Good
Stereo Quality: Unspectacular

Grouping these three seldom "highlighted" Strauss scenes on one disc makes eminent sense, particularly with the assistance of such qualified interpreters. The program offers yet another opportunity for the remarkable Christa Ludwig (officially still a mezzo) to exploit the dramatic soprano repertoire. Her singing is not without a trace of strain, but musicality is never compromised, and most of her work is warmly expressive and tonally beautiful. There is little doubt that she can be a convincing and effective Elektra, or "Färberin," in normal-size theaters.

Walter Berry (Christa Ludwig's husband) seems to be an ideal Orest with his dark timbre and brooding tone quality. He is also a substantial Barak without quite realizing all the lyric magic Fischer-Dieskau was able to pour into this music in DG's complete recording of Die Frau ohne Schatten. The utilization of Berry's baritonal sound for the music of Baron Ochs comes off interestingly: the somewhat elephantine quality of the character disappears and a debonair rustic rogue appears in his place. Vocally, the performance is expert and secure, and the low-register demands are artfully managed. Throughout the entire program, however, one remains aware of careful dynamic scaling to accommodate the singers—everything is effectively proportioned but not necessarily in big Straussian dimensions. The sound is pleasant and clear, but the effect is rather unexciting.

G. J.


Performance: Excellent
Recording: Good
Stereo Quality: Good

Refinement of phrasing and rhythm are the hallmarks of these Karajan performances. The Swan Lake selections are more felicitous and less scrappy in effect than those from Sleeping Beauty—I was especially happy to hear the wonderful waltz from Act I of Swan Lake played with all repeats for once. I would get this disc for the waltz if for nothing else. The Karajan approach is far removed from the balletic and dramatic way

record of the month

LE BOEUF SUR LE TOIT; LA CREATION DU MONDE.

NONESUCH RECORDS takes pride in announcing its new album containing these two works by Darius Milhaud, in which the distinguished composer himself conducts the Orchestre du Théâtre Champs-Elysées. The crackling, witty, often sardonic mood of the 1920's, when these works came into being, is captured in these performances, brilliantly recorded in Paris.

H-1122 Mono
H-71122 Stereo

NONESUCH RECORDS
51 WEST 51st STREET, N.Y.C., N.Y. 10019

CIRCLE NO. 21 ON READER SERVICE CARD

AUGUST 1966
sic looks forward to the so-called classical era, to Gluck and even to Mozart. It is a long solo cantata (nearly thirty-nine minutes), which describes the flight of Ino and her child from her husband, King Athamas, who wishes to kill them both. Ino, with her son in her arms, leaps off a cliff into the water, but instead of drowning, the two are rescued by the Nereides, brought to the realm of Neptune, and made sea deities. For a singer, the work is obviously a dramatic tour de force, and in many ways Gundula Janowitz handles the characterization impressively. But there is some lack of color in her voice and less than the necessary degree of technical flexibility to do justice to the runs and ornaments. Boettcher's direction is stylish, but the chamber orchestra has sounded more polished in some of his other recordings. Furthermore, his treatment of the recitatives tends to be rhythmically stiff and tied to the beat, a fault that causes the work to lose some of its dramatic impact. Nevertheless, as a first recording, particularly one that is so well performed sonically, this is not an unwelcome issue.

I. K.

COLLECTIONS


Performance: Superior technically
Stereo Quality: Natural

From the standpoint of technical skill, it is difficult to imagine a more expert performance than this one of the Bach fugue, originally written for solo violin but transcribed by Bach for lute. Julian Bream eschews the Romantic approach of so many guitarists, although certain details of his interpretation could stand improvement—some missing cadential trills in the Visee, for example, and the absence of embellishments on repeats. The guitarist comes into his own with the Sor pieces, which, of course, are not Baroque but contemporary with Beethoven. I felt a certain lack of involvement on Bream's part, but nowhere will one hear greater skill in the art of guitar playing than here. (Blindness incidentally, is supposed to be in the process of acquiring a Baroque lute. It will be interesting to hear the Bach and Weiss pieces played on the instrument for which they were written.) RCA Victor's sound is thoroughly natural.

I. K.

RECORDING OF SPECIAL MERIT


Performance: Well worth hearing
Recording: Superior
Stereo Quality: Excellent

(Continued on page 85)
PAY LESS FOR THE BEST IN STEREO HI-FI & TAPE RECORDING AT ALLIED

Buy from Allied—where more people buy their stereo hi-fi than anywhere else in the world—and save most. Choose from the world's finest makes, including AR, Bogen, Fisher, Dyna, EV, Garrard, Harman-Kardon, Jensen, Knight, Knight-Kit, McIntosh, Scott, University, and many more. Discover how you can have hours of fun building your own Knight-Kit hi-fi and save even more. Choose from the largest selection of tape recorders, tape decks, pre-amplifiers, and recording tape. See top values in beautiful hi-fi cabinetry. Rush the card for your big new 1967 Allied Catalog ... NOW!

NO MONEY DOWN—24 MONTHS TO PAY!
Low Monthly Payments to fit your budget.

DO A FRIEND A FAVOR—give him this card to send for his FREE ALLIED CATALOG
NAME—PLEASE PRINT

ADDRESS

CITY

STATE 10H ZIP

FREE
ALLIED
1967 CATALOG

CHOOSE FROM THE WORLD'S LARGEST SELECTION IN STEREO HI-FI AND TAPE RECORDING . . . AND SAVE!

Buy from the world's largest electronics supplier. Use the Allied Credit Fund Plan to enjoy what you want NOW—no money down, 24 months to pay.

RUSH THIS CARD NOW!

ALLIED ELECTRONICS FOR EVERYONE 1967

Choose from the finest makes:

- AR
- Ampex
- Bogen
- Concertone
- Concord
- Dynaco
- Eico
- Electro-Voice
- Empire
- Fisher
- Garrard
- Harman-Kardon
- Jensen
- Knight
- Knight-Kit
- Marantz
- McIntosh
- Morelco
- Pickering
- Scott
- Shure
- Sony
- University
- Viking
- Wharfedale
- Wallensack

... plus many more

Tape Recorder Values

Choose from the world's largest selection of tape recorders, tape decks, recording tape and accessories.

Everything in hi-fi for complete home music centers

Only at Allied can you choose from such a wide assortment of famous make amplifiers, tuners, receivers, changers, speakers, cabinets, complete systems—all at big savings. Choose your own home music center—custom-selected to suit your own individual taste and budget.

Plus CB 2-Way Radio + Walkie-talkies + FM-AM & AM Radios
Short Wave Radios + Portable TV + Phonographs & Needles + Amateur Gear
Intercoms & P.A. + Automotive Electronics + Test Instruments + TV Antennas & Tubes + Power Tools + Parts + Hardware + Tubes + Transistors + Batteries Books . . . also hundreds of new items, scores of special Allied values!

NO MONEY DOWN! . . . Enjoy the things you want now, while you take 24 months to pay for them on the Allied Credit Fund Plan.

ALLIED RADIO P.O. BOX 4398
CHICAGO, ILLINOIS 60680

DO A FRIEND A FAVOR—give him this card to send for his FREE ALLIED CATALOG
The best example of the early seventeenth-century English Florid song on this disc is Thomas Campion's "Gone, you pretty false-eyed wanton," in which the vocal decorations could do justice to the most elaborate cantorial. Such a piece may well serve as an eye-opener, as will several examples in this well-varied collection. Concerning the singing, however, I am a little less enthusiastic, even though I admire the style and spirit of the performances. Some of the vocalists have trouble with the English language, others do not have particularly ingratiating voices, and a few are just not able to cope with the pyrotechnical hurdles. Yet the record is an important one, for it represents a first-rate attempt to capture the stylistic practices, using actual examples of seventeenth-century ornamentation and embellishment, of this period. To vary the repertoire there is an excellent selection of gamba consort pieces, well played by the Concentus Musicus. Despite my reservations about the vocalists, I found the disc highly interesting and stimulating. Notes and texts are included in both German and English. I.K.


Performance: From promising to brilliant Recording: Excellent Stereo Quality: Excellent

This set is conceived in a provocative format: a tribute to the celebrated daughters of Manuel Garcia, Maria Malibran and Pauline Viardot, were not blind to the remarkable versatility of their vocalists, I found the disc highly uninvolved, though it is lacking in the kind of dramatic conviction and effectiveness that can be gained only through theatrical experience. She is at her best in the excerpts calling for sustained lyricism (from Sapho, I Capuleti ed i Montecchi, Otello) and in the passages displaying her smoothly spurious toriture. I also like the dreamy quality she imparts to "Stride la vampa," but in "Con- dotta ell'erai in cephi" convincing passion is missing. As for the more familiar arias from Fidelio, Alcina, Orphée, Semiramide, and Il Barbieri, the current catalog abounds in superior interpretations. Miss Horne might have far surpassed her performances here had she been allowed time for further maturation before such an imposing task. As it is, her accomplishment is akin to almost scaling Mount Everest: daring, admirable, but somewhat frustrating.

Henry Lewis obtains generally good results from the fine Swiss orchestra, but there is some imprecision, and the choral passages are not realized to full effectiveness. Furthermore, his tempo for "J'ai perdu mon Eurydice" is unreasonably fast, and that for "J'ai perdu mon Eurydice" unreasonably fast. The recorded sound is exemplary, and the album enclosures are informative and fascinating. G.J.

RECORDING OF SPECIAL MERIT


Performance: Highly accomplished Recording: Excellent Stereo Quality: Very good

This collection of music by composers associated with the Viennese court of Emperor Leopold I has as its longest work a fine, French-style overture-suite by Fux, but the shorter pieces, ranging from works by Schmelzer and Biber to two excellent Legrenzi compositions (this Venetian applied to the Vienna court for the position of choirmaster), are just as much worth hearing. Particularly enjoyable are the performances by the members of the Concentus Musicus, their use of original instruments of the period (or reproductions), and the very persuasive manner in which they prove that such instruments not only do not have to sound out of tune, but can in fact provide the music with a piquant quality not obtainable from modern instruments. The timbre of the ensemble is well captured in the warm-sounding recording. The disc may be recommended as yet another outstanding example of the fine work the Concentus Musicus is doing. I.K.

© © HERMANN PREY: Goethe Lieder. Heuber: Heidenröslein; An die Easerlute; Rastlose Liebe; Erster Verlust; An Schwäger Kronos; Schäfer Klagezeit; Willkommen und Abschied. Schumann: Der Sanger (Bal-

(Continued on page 88)
RUDOLF SERKIN: A BRILLIANT HARVEST
by David Hall

RUDOLF SERKIN has been one of the shining lights on the American musical scene since 1933, when, having left Germany after the Nazi takeover, he appeared with his eminent father-in-law, Adolf Busch, at the Elizabeth Sprague Coolidge Festival in Washington, D.C. Though his chamber-music recordings with Busch still stand as peerless artistic achievements, Serkin has been an eminent soloist in his own right for thirty years.

Columbia's handsome new releases, as noted below, constitute a telling summation of Serkin's work as solo pianist and concerto interpreter over the past half-dozen years. The first two Beethoven concertos and the bagatelles, the two Mozart concertos, and the Schubert sonatas are new releases; the earliest of the reviews and recoupings contained in the multiple-disc albums is the Mendelssohn G Minor Concerto, dating back to 1960.

The two early Beethoven concertos come off with great sparkle and vitality, and together with the Serkin-Busch, reading of the C Minor, stand as the most naturally flowing and eloquent performances in the integral package of five concertos. The "Emperor" Concerto interpretation is a strikingly dramatic one, but the lyrical G Major doesn't seem to take wing until the final movement, partly because of the very deliberate pacing of the long opening movement. By dint of clever side distribution and skillful mastering, Columbia has managed to accommodate the intriguing if rather bombastic Choral Fantasy in the concerto package too. The performance by Serkin, the Westminster Choir, and Bernstein's New York Philharmonic could hardly be bettered in terms of brilliance and dramatic impact. The single-disc release of the Beethoven First Concerto offers as a filler Serkin's neatly turned readings of Beethoven's sometines lyrical, sometimes cryptic Op. 119 Bagatelles.

The other side of the single-disc version of the Beethoven Second Piano Concerto brings us Serkin's view of Mozart's last piano concerto, No. 27 in B-flat. In common with the other instrumental works of Mozart's tragic last years, notably the "King of Prussia" string quartets, this B-flat Concerto presents interpretive problems: there is an implicit assumption of a small, intimate string quartet. Serkin's handling of the terrifying emotional outburst midway through the slow movement is not easily forgotten.

In the case with this new recording of the great posthumous A Major Sonata. This is a big-scale, thirty-five-minute work in Schubert's most eloquent lyrical-dramatic manner, but Serkin's playing tends to make many of his solo performances of Schubert sound almost disjointed. Such is the case with this newly recorded performance of the great posthumous A Major Sonata. This is the only one of the three made after the composer's death, and it is certainly one of Serkin's finest recordings. The recorded sound is splendid too.

As for the earlier Mozart concertos, it is the high drama, the fiercely temperamental give-and-take between piano and orchestra, of the E-flat and G Major that find Serkin most truly in his element. And this holds true too for his conducting of the Symphonie Fantastique of Alexander Schneider. They operate together throughout these recorded performances as a single intensely vital human entity to produce some of the most exciting Mozart concerto playing I have ever heard: it is beyond all existing recorded competition. The recorded sound is especially clear, and the performance is convoluted and the flow of the music is as fine as a reading you'll ever get. The Mendelssohn remains for me as the most exciting tour de force in the entire Serkin concerto discography—a real stunner.

Of the two Brahms concertos, the Serkin-Ormandy B-flat remains unsurpassed by other recorded versions for combined eloquence, command of tonal architecture, and gorgeous recorded sound. The D Minor is less successful, chiefly because the recorded balance substitutes a dominating piano for a truly integrated solo-orchestral relationship.

All told, this is a wonderful Serkin harvest, especially for those who may be just beginning to build their libraries of recorded concert music. But since the image of Serkin presented in this release is exclusively that of a master of the classic and Romantic Austro-German repertoire, I recommend as an adjunct to it his remarkable disc of the Bartok First and Prokofiev Fourth Concertos (Columbia MS 6405, ML 5805).


UNIVERSITY'S NEW SUPER CARDIOID DYNAMIC MICROPHONE

From a soft, sweet ballad to the dynamic, vibrant discotheque... you get ACTION with the new University 5000! No feedback problems — no sound of rustling clothes — any way you use it, the 5000 delivers only the music not the noise! The super cardioid wide-angle pattern of the 5000 is designed for ACTION — ideal for the modern day performer, small combo, singing group and all "sound-on-the-go" applications. Try this action microphone at your University Franchised Dealer today. Toss it around — talk to it — sing to it — you'll know it's your kind of mike!

SPECIFICATIONS:
- Frequency Response: 25 to 20,000 Hz
- Impedance: Variable, 200 and 20,000 ohms (wired at the plug)
- Sensitivity Rating: -47 db (EIA) Output Level -200 ohms: -54 dbm/10 microbar 20,000 ohms: 13 mv/10 microbar
- Dimensions: 2 3/16" max. dia, 9 3/8" max. length (Model 5050)
- Shipping Weight: 2 1/2 lbs
- Finish: Satin Chrome

MODEL 5000 Complete with SA-15 Stand Adaptor, 15-foot cable.
MODEL 5020 Complete with SA-15 Stand Adaptor, 15-foot cable.
MODEL 5050 Switch and Swivel Stand Adaptor, 15-foot cable.

LISTEN — UNIVERSITY SOUNDS BETTER

A DIVISION OF LTV LING ALTEC, INC.
9500 W. Reno
Oklahoma City, Oklahoma 73101

CIRCLE NO. 59 ON READER SERVICE CARD
FOR STORES "WHERE YOU CAN BUY" SEE LAST PAGE.

AUGUST 1966
Considering Goethe's remarkable lack of musical judgment and his often inconsistent treatment of the great musicians who were his contemporaries, it is rather ironic that those same composers have contributed so much to his posthumous glory. But then Goethe's poetry was an abundant source of inspiration for music, and thus, I suppose, even the score. The Schubert settings of the great musicians who were inspiration for music, and that, much to his satisfaction, Wilhelm Meier (piano). LONDON OS 25927 $5.79, 25927* $4.79.

Performance: Intense and lyrical 
Recording: Excellent 
Stereo Quality: Suitable

Leukst's Arias: Ayan Hartmann: The weary winter; Sleep soundly in the soil of Slesvig. Heise: Alone in the woods; To a lady friend; Evening at the loggia. Lange-Müller: Sere
ni: The page was high up in the tower; Hunter's song; We, the sons of the plains. Aksei Schiotz (tenor); Royal Orchestra, Copenhagen, Johan Hye-Knudsen cond.; Mogens Woldike, harpsichord; piano and other instrumental accompaniments. ODIEON MAOK 19 $9.98.

Performance: Highly artistic 
Recording: Fair to good

This collection (number five in an imported Odeon series) embraces recordings covering the first phase of Assl Schiitz's career (1938-1946). With the exception of the first two selections, everything is sung in Danish, and the absence of texts for the unfamiliar songs proves a handicap. But the extraordinary art of this interpreter compensates, for the most part—his elegant

cceptional clarity of enunciation, he also displays a superb command of legato and an amazing breath control in florid passages. Schiitz's unique art combined intellectualty and emotion in perfect balance; it was an art in which the response to the Romantic style was held in check—though never with rigidity—by the taste and discipline of the classicist. The sound is dated but entirely satisfactory.

G. J.


Performance: Broad buffo-style 
Recording: Old but good

This worthy collection will acquaint American audiences with the celebrated bass of the Berlin State Opera, whose sudden death in 1931 (at the age of forty-five) cut short a brilliant career. He was an imposing and flamboyant singing actor similar to Richard Mayr and Michael Boenhn. Extremely popular in both opera and operetta, he excelled in a vast repertoire whose range is barely suggested by this program. Nevertheless, this release leaves no doubt of his high stature. Once the recital gets past a solid but unexceptional "Non più andrai" (in German) are treated to spectacular buffo singing—rich voice knowingly used, seasoned comic flair, bravura technique, and a contagious joy in the task at hand. Schützendorf takes many liberties, but somehow manages to get away with them.

I was particularly delighted with the Millicer tunes, which are quite elusive on records, and with the Lortzing excerpts, which can nowhere be heard with this kind of unción and blustery bravura. The sound has been enhanced artificially, but remarkably well, revealing the excellence of orchestra and conductor as well as the singer. In all, a highly commendable disc for the vocal lover. It will be a special treat for listeners who can appreciate the Schützendorf brand of German singing.

G. J.


Performance: Elegant playing 
Recording: Excellent 
Stereo Quality: Good

The impressive thing about this collection of the quartet music is the very sensitive and elegant playing of the instrumentalists: they are marvelously balanced as a team. Stylistically, there are a few lapses, notably in the earlier pieces: the singing here is distinguished throughout—Prey has rarely been recorded in richer sound or in more assured command of his vocal resources. His range is remarkable in its extension, and the simple vocal resources. His range is remarkable in its extension, and the simple

ven's treatment of the great musicians who were


Performance: Excellent 
Recording: Old but good 
Stereo Quality: Suitable


RITA STREICH Taste, intelligence, unfailing assurance


Performance: Intense and lyrical 
Recording: Excellent 
Stereo Quality: Suitable

Considering Goethe's remarkable lack of musical judgment and his often inconsistent treatment of the great musicians who were his contemporaries, it is rather ironic that those same composers have contributed so much to his posthumous glory. But then Goethe's poetry was an abundant source of inspiration for music, and thus, I suppose, even the score. The Schubert settings of the great musicians who were inspiration for music, and that, much to his satisfaction, Wilhelm Meier (piano). LONDON OS 25927 $5.79, 25927* $4.79.

Performance: Intense and lyrical 
Recording: Excellent 
Stereo Quality: Suitable

Leukst's Arias: Ayan Hartmann: The weary winter; Sleep soundly in the soil of Slesvig. Heise: Alone in the woods; To a lady friend; Evening at the loggia. Lange-Müller: Sere
ni: The page was high up in the tower; Hunter's song; We, the sons of the plains. Aksei Schiotz (tenor); Royal Orchestra, Copenhagen, Johan Hye-Knudsen cond.; Mogens Woldike, harpsichord; piano and other instrumental accompaniments. ODIEON MAOK 19 $9.98.

Performance: Highly artistic 
Recording: Fair to good

This collection (number five in an imported Odeon series) embraces recordings covering the first phase of Assl Schiitz's career (1938-1946). With the exception of the first two selections, everything is sung in Danish, and the absence of texts for the unfamiliar songs proves a handicap. But the extraordinary art of this interpreter compensates, for the most part—his elegant

cceptional clarity of enunciation, he also displays a superb command of legato and an amazing breath control in florid passages. Schiitz's unique art combined intellectualty and emotion in perfect balance; it was an art in which the response to the Romantic style was held in check—though never with rigidity—by the taste and discipline of the classicist. The sound is dated but entirely satisfactory.

G. J.
The full title of this recital, "Rita Streich Sings Opera Arias in the Original Tongue," may seem odd to us. In Germany, however, where the recording originated, performances are usually given in the vernacular, and the distinction is quite noteworthy.

Rita Streich is in fine form here, as always (I don't recall ever having heard a less than first-rate recording by this artist). Her voice is not a spellbinding voice, but it is attractive in tone and, served by a solid technique, always used tastefully and to high artistic effect. What is equally important, she is an intelligent artist who understands and responds to the different styles of Bellini and Massenet with unfailing assurance. Her enunciation is clarity itself, she can infuse her recitatives with feeling and meaning, and the spinning of a lovely cantilena does not, in her case, require disregarding the text. The program is appealing, too, in its inclusion of choices that are not too obvious. While I am not qualified to judge Miss Streich's Russian pronunciation, her faultless vocalism in the Sadko aria is something the wobbily nightingales of the Bolshoi should perhaps turn to with diligent attention.

Miss Streich is not a very emotional singer, and the Massenet excerpts could do with more involvement. Her Bell Song, too, is relatively tame and cautious (and tonally less steady than the others), an approach clearly matched by the deliberately paced orchestral accompaniment. The recording is clear but somewhat lacking in color, bite, and overall excitement.

G. J.


Except for the Atrilla scene, which I do not remember encountering before, the entire program has been assembled from previous, more grandiloquently titled releases. Although the excerpts from Rigoletto and La Traviata come from the complete opera sets, they provide (contrary to what may be expected) the less exciting part of the sequence. There are, as always with Miss Sutherland, splendid bits of singing here and there, but also damaging instances of rhythmic slackness, dull and mannered interpretation and, in one case ("Addio del passato"), deadly tempo.

The early Verdi arias, where the accent is on vocal display, fare much better. The Atrilla scene is quite exciting, and it is rendered with appropriate fireworks even though the music calls for a few uncomfortable descents into the low tessitura. "Ernani involami" lacks the dramatic urgency and sense of determination that made the Callas and Ponselle versions overpoweringly fine.  

a brand new ALL REQUEST performance
NOW HELOIDOR brings you Bernstein, Weill, Brecht and the Whole "Creation" LEONARD BERNSTEIN: Trouble in Tahiti. But while the music opera is now available once more With Beverly Wolf and David Atkinson of the original TV production. H/ HS-25020

BRECHT-WEILL: Der Jasager. An unexcelled masterpiece by the "THREEPENNY OPERA" team of Brecht and Weill. Recorded under the supervision of Lotte Lenya. H/ HS-25025

Two for the price of one JOSEPH HAYDN: The Creation. The only budget recording of Haydn's great oratorio. Complete 2-record set includes full cast Berlin Radio Chorus and Orchestra. H/ HS-25028-2

Also new on Helidor: RACHMANNINOFF: SYMPHONY NO. 1. Leningrad Symphony. H/ HS-25029

BRAHMS: LIEBESLIEDER WALTZES, SU: SERENADE FOR STRINGS. Arthur Wind- grath, cond. H/ HS-25030

PISTON: QUINTET FOR PIANO AND STRINGS. Earl Wild, Walden Qua- rent. H/ HS-25031

HOVHANESS: KHALDIS CONCERTO. William Massen- les, clarinet. H/ HS-25032

BACH: VIOLIN PARTITA NO. 2, FLUTE SONATA IN A MINOR. Walligana Schnid- erhan, Gustav Schek. H/ HS-25039

HELOIDOR Records is a division of Metro-Goldwyn-Mayer Inc.

CIRCLE NO. 16 ON READER SERVICE CARD

ing, but Sutherland's singing is always im- posing in its absolute ease and security. It is said that the aria from I Masnadieri—low-grade Verdi, alas—was first sung by Jenny Lind, but I doubt very much that even she could have sung the piece more brilliantly than Sutherland.

To sum up, the disc offers an excellent display of what Miss Sutherland is (the most accomplished vocal technician around), and a bona fide legatee of the fabled divas of old and what she is not (a convincing dramatic interpreter). The accompaniments suffice, except for occasional time disagreements between singer and conductor. No texts, which is regrettable, considering Miss Sutherland's diction. G.J. ♦

USTAD FAIYAZ KHAN SAHIB: Ustad Faiyaz Khan Sahib, Ustad Faiyaz Khan Sahib (vocals) and unidentified accompaniment. Tarpat Han Jaisie; Ara Mero Nabi; Kheyal; Céloko Khe Ko Jhadi; and eight others. ODEON MOAE 131 $5.79. Performance: Virtuoso. Recording: Adequate. Although an increasing quantity of Indian instrumental music is available on long-playing records, the master vocalists in the tradition remain largely unknown in this country. The late Ustad Faiyaz Khan was one of them. Possessed of a robust but remarkably flexible voice, he reveals a fascinating command of textural and rhythmic subtleties. Like jazz vocalizing, Indian singing appears to be based on an instrumentalized conception. And just as jazz musicians are discovering that they have much to learn from Indian practices in terms of rhythms and colors, it is not inconceivable that future avant-garde jazz singers will be stimulated to find new challenges by listening to such performers as Ustad Faiyaz Khan. I can easily imagine him in collaboration, for example, with John Coltrane or Albert Ayler. Unfortunately the jacket notes here are skimpy and provide no information on the traditions of this fascinating vocal medium. Nat Heman.


MUSIC OF BOLOGNA (16TH-18TH CENTURY). Canale: Balzana for Two Organs; Cazzati: Brebbiana Sonata to 6 for Two Organs; Guarni: Lucciciana to 8 for Two Organs; Lucciciana for Two Organs. D. Gabrielli: Trumpet Sonata a 6. Pasquini: Sonata ad due cembali. Aldrovandini: Sinfonia for Two Trumpets; Strings, and Organ. Manfredini: Sinfonia No. 2 for Strings; Torelli: Concerto for Two Trumpets; Two Oboes; Torelli: Concerto for Two Organs. Marie-Claire Alain and Luigi Ferdinando Tagliavini (organs of the Basilica of San Petronio, Bologna); Maurice André and Marcel Lagorce (trumpets); Gino Siviero and Giuliano Giuliani (oboes); Gabriella Armuzzi (violin), Instrumental Ensemble of Bologna, Tito Gobbi. MUSIC GUILD MS 130 $2.39, MG 130 $2.39.

Performance: Vanguard the more exciting Recording: Music Guild good, Vanguard excellent.

Stereo Quality: Both effective.

Although there is no duplication of material in these two collections, all the trumpet music was originally intended for performance in the same place: the Basilica of San Petronio in Bologna. There was a yearly celebration there of the Feast of San Petronius, and an unusually large number of pieces were written for this festival during the last half of the seventeenth century and the first twenty years or so of the eighteenth. Many of the composers—Torelli, Domenico Gabrielli (misspelled with one l on the Music Guild jacket—he was not one of the Venetian Gabriels), Jacchini, Aldrovandini—played in the San Petronio orchestra.

Music Guild's collection has more than ordinary interest, because it was recorded in this very basilica. The reverberation is extreme, and the engineers have sought to retain clarity by close miking, an effect that produces a somewhat boxed-in sound. Nevertheless, to hear what trumpets sound like in the basilica is enthralling. The remaining repertoire on this disc (with the exception of the Manfredini Sinfonia) emphasizes antiphonal writing, especially through the use of the two organs of the basilica.

There is some vagueness in the identification of composers and titles on the jacket (Vanguard is far more thorough), and not all the composers were associated with Bologna—Canale, Guarni, and Pasquini (whose double-keyboard sonata was originally in tended for harpsichords) are examples. And there is one other curiosity: the disc opens with a Torelli minuet for trumpets that turns out to be the last section of the Torelli concerto heard complete at the very end of the record. The performances are nonetheless competent, though the orchestral playing is not very polished. Such essential stylistic ingredients as cadential trills are invariably left out, and, if you are aware of the omission, the effect is not unlike leaving a t uncrossed or an i undotted. The Vanguard collection is by far the more exciting, owing both to the precision and verve of the playing and the brilliance of the recording. Even though most of the music necessarily centers around the tonality of D (the most common key of the natural trumpet) and there is less variety in repertoire than the Music Guild recording offers, it is the more pleasurable disc. Her- bert Tachezi provides some imaginative fill-in improvisations on the harpsichord, and except for that bugaboo of missing cadential trills, the recordings are properly stylish. Both recordings make the most of stereo possibilities.

ROGER WAGNER CHORALE. Choral Music of the Spanish New World 1550-1750 (see Best of the Month, page 67).
How To Get A $570 Stereo Recorder For $400

The tape transport is powered by 3 separate motors. The hysteresis synchronous motor has a dynamically balanced flywheel and a ballbearing inertial stabilizer mount for constant, accurate speed. Two permanent split-capacitor type motors drive the reels. With the convenient push-button controls, you can change operational modes instantly and gently with the touch of a button. Compliance arms insure correct tape tension at all times.

The military-type differential band brakes are solenoid operated for instant, gentle stops. And when the tape runs out an automatic switch shuts off all motors and retracts the tape pressure roller eliminating unnecessary motor wear and prevents deformation of rollers. The tape gate and pressure roller also are solenoid-operated for positive action.

3 Professional Tape Heads

Selectable 1/4 track erase, record and play. Engineered and lapped to a precise hyperbolic curve for smooth low frequency response...made with a deep gap, deposited quartz for high frequency response and long life. Removable shields afford double protection against external magnetic fields. Protective, snap-mounted head covers provide easy access for cleaning and de-magnetizing. And for quick, accurate editing, there are center-line marks.

Other Professional Features

All parts mount on a thick, die-cast main-plate that won't warp, reduces wear, provides rigid support and stable alignment. Two V.U. meters for visual monitoring of signal levels from either tape or source. Two V.U. meters for visual monitoring of signal levels from either tape or source.

Build The New Heathkit/Magnecord 1020!

You Save $170!

Thanks to Heath, you can now save $170 on the new Magnecord 1020 4-Track Transistor Stereo Tape Recorder by building it yourself. And the only difference between this Heathkit version and the original is the $170 you save (think of all the tape you can buy with that!).

Add to this Magnecord's years of pioneering and developing tape equipment for the broadcasting and recording industries, and you have a sophisticated recorder that will give you years of professional quality and reliability.

Professional Recording Facilities

With the 1020, you can record "live" from microphones, or from auxiliary sources like tuners, phonographs, TV's, etc., and playback in 4-track stereo or mono at either 7 1/2 or 3 1/4 ips. And you can make sound-on-sound, or sound-with-sound (mixing) recordings, or create interesting echo effects.

Professional Tape Transport

The tape transport is powered by 3 separate motors. The hysteresis synchronous motor has a dynamically balanced flywheel and a ballbearing inertial stabilizer mount for constant, accurate speed. Two permanent split-capacitor type motors drive the reels. With the convenient push-button controls, you can change operational modes instantly and gently with the touch of a button. Compliance arms insure correct tape tension at all times.

The military-type differential band brakes are solenoid operated for instant, gentle stops. And when the tape runs out an automatic switch shuts off all motors and retracts the tape pressure roller eliminating unnecessary motor wear and prevents deformation of rollers. The tape gate and pressure roller also are solenoid-operated for positive action.

3 Professional Tape Heads

Selectable 1/4 track erase, record and play. Engineered and lapped to a precise hyperbolic curve for smooth low frequency response...made with a deep gap, deposited quartz for high frequency response and long life. Removable shields afford double protection against external magnetic fields. Protective, snap-mounted head covers provide easy access for cleaning and de-magnetizing. And for quick, accurate editing, there are center-line marks.

Other Professional Features

All parts mount on a thick, die-cast main-plate that won't warp, reduces wear, provides rigid support and stable alignment. Two V.U. meters for visual monitoring of signal levels from either tape or source...allows quick comparison of source with recorded signal. Inputs for microphones and outputs for headphones are all front-panel mounted for easy access. Digital counter with push button reset. Low impedance emitter-follower outputs deliver 300 millivolts or more to amplifier inputs. Individual gain controls for each channel. And all solid-state circuitry...21 transistors and 4 diodes...your assurance of cool, instant operation, long reliable life.

Famous Heathkit Know-How

Simple step-by-step instructions with generous use of giant pictorials guide you every step of the way. You just wire two circuit boards and do the easy mechanical mounting of the transport components.

And to make construction even easier, the connecting wires and shielded cables are precut, stripped, and marked...even the connectors are installed where necessary; just plug them in! The only soldering you do is on the circuit board! Total assembly time is around 25 hours...that's like getting $7 an hour for your efforts.

Get today's best buy in a professional stereo tape recorder...order the Heathkit version of the Magnecord 1020 now!

Kit AD-16, deck & electronics, 45 lbs...$395.50
Kit AD-16-1, walnut base, 8 lbs...$19.95
Kit AD-16-2, adapter ring for cabinet or wall mounting, 2 lbs...$4.75
Kit AD-16-3, slides, (combine with walnut base for tape drawer), 7 lbs...$5.55

FREE!

World's Largest Kit Catalog

108 pages! Describes this and over 250 kits in stereo hi-fi, color TV, organs, ham, test, CB, marine, home and hobby. Mail coupon, or write Heath Company, Benton Harbor, Michigan 49022.

HEATHKIT

Heath Company, Dept. 40-B, Benton Harbor, Michigan 49022

□ Enclosed is $ , plus shipping. Please send model (s)
□ Please send FREE Heathkit Catalog.

Name
Address
City State Zip

Prices and specifications subject to change without notice.

CIRCLE NO. 30 ON READER SERVICE CARD

HEATHKIT® 1966
The Sound of Marantz
is the Sound of
Music at its Very Best.

SLT-12 Turntable, with Straight Line Tracking—a revolutionary development from Marantz. Finally, the art of tracking a record precisely duplicates the art of cutting a record. The Marantz SLT-12 Straight Line Tracking System exactly conforms to the angle, posture and the tracking used in the cutting of an original master stereo record. This perfect compatibility eliminates inherent deficiencies of conventional swing arm record player systems and gives incredibly perfect reproduction. It is the only system available which faithfully reproduces sound as it was originally recorded.

10B FM Stereo Tuner—rated by Hi Fi/Stereo Review magazine, “I have never seen a tuner to compare with it...so outstanding that it is literally in a class by itself.”

7T Solid State Stereo Console—a solid state component unequalled in performance, versatility and flexibility.

8B Dual 35 Stereophonic Power Amplifier—American Record Guide magazine says, “The Marantz 8B is a logical choice for ears that demand the best sound for now and for the future.”

Marantz
MARANTZ, INC. SUBSIDIARY OF SUPERSCOPE INC.
25-14 BROADWAY, LONG ISLAND CITY, NEW YORK

Model 7T Stereo Pre-Amplifier  Model 8B Stereo Amplifier

Model SLT-12 Turntable  Model 10B Stereo Tuner

A wonderful adventure in sound awaits you with your discovery that the sound of Marantz is the sound of music at its very best. You, too, can own an incomparable Marantz system. Ask your dealer about the easy finance plan.

CIRCLE NO. 37 ON READER SERVICE CARD

HIFI/Stereo Review
The next time somebody tells you how American popular music has gone to hell in a handbasket, play this record. American popular music has its problems, and in some ways it has deteriorated; but in other ways it has improved markedly. Listen to the corny arrangements in this album. They're funny by today's standards: all those loo-loo-loo saxophones, sweetly muted trumpets, and naïve section voicings.

Astaire's singing has never been much. His charm (and it was great) was in the dancing, of course. Yet association makes his voice somehow enjoyable. All the songs here are from his films of 1935 to 1940.

The value of this album, which by the way is a reissue of "The Best of Fred Astaire" (Epic EG 7142), is in its nostalgia content.

As society pianists go, Peter Duchin isn't bad. At least his chord changes are correct, if not inspired. Surely he could use more interesting substitutions without losing the chicken-fat quality that is the chief intent of this kind of playing. For the rich of New York, Peter Duchin is a kind of pet, which leads one to wonder about their collective aesthetic judgment. For anybody seriously interested in music, he is quite dull.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but a few days later he couldn't stand the Lennon-McCartney tunes any longer. Keating is noted for his great orchestral music in London. And it's interesting. And he's one of the most skilled vocalists in the business; there's little she doesn't know about time and phrasing; her intonation is good and her breath control sturdy. But the brittle efficiency of her singing and her harshness of tone have always kept me from admiring her, except on a technical level.

This album presents the new, improved, "emotionalized" Gorme. This year the big thing among girl vocalists is melodrama. ("Sing till it kills you, so they'll know you mean it.") Miss Gorme is apparently aware of this trend. Thus, on, If He Walked into My Life and several others, she gives with the sobs and belting personally. I'll be grateful when the current M.E.A.-Desperately singing style is left in the hands of Barbra Streisand, who started it. All the overacting going on today has nothing to do with good singing (and a lot to do with bad). It's unnecessary, and above all, it hurts the ears.

A few months ago, Scottish-born arranger Johnny Keating, who is noted for his great talent and his air of utter confusion, was asked by some rock-and-roll act to come to America to conduct the orchestra for them. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.

This album is the first Keating has done for Warner Brothers—his others were for English Decca, whose U.S. affiliate is London. After a week in Vegas, he couldn't live with the music and resigned. He popped off to America to conduct the orchestra for them during an engagement at Las Vegas. Keating agreed, thinking the trip might be nice, but after a week in Vegas, he couldn't live with the music and resigned. He popped off to Los Angeles to visit friends before heading back to London, was asked to orchestrate the score of a film, did so, was asked to score another film, was asked to sign a contract with Warner Brothers, and not long thereafter became a legal resident of this country.
Many people think that Sinatra started out doesn't swing; it just stands there and pounds. and eight others. CAPITOL ST 2477 $4.79, 94 don't bother buying this one.

...imposition unnecessary and bothersome. If ...reissues the album with a new stein's Somewhere. Another track. Brown, by ostensible rock-and-rollers, Leonard Ber-

The Jule Styne album is interesting chiefly for reminding us how many excellent songs he has written. Arranged in medleys— ...events. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted.

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-

The record business in this country operates under certain strict rules. Rule One: read Billboard and Cash Box faithfully and do exactly what the top guy did last week. Rule Two: when somebody else gets a good idea, steal it, even if it's already been exhausted. When Barbra Streisand was successful with a disc called "The Barbra Streisand Album." Verve followed up with one called "The Astrud Gilberto Album." Not long after that. Columbia issued an album called "My Name is Barbra," on the cover of which was a childhood picture of Miss Streisand. Wouldn't you know it? Some pedestrian producer, this one at United Artists, has copped the idea. "My Name is Jule." and now "Color Me Barbra") is where she is: from her a-minus first name "Barbra" led me to hope she might be ac-
Henry Mancini says in the liner notes to this album of various melodies of his: "I've always had a special liking for mercurial singers. By that I don't mean singers who are merely pop vocalists, with pleasing voices, but singers who know music, who can read parts, who have precise intonation, sensitive phrasing, and a professional 'feel' for music. The seven voices (four male, three female) who comprise Group I have all these qualities and then some. They are musicians in every sense of the word, who sing as if they were playing instruments.

Mancini falls into the common trap of judging voices by how much they sound like instruments. I am increasingly convinced that, on the contrary, you must judge instrumental music by how 'vocal' it is — both Horowitz and Bill Evans talk about "singing" in their playing. And, oddly enough, Mancini writes a singing kind of music. Yet he judges vocal music from an instrumentalist's point of view.

Everything Mancini says about Group I is correct: they are musically, they are in tune. But this kind of album doesn't make it for me: not when Dick Williams (Andy's deeply talented brother) does it; not when Wally Swingle does it, not when Mimi Perrin and the Double Six of Paris do it. It's a one-joke act, and the joke's already been told, sometimes well and sometimes badly. Applying the joke to Mancini, material, George Wilkins comes up with something that is skillful enough, but an earlier album on RCA Victor, in which Mancini instrumental material was done vocally, is to my ear even better. I refer to the Mancini album by the Anita Kerr Singers of Nashville. And in the end, I'd rather hear the instrumental versions. Instruments do a much better job of sounding like instruments. I like voices that get a sound that no instrument can ever get: that of the human voice.

G.L.
McKuen's main fault so far has been that he doesn't reject enough of his own lines in the process of writing them.

Despite these picayune shortcomings, the twelve McKuen songs Yarbrough sings here add up to one of the most interesting albums of light music to come out in this country in quite some time. McKuen's songs have an honesty about them that is quite rare, and a maturity in treating the subject of love that is even rarer. McKuen has been much influenced by French songwriters—by his own admission, he's particularly under the spell of Jacques Brel. It's a worthy influence.

The album is subtitled "Glenn Yarbrough Sings the Love Songs of Rod McKuen," but in fact some of the tracks are poems by McKuen against background orchestrations by Mort Garson. One of these, 'Brownstone,' is a gem. Garson's arrangements contribute enormously to the value and interest of this album. Sensitive to the moods of the songs, tastefully written, and superbly played by a large string section (a Los Angeles string section, inevitably), they are quite moving.

Yarbrough's pure tenor sound can be faulted for a quick and rather wobbly vibrato, tastefully written, and superbly played by a large string section (a Los Angeles string section, inevitably), they are quite moving.

In 1957 the British Broadcasting Corporation commissioned Ewan MacColl and Charles Parker to create a documentary radio program on the life and death of John Axon, an engine driver who had been killed early that year in a collision of freight trains. The result, now available on Argo as The Ballad of John Axon, is my favorite album of Rod McKuen songs.

A genuinely beautiful disc, this one is highly recommended as a venture into the unusual in American light music. G. L.
lads on life in Watts, on the work of a Peace Corps recruit, on the changing nature of American factory life, on the odyssey of a jazz musician. It is a form that America's more venturesome FM radio stations ought to explore. As serious drama and music become increasingly rare on television, the imagination-expanding resources of radio are still largely unexamined. And in a country still as culturally heterogeneous as this one, the radio ballad could be an extraordinarily awakening way of using those resources. In any case, The Ballad of John Aron is a revelation, in speech and music, of the complex rhythms of actual life. N. H.

RECORDING OF SPECIAL MERIT

Bob and Ron Copper: English Shepherd and Farming Songs. Bob and Ron Copper (vocals). The Lark in the Morning; Good Ale; The Two Brethren; The Season Round; and twelve others. Folk-Legacy FSB 19 $4.98.

Performance: Authentic, absorbing
Recording: Very good

For more than three hundred years, the Copper family has lived in the village of Rottingdean in the heart of the Sussex sheep country. The traditional ways of agricultural life and the traditional songs associated with them are disappearing now, but Bob and Ron Copper are determined to keep the music alive as long as they can. Their two-part harmonizing—with survival of primitive folk polyphony—is unaccompanied: as Bob Copper says, the songs "know of no accompaniment but the call of the seagull, the song of the lark, or the wavering cry of the newborn in search of its dam."

To listen to their rugged, rolling singing is to enter another world and time—the homogeneous village where everyone sang, where each family had its particular specialities, and each man his particular favorites regarded by his neighbors as "his songs." These musical tales tell of hunting, harvesting, the pleasures of love and of ale, and the delights of the seasons.

An accompanying booklet contains complete texts and an introductory essay by Bob Copper that brings the settings and the traditions of these songs into detailed perspective—at least for the nostalgic imagination, because "now, alas, there are scarcely any villagers who could sing one song right through." Bob and Ron Copper, fortunately for us all, made a vow that they "would never be the weak links in the long chain of 'singing Coppers.'" N. H.

Leadbelly: Keep Your Hands Off Her. Leadbelly (vocals and twelve-string guitar); Cisco Houston, Sonny Terry, Woody Guthrie (vocals and accompaniment). Stewball; On a Monday; Fiddler's Drum; Living Track; Outskirts of Town; and ten others. Verve/Folkways EFS 9021 $5.79, FV 9021 $4.79.

Performance: Generally excellent
Recording: Good
Stereo Quality: Very good

I neither claim nor desire membership in the Leadbelly cult, and I occasionally puzzle over why he is regarded so highly. Still, this disc comes as close to explaining it all as anything is likely to. He is joined on some tracks here by three of his buddies: Sonny Terry, Woody Guthrie, and Cisco Houston. One of these tracks, We Shall Be Free, is interesting for the impetus it provided for several of Bob Dylan's excursions.

Strangely enough, the reprocessed stereo version has better sound than the monophonic. Either way, this is an excellent record for the uninhibited and the unconvinced. J. G.

FOLK COLLECTIONS

RECORDINGS OF SPECIAL MERIT

Chicago/The Blues/Today, Volume I. The Junior Wells Chicago Blues Band: Junior Wells (harmonica, vocals); Buddy Guy (guitar); Jack Myers (bass), Fred Below (drums); J. B. Hutto and His Hawks: J. B. Hutto (guitar, vocals), Herman Hassell (bass), Frank Kirkland (drums), Otis Spann's South Side Piano: Otis Spann (piano, vocals); S. P. Leary (drums). It Hurts Me Too; Going Ahead; Married Women Blues; Sometimes I Wonder; and eleven others. Vanguard VSD 79216 $5.79, VRS 9216 $4.79.

Chicago/The Blues/Today, Volume II. The Jimmy Cotton Blues Quartet: Jimmy Cotton (harmonica vocals), James Madison (guitar), Otis Spann (piano), S. P. Leary (drums), The Otis Rush Blues Band: Otis Rush (guitar, vocals), Robert "Sax" Crowder (alto saxophone),

For more than three hundred years, the Copper family has lived in the village of Rottingdean in the heart of the Sussex sheep country. The traditional ways of agricultural life and the traditional songs associated with them are disappearing now, but Bob and Ron Copper are determined to keep the music alive as long as they can. Their two-part harmonizing—with survival of primitive folk polyphony—is unaccompanied: as Bob Copper says, the songs "know of no accompaniment but the call of the seagull, the song of the lark, or the wavering cry of the newborn in search of its dam."

To listen to their rugged, rolling singing is to enter another world and time—the homogeneous village where everyone sang, where each family had its particular specialities, and each man his particular favorites regarded by his neighbors as "his songs." These musical tales tell of hunting, harvesting, the pleasures of love and of ale, and the delights of the seasons.

An accompanying booklet contains complete texts and an introductory essay by Bob Copper that brings the settings and the traditions of these songs into detailed perspective—at least for the nostalgic imagination, because "now, alas, there are scarcely any villagers who could sing one song right through." Bob and Ron Copper, fortunately for us all, made a vow that they "would never be the weak links in the long chain of 'singing Coppers.'" N. H.

Leadbelly: Keep Your Hands Off Her. Leadbelly (vocals and twelve-string guitar); Cisco Houston, Sonny Terry, Woody Guthrie (vocals and accompaniment). Stewball; On a Monday; Fiddler's Drum; Living Track; Outskirts of Town; and ten others. Verve/Folkways EFS 9021 $5.79, FV 9021 $4.79.

Performance: Generally excellent
Recording: Good
Stereo Quality: Very good

I neither claim nor desire membership in the Leadbelly cult, and I occasionally puzzle over why he is regarded so highly. Still, this disc comes as close to explaining it all as anything is likely to. He is joined on some tracks here by three of his buddies: Sonny Terry, Woody Guthrie, and Cisco Houston. One of these tracks, We Shall Be Free, is interesting for the impetus it provided for several of Bob Dylan's excursions.

Strangely enough, the reprocessed stereo version has better sound than the monophonic. Either way, this is an excellent record for the uninhibited and the unconvinced. J. G.

FOLK COLLECTIONS

RECORDINGS OF SPECIAL MERIT

Chicago/The Blues/Today, Volume I. The Junior Wells Chicago Blues Band: Junior Wells (harmonica, vocals); Buddy Guy (guitar); Jack Myers (bass), Fred Below (drums); J. B. Hutto and His Hawks: J. B. Hutto (guitar, vocals), Herman Hassell (bass), Frank Kirkland (drums), Otis Spann's South Side Piano: Otis Spann (piano, vocals); S. P. Leary (drums). It Hurts Me Too; Going Ahead; Married Women Blues; Sometimes I Wonder; and eleven others. Vanguard VSD 79216 $5.79, VRS 9216 $4.79.

Chicago/The Blues/Today, Volume II. The Jimmy Cotton Blues Quartet: Jimmy Cotton (harmonica vocals), James Madison (guitar), Otis Spann (piano), S. P. Leary (drums), The Otis Rush Blues Band: Otis Rush (guitar, vocals),

Whisper Fan Kit

A QUICKLY AND EASILY INSTALLED WHISPER FAN KIT COOLING YOUR HI-FI EQUIPMENT...

Measuring only 4 3/4" square and 1 1/8" deep, it can be set in a corner or mounted on the rear panel in just minutes. The Whisper Fan requires only 7 watts, just pennies a week to operate. Whisper Fan Kit comes complete with mounting hardware, plug and cord for electrical connections and installation instructions. Cost only $14.85. Write for descriptive literature and name of nearest dealer.
new Minolta Electro Shot

Transistors and diodes make the Minolta Electro Shot the most completely automatic, thoroughly fool-proof 35mm camera you can own. Space age electronics set exactly the right combination of lens opening and shutter speed for automatically perfect exposure. Even flash photography is automatic. Bright "snap-in" focusing makes viewing easy. Most important, you get a famous Rokkor f/1.8 lens for razor-sharp slides or snapshots. Under $115 plus case. At your photo dealer or write for literature to Dept. E, Minolta Corporation, 200 Park Ave. South, New York, N.Y. 10003.

Luther Tucker (rhythm guitar), Roger Jones (bass), Willie Lion (drums); Homespick James and His Dusters: Homespick James Williamson (guitar, vocals), Willie Dixon (bass), Frank Kirkland (drums). Cotton Crop Blues; It's a Mean Old World; I Can't Quit You, Baby; So Mean to Me; and ten others. Vanguard VSD 79217 $3.79, VRS 9217 $4.79.

© © CHICAGO/THE BLUES/TODAY, Volume III: Johnny Young's South Side Blues Band: Johnny Young (guitar, mandolin, vocals), Walter Horton (harmonica), Hayes Ware (bass), Elka Edmunds (drums); The Johnny Shines Blues Band: Johnny Shines (guitar, vocals), Walter Horton (harmonica), Floyd Jones (bass), Frank Kirkland (drums); Big Walter Horton's Blues Harp Band with Memphis Charlie: Walter Horton and Memphis Charlie Musselwhite (harmonicas), Johnny Shines (guitar), Floyd Jones (bass), Frank Kirkland (drums). Kid Man Blues; Black Spider Blues; If I Get Lucky, Mr. Brownsville; and nine others. Vanguard VSD 79218 $5.79, VRS 9218 $4.79.

Performance: Full-bodied, earthy Recording; Excellent
Stereo Quality: First-rate

Everyone involved in this blues project deserves the gratitude of those who find authentic blues a source of emotional replenishment. Blues historian Sam Charters has provided here a bristling cross-section of the taverns on Chicago's south and west sides. Some of the older performers remain directly linked to their country origins in Mississippi and elsewhere in the South. The younger players, though more immersed in city rhythms and textures, nonetheless also reveal a visceral bond with the venerable lineage of Negro blues.

Among the performers heard in the first volume. Junior Wells, a disciple of Sonny Boy Williamson and others, is a broodingly powerful story-teller. If you have any doubt that the blues can still comment acutely on contemporary affairs, listen to his achingly Viertong Blues. Complementing Wells is the lean, baring guitar of Buddy Guy. Also rawly persuasive is J. B. Hutto. Otis Spann, the pianist with Muddy Waters, is a master of bedrock blues piano and sings with utterly convincing passion.

Jimmy Cotton, a stunningly dramatic harmonica player and an intimate singer, leads off the second volume. He, too, is a Muddy Waters sideman, but his power is fully revealed on these tracks for here he is in complete charge. Though he and Otis Rush are only in their early thirties, both reflect a long span of collective Afro-American experience.

The third and final volume begins explosively with the driving, singing and fierce mandolin playing of Johnny Young. The excitement is sustained by the virile thrust of fifty-one-year-old Johnny Shines. Walter Horton, who underlines the urgent, speech-like textures of which the blues harmonica is capable in his performances with Young and Shines, also has a track—Rockin' My Bongie—in which he takes sizzling command.

Sam Charters' notes give us a feeling of the places in which these men play, their audiences, their histories, and their commitment to the blues as the continuation of a distinctive and proud culture. N. H.
and exuberant as she toots a bugle and belts out "It's Today." Valiantly she ascends the moon Beatrice Lillie used to swing from to join Beatrice Arthur (as her actress friend Vera Charles) in a take-off on a Shubert operetta production number called The Man in the Moon, starts Christmas a month early in We Need a Little Christmas and transforms a stuffy Westchester engagement party into a sizzling revel in That's How Young I Feel.

Miss Lansbury has brilliant support, not only from Miss Arthur as the vain Vera, but from Jane Connell as the Agnes Gooch. Mame teaches how to Live. Frankie Michaels as the least objectionable child actor of the age, and Charles Brasso as Beauregard Burnside who converts our resiliently convertible heroine into a Southern aristocrat—and later falls off an Alp. Each is up at bat at least once on this disc and scores a hit.

An excellent album to wear out replaying while awaiting those hard-to-get tickets from your local scalper.

P. K.

COLLECTIONS

RECORDING OF SPECIAL MERIT


Performance: Spruce
Recording: Excellent
Stereo Quality: Wraparound

If you like your Gilbert and Sullivan at close quarters and in short doses, here is the album for you. Phase 4 fidelity pitches you right aboard the H.M.S. Pinafore, surrounds you on all sides with the gentlemen of Tintipu in The Mikado, and may even dislodge a vase or two from your shelves when the pirate band comes stomping on stage roaring out With Catslike Tread. The Mikado, The Pirates of Penzance to the tune that later became Hail, Hail, The Gang's All Here. There's even a song from Ruddigore—the sad, touching one about the romance between the oak tree and the flower.

The D'Oyly Carte Company has trotted out its crispest contemporary solists for this occasion, giving the engineers some sounds of substance to work on as Philip Potter's pure golden tenor pours out A Wandering Minstrel or Valerie Masterson joins with Pauline Wales and Peggy Ann Jones to present three little more-than-life little maids whose schoolgirl titters have never been coy. I was particularly pleased with John Reed. His portrayals of Gilbert's finest caricatures—the model major generals and admirals and lord high executioners—have grown immensely since his callow first efforts in the full-length London recordings. Alan Styler as Captain Corcoran greeting his crew on the deck of the Pinafore and Donald Adams as the Emperor of Japan meting out punishments to fit the crime are impeccable, as always. I was vexed only by Sir Malcolm Sargent's occasional tendency to drag the feet of his forces in passages where greater velocity would seem in order, but the rest seemed right as rain in style and spirit.

(Continued on next page)
All new from Sansui!
TR-700 Solid-State FM Multiplex Stereo Tuner Amplifier

Count on Sansui to come up with a winner like this. The new model TR-700, featuring perfect sound reproduction, all transistorized, full 50-watt output.

And at a price that you will applaud. It's really a Sansui natural though. For Sansui pioneered stereo development in Japan more than two decades ago. And Sansui's dedicated engineers and craftsmen — now 1,000 strong — have your best interests at heart.

That's why three out of four Sansui stereos are destined for customers overseas.

Sansui
SANSUI ELECTRIC COMPANY, LIMITED
450 Iizumi-cho, Sugarnami-ku, Tokyo, Japan
HOUSE OF STEIN ELECTRONIC DISTRIBUTORS: 949 Granville, St. Vancouer, 2. B.C.

CIRCLE NO. 45 ON READER SERVICE CARD

© KURT WEILL: The Two Worlds of Kurt Weill. Orchestra, Morton Gould cond. Mack the Knife; Speak Low; Marie Galante; and nine others. RCA VICTOR LSC 2863 $5.79, LM 2863* $4.79.

© KURT WEILL: Mack the Knife and other Berlin Theatrical Songs. Sextet of the Orchestra U.S.A.: Eric Dolphy, Jerome Richardson (alto sax and bass clarinet), Nick Travis (trumpet), Thad Jones (cornet), Mike Zwerin (bass trumpet), others. Mack the Knife; Bilbao Song; Pirate Jenny; and four others. RCA VICTOR LSP 3498 $4.79, LPM 3498* $3.79.

Performance: Both interesting Recording: Gould very good, Sextet good Stereo Quality: Both good

Mike Zwerin, who arranged and conducted the music for the second album listed above, says in a liner note quotation: "These arrangements are not 'jazz versions' of Kurt Weill songs. They were full of jazz to begin with, and all I had to do was make them Sixties' jazz instead of Thirties' jazz. In some cases the harmonies are exactly as in the original scores." Morton Gould says in his liner notes for the first album: "I have generally retained Weill's original harmonizations, for along with his melodic pattern he had a very definite harmonic style. That he did. It is one of the things I don't care for in Weill's music.

We are in an age that adores realism, but equates it simply with ugliness. The world is ugly, right? Art should be ugly to reflect it. We who think that art also has a function to inspire are accused of liking only "pretty" things. Weill's music, coupled with the lyrics of Bertolt Brecht, was acid in character and intent. It is haunting, Haunting as hell. It is utterly distinctive. But it was ugly and I don't like it, and I am suspicious of those people who have made a mystique of it.

Not that I think either Gould or Zwerin is a cultist about Weill. I think they both like his music, without cant or mystique, and each in his way has been exceptionally faithful to it.

Gould uses a large orchestra, but he has used it in different ways. One side of the disc, devoted to Weill's Berlin period, is harsh; the other, devoted to Weill's American period, is less so. The arrangement of Speak Low, if memory serves me, is the same one (perhaps modified a little) that Gould wrote for an album of 12-inch 78's called "After Dark" some twenty-odd years ago. It is still very listenable, indicating how far ahead of his time Gould was in his approach to the orchestration of popular music.

In summoning the spirit of Weill's Berlin harshness, Zwerin had a powerful tool in the bass clarinet playing of the late Eric Dolphy, who died in Paris just a year ago. Dolphy was, to me, the one member of the New Thing school of jazz who was genuinely musical! Zwerin himself, who used to be a trombone player with Maynard Ferguson, gave it up when he inherited the presidency of Inland Steel, and lately has been delving in music as an exceptionally rational and informed jazz critic, plays bass trumpet here. Zwerin's playing sounds much like Bob Brookmeyer's valve trombone work, and that's no small compliment.

I wish they'd tuned John Lewis' piano before the record date.

© JOHN COLTRANE: Ascension. John Coltrane, Pharoah Sanders, Archie Shepp (tenor saxophones), Marion Brown, John Tchicai (alto saxophones), Freddie Hubbard, Dewey Johnson (trumpets), Barry Potter (trombone), Jimmy Garrison (bass), McCoy Tyner (piano); Elvin Jones (drums). Ascension, Part I and II. Impulse AS 95 $5.98, A 95* $4.98.

Performance: Intense Recording: Excellent Stereo Quality: Very good

John Coltrane is becoming increasingly interested in the manipulation of textures as the primary shaping force in his music. As Archie Shepp, quoted in the notes, says: "The idea is similar to what the sitar players do, in that it creates various surfaces of color which push into each other, creating tensions and counter tensions and various fields of energy." Logically, therefore, Coltrane has been enlarging his regular group in order to have more textural possibilities with which to work. Simultaneously, he concentrates on a group concept of playing. There are still solos—often long ones—but in this album they are subordinate to the group's movement-by-colors. In "Ascension," he has achieved his most absorbing success in this style. The record begins at a high level of intensity and continues to climb as horns play against each other in ensemble passages and as soloists engage in fierce dialogues with the rhythm section. The beat advice for a listener who finds it difficult to discover a coherent direction to hang onto is that given by Shepp: "There is unity, but it is a unity of sounds and textures rather than like an A-B-A approach." Quite apart from analysis, the performance is of extraordinary emotional force. As altoist Marion Brown recalls, "We did two takes, and they both had that kind of thing in them that makes people scream. The people who were in the studio were screaming."

RECORDING OF SPECIAL MERIT

© DUKE ELLINGTON: The Ellington Era, Volume Two. Duke Ellington (piano), Bubber Miley (trumpet), Joe Nanton (trombone), Johnny Hodges (alto saxophone), Barney Bigard (clarinet), Wellman Braud (bass), Sonny Greer (drums), and others. Trudell's, Showboat Shuffle, Uptown Downbeat, Buffalo Flat, Weezy, Little Posey, Move Over, and forty others. COLUMBIA C3L 39 three discs $11.39.

Performance: Often superb Recording: More than acceptable

Frank Driggs, of Columbia, makes historical album sets that are scholarly, careful, beautifully packaged, and most of all acceptable. Here we have forty-seven examples of our most important jazz musician (and — caution
The duke Deac-bird Ellington, a phrase I should qualify by saying that I find the lauded Victor period a concession to big band orthodoxy, and his free-lance Who-Will-Buy-My-Flowers? period only intermittently gorgeous. But here you get Lonnie Johnson’s guitar, Ivie Anderson’s Lee-Wiley-type voice, an outside arrangement by Benny Carter (1932), an eighteen (at least) version of Creole Love Call as illuminating as any of the others, a lovely extended effort from 1933 called Remembering in Tempo that was apparently considered controversial in its day, a version of Azure that once again reminds you that the sound is what has always been the unique Ellington contribution, a few reissues from a deleted LP called “Blue Light,” an astonishing two-trumpet chorus on Tootin’ Through the Roof, an obscure Serenade to Sweden that any composer would be proud to claim—and many more.

The de rigueur booklet is less suspicious. Drummer Sonny Greer sounds like Johann Ives), and if it is not the declarative spirit and extraordinary youthfulness of this magisterial pianist. The French engineer, incidentally, ought to have been credited on this jacket for his fine job. Keep this one on hand for times when your spirits need brightening.

**WooDy HERMAN:** Woody’s Winners. Woody Herman (clarinet, alto saxophone); Gary Klein, Salvatore Nistico, Andy McGhee (tenor saxophones); Tom Anastos (baritone saxophone); Gerald Lamy, Dusko Goykovich, Bob Shew, Don Rader, Bill Chase (trumpets); Henry Southall, Frank Tesinsky, Donald Doane (trombones); Nat Pierce (piano), Anthony Leonardi (bass); Ronnie Zito (drums). Twenty-three Red; Poor Butterfly; Greasy Suck Blues; Woody’s Whistle; and four others. COLUMBIA CS 9236 $4.79. CL 2436 $3.79.

**Performance:** Clean and bright

**Recording:** Excellent

**Stereo Quality:** Good

A good many people believe that Woody Herman has one of the major big jazz bands—this, without a major soloist at the moment and with no major arranger since Ralph Burns left nearly twenty years ago. I suspect, therefore, that the opinion is held by those who prefer Basie to Ellington, those whose delight in big bands comes from the toys of power and precision. Herman’s band possesses these two qualities in abundance; it is clean and the arrangements are well executed.

Herman’s is still, really, the band that plays the blues. Woody’s Whistle is relaxed and easy, and there is a fine extended Nat Pierce arrangement of Horace Silver’s Opus de Funk. This last contains the one striking solo on the album—by Dusko Goykovich on muted trumpet.

There is also an arrangement of North-west Passage by Nat Pierce that I find more enjoyable than the famous original, and a Poor Butterfly by Don Rader that is dangerously close to parody. The album was excellently recorded during sessions at Basin Street West, and, as might be expected where power is the point, the stereo version is to be preferred.

**RECORDING OF SPECIAL MERIT**

**EARL HINES:** Paris Session, Earl Hines (piano) I Cover the Waterfront; Second Balcony Jump; Sixty Five Faubourg; Sweet Sue; and six others. DUCRETET-THOMSON 300 V 140 $5.98.

**Performance:** Brilliant

**Recording:** Excellent

Recorded in Paris during a 1965 Earl Hines tour of Europe, this is one of that irresistible virtuoso’s major albums. I have always preferred to hear Hines as an unaccompanied soloist rather than in small combos because he is an orchestra himself. I mean that there is always so much going on in his playing that the presence of other musicians usually interrupts and dilutes the captivating play of cross-rhythms, spinning harmonies, and continually suspenseful melodic variations. Here in addition to his bold reshaping of standards, Hines also revivifies two songs from his vintage repertoire—Second Balcony Jump and Blue Because of You—that have not been heard often enough in recent years. Throughout, this recital pulses with the overpowering spirit and extraordinary youthfulness of this magisterial pianist. The French engineer, incidentally, ought to have been credited on this jacket for his fine job. Keep this one on hand for times when your spirits need brightening.

**ROGER KELLAWAY:** The Roger Kellaway Trio. Roger Kellaway (piano), Russell George (bass), Dave Bailey (drums). Can’t You See It; Organ Morgan; (Continued on page 103)
I've been arguing for some time that the other people involved in making a record album are as fit subjects for criticism as the star whose name appears on the cover. The faults (and virtues) of the album usually must be shared by the a&r man, the arranger, and at times even the engineer.

Most of the faults of Verve's new "Bill Evans Trio with Symphony Orchestra" belong in the lap of an organization whose name doesn't appear anywhere in the liner notes on the cover—the American Federation of Musicians. The AFM imposes on the recording industry of this country a number of featherbedding regulations that detract from the quality of our music, particularly popular music. This album was made wrong; it was made wrong because two AFM rulings rendered it virtually impossible to make it any way but the way it was.

Because of the nature of the task facing Evans and arranger-conductor Claus Ogerman, the album should have (a) been carefully rehearsed in advance, or (b) been tracked. (Tracking is the process of recording an orchestra first and adding the soloist later.)

Both practices are effectively blocked by the AFM. Incredibly, the union does not set a rehearsal scale for this sort of "pick-up" orchestra. Thus, a record company must pay full recording scale, that is, $64 per man for a three-hour session, to rehearse. Therefore, nobody ever rehearses the music for a pop album: the orchestra is assembled in the studio, the arrangements are distributed to the players, and hasty run-downs are done on the date. Each tune is recorded as soon as the music is assembled in the studio, the arrangement being done on the spot, the voice going on a separate track. There is virtually nothing the union can do to stop the widespread practice of surreptitiously erasing the voice track and re-recording it later. So the union has set up a sort of 'sweetener' system—the musicians on the date must be paid overtime if you want to track the music.

Illicit tracking, however, would have been hard to do in the case of this album; not that I think Creed Taylor, who produced it, would have done it anyway. There were simply too many men on the dates for this album an orchestra that could get pretty expensive with forty musicians. So Taylor tried to do the album "live"—with Evans and his trio and a chamber symphony orchestra gathered in Rudy Van Gelder's New Jersey studio. The orchestra had been assembled by Harry Lookofsky. A fine violinist, Lookofsky is also a prominent contractor. The orchestra had been assembled by Harry Lookofsky. A fine violinist, Lookofsky is also a prominent contractor. The union specifies that there must be a contractor on every date. Whether Lookofsky was angry at Creed Taylor or at Claus Ogerman, or whatever, he assembled for the dates for this album an orchestra that was something less than satisfactory. Ogerman wanted to use a soprano voice in unison with a flute on one track. The singer Lookofsky hired was so bad that she had to be tuned out. Everyone was afraid to tell her how bad she was, so instead, Rudy Van Gelder simply turned off her microphone. She sang away, thinking she was being recorded.

The woodwind players Lookofsky assembled were not to be believed. If you listen to the track My Bells on this album, you'll hear some ear-twistingly out-of-tune woodwind playing. Alas, too many of the musicians on these dates were the kind of studio classical musicians who have long since taken a greater interest in the stock market than in music. They needed a martinet conductor, someone with a violent temper and an utter lack of fear, a man capable of calling every musician on the dates a lazy, loafing, good-for-nothing time waster. In other words, a Fritz Reiner. Ogerman, who is a fine arranger, is deficient as a conductor by virtue of being too much a gentleman.

It took the musicians of this orchestra much too long to master the arrangements. They needed endless retakes. As a result, Evans was never given room to "stretch out," as musicians term it—to settle into the improvisations. He was boxed in by the stiff arrangements, with a soloist who, if you can't hear the voice leading, you can't grasp what it is he does and why he is so widely imitated. It may be that, to spare him the insensitive evaluations of some jazz critics, we should stop calling him a jazz musician altogether.

It is a tribute to Evans' curious genius that this album came off at all. Despite the hours frittered away on the orchestra, he came up with some tracks that are breathtaking. Probably the most beautiful is a track taken from Scriabin's Prelude No. 15 in D-flat. The album is good, very good. But it could—and should—have been more magnificent. I understand it is selling. This would seem to augur well for an encore project, and I would urge that Creed Taylor fly Evans and his rhythm section to England and record there, thereby circumventing the AFM and its anti-aesthetic policies.

© @ BILL EVANS: BILL EVANS Trio with Symphony Orchestra. Bill Evans (piano, Grady Tate, 4th and Daytroters (bass), orchestra, Claus Ogerman cond. Granados; Prelude; My Bells; and five others. VERVE V 68640 $5.79, V 8640 $4.79.
I first became aware of Roger Kellaway when he was a pianist for the Bob Brookmeyer-Clark Terry Quintet. I marveled at his technique, his stylistic variety, his apparent joy in playing, and his ability to do just what was required in any situation, while bringing originality to whatever specific problems were involved. So I wanted to hear him on his own record, and here it is. I am only slightly disappointed, but that is my fault. I probably hoped for a bit too much, and this is far above most trio albums by young pianists.

To dispense, first of all, with Bratt, a prepared-piano piece which annotator Dom Gerulli devotes much space to: it is a good, enjoyable piece, most notable for the empathetic work of bassist Russell George (who also distinguishes himself when he works with Pee Wee Russell). But I can't consider it a big deal when jazzmen use techniques that composers of other kinds of music have had for a long time. I am more impressed with Kellaway's lovely use of out-of-the-way tunes (Ballad of The Sad Young Men and the exquisite No More from Golden Boy), with his ability to make Sweet andLovely completely his own after a broad-daylight theft of The Lonesome Monk's arrangement, and most particularly with his extraordinary blues playing on Sigma: O.N. He recently gave a concert, which I did not attend, but which was reported to be half excellent jazz, half blues. I love his work so much I hope he doesn't take his work too seriously. I recommend this album highly.

Yusef Lateef (tenor saxophone, flute, bamboo flute), George Arvanitas (piano), Reggie Workman (bass), James Black (drums), Bamboo Flute Blues; Semiocto; Medula Sonata; I'll Always Be in Love with You; and four others. IMPULSE AS 92 $4.98.

Performance: Sometimes remarkable
Recording: Excellent
Stereo Quality: Good

Each Yusef Lateef album contains something unexpected. It is not that he cultivates novelty, but rather that he is one of those men who are involved in the discovery of musical possibilities—in the street as well as in a studio—never stops. In this intriguing, diversified collection, he examines the tensions of intersecting textures (Psychicemotus); the use of shifting harmonies as a means toward deepening intensity (Semiocto), and what I would call "stretched time" (Medula Sonata). In that last piece, a slow melodic line over a busy rhythm creates a deepening intensity (Semiocto); and what an enjoyable piece is that. From $49.95* to $395.00* *Slightly higher in South and West

Stereo Quality: Good
Performance: Intricous
Recording: Good

Although I would occasionally prefer more complexity in his written ensemble passages, Randy Weston is certainly a jazz composer of melodic sweep and distinctive personal integrity. He does not strain to be whatever is currently "hip," but rather creates original statements from a basic vocabulary. At any rate, RCA Victor, for whom Hirt records, has sent Spitalera down to Nashville and put him to work with the same computer that turns out tunes and arrangements for records by Hirt and Fountain. Someone should have taught the computer the proper chords for The Gypsy and kept it from making those element noises on Ebb Tide.

Mr. Spitalera goes through a program of those cute Nashville tunes with cute Nashville titles (at least I think Hey! Short Legs is a cute title) with what is generally called the creole clarinet sound and an absolute minimum of improvisation. Mr. Hirt wrote the liner notes and, as I said, employs Mr. Spitalera. I wouldn't do either.

Recording: Very good
Performance: Vibrant
Stereo Quality: Good

Up-grade your sound!

Whatever your receiver or amplifier is capable of doing, EMI loudspeakers have a unique way of making it sound better. Perhaps it's the ease with which EMI loudspeakers project sound. So smooth and natural, it seems to float on the air in all its concert hall glory. Filling the room.

Or perhaps, it's the deep bass, the incomparable realistic midrange and the full, silky highs.

Or it could be the subtle detailing of their transient perfect response that catches you unawares.

So, for better sound from your receiver or amplifier, come on up to EMI loudspeakers.

There's an EMI loudspeaker to meet any requirement and budget. From $49.95* to $395.00*.

Scope Electronics Corporation
470 Park Avenue South
New York, New York 10016
Also available in Canada.
also sum up the way he writes. Bakton is at P.O. Box 249, Cooper Station, New York, N.Y. 10003.

N. H.

JAZZ COLLECTIONS

- THE ASCH RECORDINGS, 1939-1947, VOLUME 1: Blues, Gospel, and Jazz. Leadbelly, Champion Jack Dupree, Josh White, Lonnie Johnson, and Brownie McGhee (guitar, vocals); Sonny Terry (harmonica, vocals), The Gospel Keys (vocals); Sister Ernestine Washington (vocals), Bunk Johnson's band; jazz groups headed by Muggsy Spanier, Pee Wee Russell. Omer Simeon, James P. Johnson, Joe Sullivan, with Sidney Bechet. Art Tatum, Coleman Hawkins, Mary Lou Williams; Jazz at the Philharmonic (except: Top Evil to Cry; Lonesome Train; I'd Climb the Highest Mountain; Defense Blues; Moses Smote the Water, and eighteen others. ASCH AA 1/2 two discs boxed $13.58.

Performance: Uneven
Recording: Fair to good

Before starting the Folkways label in 1948, Moses Asch had indicated in his Asch and Disc recordings the remarkable range of his musical interests. Unquestionably he has been—and continues to be—a singularly important catalyst making us aware of how diversely stimulating are the musical cultures of this country and of the world. It's unfortunate that this retrospective collection of Asch recordings from 1939 to 1947 was not prepared and annotated with the care and sensitivity befitting Asch's early achievements. The fault is apparently that of the compiler and editor, Sam Charters (who is usually knowledgeable and conscientious in this kind of project).

To begin with, neither recording dates nor complete personnel are given for the tracks. Second, the quality of the music varies considerably. The first disc is generally substantial—Leadbelly, Champion Jack Dupree, Lonnie Johnson, and Sonny Terry are challenging blues hard. Also on the first disc, gospel music is strongly represented by the kinetic intensity of the Gospel Keys and the craggy harmonies of the Thrasher Wonders. It's also good to have again the strutting spirituals of Sister Ernestine Washington with Bunk Johnson's New Orleans band. But the second disc, which concentrates on jazz, is too often disappointing. Certainly there are more roaringly eloquent Sidney Bechet performances in the Asch archives than the one here, and there must be far less scratchy Omer Simeon originals available. The Muggsy Spanier and especially the Pee Wee Russell selections stand up, but the performances by Art Tatum. James P. Johnson, Coleman Hawkins, Stuff Smith, and Mary Lou Williams are inferior to others from which Charters could have chosen. And the final track, a loud but empty attempt by Les Paul to play jazz, hardly represents the best of the initial Jazz at the Philharmonic recordings.

Considering the inadequate notes and the musical thinness of much of the second disc, this look backward to Moses Asch's beginnings as a record producer is a blurred one, and too much to ask for it. Those first Asch records did make up a distinguished catalog, but full evidence for that achievement is not here.

N. H.

SPOKEN WORD

- PADRAIC COLUM: Reads from His Irish Tales and Poems, FOLKWAYS FL 9737 $5.79.

Performance: Endearingly Gaelic
Recording: Excellent

Lee J. Cobb

A commanding portrait of Willy Loman

The charm of Padraic Colum's verses and tales is virtually irresistible, all the more so when read with his most engaging of brogues. At eight-five he still has a voice that is resilient, alert, and utterly musical. For this reading Mr. Colum has chosen from his sixty-four published volumes a fragment, half love and half traveologue, about Blarney Castle and a story about the Earl of Kildare, who possessed remarkable powers of wizardry but wasn't clever enough to prevent himself from being changed into a horseman who haunts the county every Midsummer Eve. The reverse side is devoted to Mr. Colum's poems—simple, endearing lyrics about birds, animals, a honey-seller, and the beauty of the Irish countryside on a fair day in spring.

P. K.


Performance: Subdued
Recording: First-rate

These are new poems Columbia invited Mr. Graves to record, and it is too bad that there is no text sheet with the disc: such subtle exercises in language almost require that the eye consult the page while the ear listens, but as far as I know, these pieces are published nowhere. They are verses in praise of women and of love, imbued with a lyricism that is entirely free from all the fads that have come and gone in our time, yet wry and immediate with a modernity of their own.

Graves has reminded our century of the conception of the female goddess who guards all life—the woman who raises us, loves us, and ultimately buries us. In these poems Graves (now in his sixties) is specifically concerned with a young woman loved by an older man. It is an unsentimentalized relationship sung about quite sweetly, yet with a cool objectivity that is almost spine-chilling at times, especially when read in the "level, natural voice" he prescribes for all poetry-reading—wise, British, restrained, and, at its worst, just a little dull.

Although he has led no revolutions and added no new techniques to the poet's stock, Graves, working within traditional forms, has almost reached the zenith of greatness and in the performance captured in this stereo version the play tears at the heart again as it did fifteen years ago. From the moment of the author's compelling introduction to the performance, as he describes how the play grew out of "images of futility," it is hard to keep a firm hold to the final requiem.

The central character, Willy Loman, is eternal—a Job who doesn't realize that what he is sitting on is a dunghelp. He recognizes that his car and his washing machine will wear out just in time for the final payment, but cannot acknowledge the built-in obsolescence of his own mortal nature. Wistful, exhausted, envious of the wrong men for the wrong reasons, he lies to himself and to his wife, who knows the truth but refuses to face it—that Willy is washed up, too old to go on as a salesman, that their older son Biff is a self-acknowledged failure and their younger son Happy a self-indulgent nonentity. Yet Willy must hope, and in the hour of his breakdown he consorts with ghosts and the sites of old illusions. The play moves in and out of the past through superb transitions of the greatest naturalness. When Willy dies, because he is worth more money dead than alive, Charley recites at his grave those famous lines, "For there is the summer there is no rock bottom to life.... He's the man way out there in the blue riding on a smile and a shoeshine. And when they start not smiling
back—that's an earthquake. And then you get yourself a couple of spots on your hat, and you're finished. Nobody dares blame this man." And nobody dares deny that Willy is still up there, either, riding the American sky, and fated for the same old fall.

The play has been recorded before, with Thomas Mitchell as Willy, but new techniques leave the old Decca version trailing. And not only is Lee J. Cobb more firmly in command than Mr. Mitchell of every facet of Willy's mercurial nature and the weariness that strangles his spirit, but Mildred Dunnock projects even more movingly than she did on the old recording the helpless loyalty of the wife who knows only that "attention must be paid to this man." In their early scenes, Michael Tolon as Biff and Gene Williams as Happy are somewhat tentative and stagey, not as strong as Arthur Kennedy and Cameron Mitchell of the Decca original-cast album, but they soon get firmer grasps on their parts and are magnificent in the moments that count as the tragedy sweeps to its chill end. The supporting players are unusually well cast: down to raspy-voiced Tom Pedi as an advice-giving waiter, Mr. Grosbard has directed with an ear cocked to the full potential of stereo in enlarging the sense of presence and dimension, and the original Alex North score helps to create a new song by Mark Bucci that is about as subtle as a clothing salesman's pitch on Delancy Street, yet it too comes off, like the rest of the program, as quite pleasant. P. K.

RECORDING OF SPECIAL MERIT


Performance: Level
Recording: Good

Marianne Moore is no stranger to the recording studio. That flat, common-sensical, schoolmarmish voice with its overtones of clothespin-nose and Missouri schoolmarmishness has turned up in many a recording anthology of modern verse, as well as on several discs of her own poetry, notably a collection on the Caedmon label (Caedmon 1025). Here she is represented by verses written from the middle Thirties to 1959. To enter Miss Moore's voice is always worth hearing.

RECORDINGS OF SPECIAL MERIT


Performance: Charming
Recording: Good
Stereo Quality: Fine

These odd and shadowy sketches, written to be performed in private rooms before small groups, are never going to start box-office stampedes but they will have appeal for a special audience. Music and poetic speech are interwoven in the Japanese manner Yeats admired to provide a mystical atmosphere for the dramatization of tales at once very simple and very subtle. At the Hawk's Well is a sentimental piece about an Irish hero's quest for immortality through imbibing the waters of a miraculous well. In The Dreaming of the Bones a youthful patriot is confronted by the spirits of ancient tinators. Both of these were plays written before 1920. The Cat and the Moon, a parable about a blind man, a lame man, and a saint, and Resurrection, a look at Christ's rising through the eyes of a Greek, a Syrian, and a Hebrew of the period, stem from Yeats' later years. They are more sharply focused, and anti-romantic, as well as Gerhard Victory's music (it is meant to be danced to as well as sung) weaves a fine frame for the spoken passages, which, mercifully, are not declaimed or intoned in the manner of which their author was incurably fond, but acted with suppleness and straightforward Gaelic grace by a well-chosen cast. P. K.
Most tape recorders are toys:

The AMPEX 861 is a musical instrument. And yet, despite its technical perfection, the Ampex is one of the simplest tape recorders in the world to use. It offers uncomplicated straight line threading, versatile 3-speed operation (7½, 3¾, and 1⅞ i.p.s.), and accurate record level VU meters. And, of course, our exclusive dual capstan drive insures constant tape tension for perfect flutter-free recording and playback. Two microphones and two slide-on stereo speakers are included. This neat package proves once again that when you want to record and playback sound beautifully you need something better than a plaything. You need Ampex. Only $299.95—complete.
Emotional involvement in second and fourth movements, and some humor and an ounce or two of charm in the superficiality: my ears, entirely too clinical. Brilliance is by Szell, is conceived in a way that is, to cut in the last movement (allowed by the composer and always performed this way). The Bartok Con.

One cannot help admiring the marvelous interpretation, this recording is a most attractive alternative. In the Chopin F Minor Concerto, Ashkenazy is clearly in his element, reveling in the brassy Janíek Sinfonietta completely idiomatic and successful. The Bartok Con.

Chopin's performance is ultra-slick, with sound to match—yet keeping melodic line and rhythmic contour unbroken throughout. The accompaniments under David Zinman's baton are carefully molded, and the recorded sound is full (more so than on the disc version) and excellently balanced. D. H.

Böhm's celebrated performance of this high-powered Strauss opera has been one of my favorites ever since it was issued in disc form several years ago. The cast is virtually ideal, but most notable is the spectacular singing of Inge Borkh in the title role. On tape, one has the advantage of only one interruption of the music, as against three on records, and since the quality of sound matches the original album very closely (though the bottom range is not quite as solid), the reel can be most warmly recommended. The booklet that accompanies the tape box contains elaborate notes and a synopsis but not the libretto (neither did the disc album—perhaps because of copyright restrictions).

Bach's great D Minor Clavier Concerto. For those who find the harpsichord (the more authentic instrument stylistically) too clatery, this recording is a most attractive alternative. The accompaniments under David Zinman's baton are carefully molded, and the recorded sound is full (more so than on the disc version) and excellently balanced. D. H.

Chopin: Piano Concerto No. 2, in F Minor (see Bach)

One cannot help admiring the marvelous interpretation, this recording is a most attractive alternative. In the Chopin F Minor Concerto, Ashkenazy is clearly in his element, reveling in the brassy Janíek Sinfonietta completely idiomatic and successful. The Bartok Con.

The Elgar "Enigma" Symphony was recorded here in several years ago. The cast is virtually ideal, but most notable is the spectacular singing of Inge Borkh in the title role. On tape, one has the advantage of only one interruption of the music, as against three on records, and since the quality of sound matches the original album very closely (though the bottom range is not quite as solid), the reel can be most warmly recommended. The booklet that accompanies the tape box contains elaborate notes and a synopsis but not the libretto (neither did the disc album—perhaps because of copyright restrictions).

Recordings noted above (my personal preference is the Bernstein version) communicate more of the essential Gershwin vitality and crudeness than Black's effort. D. H.

In the Chopin F Minor Concerto, Ashkenazy is clearly in his element, reveling in the brassy Janíek Sinfonietta completely idiomatic and successful. The Bartok Con.

Chopin: Piano Concerto No. 2, in F Minor (see Bach)

In the Chopin F Minor Concerto, Ashkenazy is clearly in his element, reveling in the brassy Janíek Sinfonietta completely idiomatic and successful. The Bartok Con.

Chopin's performance is ultra-slick, with sound to match—yet keeping melodic line and rhythmic contour unbroken throughout. The accompaniments under David Zinman's baton are carefully molded, and the recorded sound is full (more so than on the disc version) and excellently balanced. D. H.

Böhm's celebrated performance of this high-powered Strauss opera has been one of my favorites ever since it was issued in disc form several years ago. The cast is virtually ideal, but most notable is the spectacular singing of Inge Borkh in the title role. On tape, one has the advantage of only one interruption of the music, as against three on records, and since the quality of sound matches the original album very closely (though the bottom range is not quite as solid), the reel can be most warmly recommended. The booklet that accompanies the tape box contains elaborate notes and a synopsis but not the libretto (neither did the disc album—perhaps because of copyright restrictions).

Recordings noted above (my personal preference is the Bernstein version) communicate more of the essential Gershwin vitality and crudeness than Black's effort. D. H.

The Elgar "Enigma" variations and the Vaughan Williams Eighth Symphony recordings here date back a decade; the "London" Symphony was recorded somewhat later. Bartoli's treatment of Elgar's piece here is tauter and more convincing in dramatic emphasis than his version recently released on Angel 3¼ ips tape. The two

Explanation of symbols:
- = stereophonic recording
- = monophonic recording

Reviewed by MORGAN AMES • DAVID HALL • IGOR KIPNIS
Coming to your hi-fi dealer soon following its spectacular West Coast premiere

the all-new, feature-packed

MIRACORD

50H

the finest automatic turntable ever produced

Use this coupon for details:

Benjamin Electronic Sound Corp. 40 Smith St., Farmingdale, N.Y. 11736
Send complete details about your new Miracord 50H. Also notify me when dealers near me receive first deliveries.

Name ____________________________
Address __________________________
City ______________________________
State _______ Zip __________

CIRCLE NO. 6 ON READER SERVICE CARD 108

Vaughan Williams symphonies appear on four-track tape for the first time. In the "London" Symphony, Sir John brings the utmost in poetic imagination and dramatic eloquence to bear on this dawn-to-dawn tonal portrait of a great city. The much later Eighth Symphony is by turns poetic, ironic, and experimental, comparable to the last works of Verdi. This symphony is dedicated to Barbierioli and, as might be expected, he and his Hallé players give it everything it demands.

Unlike many of the 31/2 ips tapes that I have heard of late, this one reveals no attempt on the part of Vanguard's (or Ampex's) engineers to create a souped-up sound by exaggerated mid-range equalization and overloaded volume levels. The result is a tape that, if not as brilliant as some, is at least totally true to the musical balances.

All told, this is one 31/2 ips tape that can be recommended without reservation, not only for its beautiful and moving musical content, but also for its honest recorded sound.

D. H.

COLLECTIONS

© THE ART OF EUGENE ORMANDY.
Performance: Smooth and vigorous
Recording: Variable
Stereo Quality: Good enough
Speed and Playing Time: 31/4 ips; 84' 26"

The Beethoven Eighth and Romeo and Juliet performances are new, but the balance of the program here is extracted from earlier recordings. While every one of these readings is smooth, beautifully controlled in dynamics and rhythm, and dazzling in orchestral finesse, none displays the "art of Eugene Ormandy" at its highest pitch of eloquence, intensity, and verve. (Such a tape would have to include the Offa Carmina Burana, the Richard Strauss Ein Heldenleben, and the Shostakovich Fourth and Mahler Tenth Symphonies.) And if the major aim on Columbia's part was to showcase Ormandy's art in terms of its most gorgeous sound, then they should have chosen 71/2 ips tape, for this release (as heard on my playback equipment, at least) suffers from many instances of tape overload and resultant distortion. The climax of the first movement of the Beethoven and the drum-cymbal transient peaks in Romeo and Juliet and La Valse are instances in point. I notice, too, in the Beethoven and Tchaikovsky, a growing tendency on the part of Columbia's production staff to exaggerate stereo separation of the various orchestral elements—brass and strings, violins and string basses.

I salute Mr. Ormandy on the occasion of his thirtieth anniversary as conductor of the Philadelphia Orchestra, but I don't feel that this tape package does either his art or his orchestra full justice.

D. H.

RECORDING OF SPECIAL MERIT


If you enjoy Russian Orthodox choral music, you will surely like this collection, both for the varied repertoire and for the wonderfully polished singing. Here are excellent examples of the characteristic basso profundo, the carefully worked-out effects of sliding pitch, the white countertenor-like high voices, and the combination of voices and bells. The tape is beautifully recorded, although not quite as full in the bass range as the corresponding disc. The whole endeavor has only one fault: a tendency for the music of all the periods represented to sound like late-nineteenth-century Russian choral music. No texts are provided.

ENTERTAINMENT

Performance: Deadening
Recording: All right
Stereo Quality: All right
Speed and Playing Time: 3 1/4 ips; 45 3/11"

The psychology of rhythm-and-blues is known to many of its promoters—those who make their living handling the product. One such person recently explained to me the "drone principle": the performer operates at a steady monotone, rhythmically and tonally, thereby nulling the impression-

HIFI/STEREO REVIEW
able—usually young—listener into a kind of trance. At that point, it's relatively easy to persuade him that he's enjoying himself and the show. This is a working formula, not an after-the-fact theory.

James Brown operates on the drone principle. Music is a shell through which he sells organized stupidity. Apparently the low-level faculties of a huge number of people respond to this crude form of hypnotism. For even remotely sensitive people, however, this album is a 1966 version of the ancient Chinese water torture. Almost every tuneless tune is played slowly, throbbing like a sore thumb. In "Oh Baby Don't You Weep," a single cliché blues figure is repeated for nearly seven incredibly unrelied minutes.

It's true that James Brown recently filled Madison Square Garden. Though there's no singing on this album, in performance he shriek-sings himself into a fit on the floor, after which he is helped to his feet by other members of his troupe. This is Principle Number Two, called "programmed hysteria," by which one can achieve notoriety and make enormous sums of money. I will live with this fact, but I won't be intimidated by it into thinking all this is anything but what it is: exhausting ugliness.

Besides being the most grotesque bore in the business today, James Brown is a lousy organist.

RECORDING OF SPECIAL MERIT

© THE CLANCY BROTHERS AND TOMMY MAKEM: Isn't It Grand Boys.
Tommy Makem, Clancy Brothers (vocals, rhythm accompaniment). Nancy Whisky; Eileen Aroon; Mingulay Boat Song; and eight others. COLUMBIA CQ 819 $7.95.

In his liner notes, Tommy Makem captures the same mood that he and the Clancy Brothers generate throughout this album. He begins: "A long time ago, when I was a lump of a lad running around, I remember many a summer afternoon climbing up into a great ash tree, sitting in the leafy branches near the top singing away to myself ...," and finishes: "If you like the songs, learn them; and if you feel like singing, just throw back your head, open your mouth and fire away. Never let it be said that your mother reared a jibber."

Makem and the three Clancys robustly perform a group of Irish songs. I couldn't catch all the words, but I caught the fun. There's more to their work than humor. These people know what they're doing musically. "The Cobbler," sung unaccompanied, is especially well done.

© DUKE ELLINGTON: The Duke at Tanglewood. Duke Ellington (piano); John Lamb (bass); Louis Bellson (drums); Boston Pops Orchestra, Arthur Fiedler cond. Caravan; Sophisticated Lady; Satin Doll; and nine others. RCA VICTOR FTC 2214 $7.95.

A COMPLETE 20 WATT HI FI STEREO SOUND SYSTEM

FEATURING THE COMPACT MODEL 12 TAPE RECORDER

The magnificent sounds of life are created in this precision solid state portable instrument. Complete with carrying case—$498.00. And if you purchase one before 9/30/66—two dynamic, low impedance microphones are yours, free. The Model 12 has two U.S.-type phone jack low impedance microphone inputs.

Ask your Tandberg dealer to show you the many exclusive features of the Model 12 today.

*Optional equipment—two Model 113 MINI-SPEAKERS at $49.50 each.

The Tandberg Huldra Girl Presents:

© TANDBERG AMERICA, INC.

P.O. BOX 171, 8 THIRD AVENUE
PELHAM, NEW YORK 10803
PERMANENT PROTECTION!

HiFi/Stereo Review

Deluxe Magazine Files that hold a full year's copies!

Designed to keep your periodicals orderly and easy to refer to. These durable files guard against soiling, tearing, wear or displacement of issues. They look, feel like leather and are washable! 23kt. gold lettering and exquisite 2-color binding make them highly-decorative additions to your bookshelves.

Shipped POSTPAID! FULLY GUARANTEED!

Only $3.50 each - 3 for $10, 6 for $19

Order several today—for HiFi/Stereo Review and all your other favorite magazines.

Jesse Jones Box Corp., Dept. HF
Box 5120
Philadelphia 41, Pa.

Please send me: (Other publications shipped in colors available.)

HiFi/Stereo Review

Total amount enclosed $____

name ____________________________

address ____________________________

city state zip-code

PAYMENT MUST ACCOMPANY ORDER

BACK ISSUES AVAILABLE

Use this coupon to order back issues of HiFi/Stereo Review

We have a limited supply of back issues that can be ordered on a first-come, first-served basis. Just fill in the coupon below, enclose your remittance in the amount of $7.50 for each copy ordered.

ZIFF DAVIS SERVICE DIVISION
Dept. 8CHF, 589 Broadway
New York, New York 10012

Please send the following back issues of HiFi/Stereo Review

I am enclosing $____ to cover cost of the magazine, shipping and handling.

Month Year

Month Year

Month Year

Name ____________________________

Address ____________________________

city state zip-code

PAYMENT MUST BE ENCLOSED WITH ORDER

HiFi/Stereo Review
Peggy Lee is so assured in her singing that she works well in any number of pop-music settings. Her technique, like Sinatra’s, can be analyzed to ribbons, yet one still doesn’t know quite how Miss Lee does it.

The two albums on this tape are directed at the commercial market, with stress on the beat. Miss Lee manages to bring much of the material up to her own level, so that even the refined listener can enjoy her version of tunes like You Always Hurt the One You Love.

The arrangements aren’t the best around, but they’re smooth and generally tasteful. Lou Levy’s piano-playing in the “Pass Me By” album is first-rate. The only disappointing selection is Johnny Mandel’s song The Shadow of Your Smile. This is one of the classic American ballads, and had Miss Lee been accompanied by a sensitive orchestral setting instead of Sid Feller’s rutted, semi-rock-and-roll backing, this could have been one of the great all-time pop recordings.

This isn’t the best available Peggy Lee recording, but for my taste, she doesn’t make bad albums.

RECORDING OF SPECIAL MERIT

© ROGER MILLER: Roger Miller. Roger Miller (vocals); unidentified vocal and rhythm accompaniment. Hitch-Hiker; You Don’t Want My Love; Lock, Stock and Teardrops; and seven others. RCA Camden CTR 851 $4.95.

Performance: Unique
Recording: Fair
Stereo Quality: Poor
Speed and Playing Time: 7 1/2 ips; 21' 27”

This album is early Roger Miller, recorded some time ago for RCA Victor (which dropped Miller as a bad risk, just before he hit big, someone at RCA must still be wincing over that short-sightedness). The vocal backgrounds, though not identified, are almost certainly provided by the fine Anita Kerr singers.

Miller’s later albums, on the Smash label, are superior to this set, but there are some gems here. Sorry, Willie tells Willie that his girlfriend is untrue, then adds apologetically: “Sorry, Willie, I didn’t know you didn’t know.” Trouble on the Turnpike is similar to Miller’s hit, Dang Me, in which he employs his happy, off-center phrasing and crackpot falsetto.

Roger Miller is a solace against stupidity. I’m happier for knowing that minds like his are loose in the world. Certainly, anyone who can come up with a song title like The Last Word in Lonesome is Me (not included in this set) has to be protected from harm.

© WES MONTGOMERY: Bumpin’. Wes Montgomery (guitar); Roger Kellaway (piano); Bob Cranshaw (bass); Grady Tate and Helio Millo (drums); orchestra, Don Sebesky cond. A Quiet Thing; Con Alma: Here’s that Rainy Day; Tear it Down; and four others. Verve VSTX 341 $5.95.

Performance: Superb
Recording: Very good
Stereo Quality: Good
Speed and Playing Time: 3 3/4 ips; 31' 11”

Verve producer Creed Taylor has once more given us an album of outstanding quality, this time using the talents of...
Why?
DO THOUSANDS OF HI-FI ENthusiasts Buy From
AUDIO UNLIMITED

It's Obvious!
• LOWEST PRICES
• FAST SERVICE
• FACTORY SEALED UNITS
• FULLY INSURED SHIPMENTS
• PACKAGE DEALS—SAVE MORE
• FRANCHISED DISTRIBUTORS
Write for FREE Listing today

SEND US YOUR LIST FOR OUR AIR MAIL QUOTE TODAY
Visit Our Showroom and Warehouse CLOSED MONDAYS

HI-FI SHOPPERS
BEFORE YOU BUY
GET A RABSONS QUOTE
...YOU'LL BE GLAD YOU DID!
At Rabsons Competitive Prices, Reliability and Personal Service have been bywords for over 61 years
It's so EASY and SAFE to deal with Rabsons
• Up to 36 months to pay on Easy Pay Plan • Central location — as close as your telephone • No Mail Order • Hi-Fi Clinic Service • Fast Air Mail Response on Quotation Requests • Franchised Distributor for Hi-Fi Lines • 61 Years of Business

Hi-Fi/Stereo Review

MORMON TABERNACLE CHOIR:
Bless This House. Mormon Tabernacle Choir, Richard P. Condie director, Philadelphia Orchestra, Eugene Ormandy cond. The Lord's Prayer; Hallelujah Chorus; Listen to the Lamb's; and eight others. COLUMBIA MQ 785 $7.95.

Performance: Sincere Recording: All right Stereo Quality: Echoey Speed and Playing Time: 71/2 ips; 42"

Considering the size of the Mormon Tabernacle Choir (three hundred and seventy-five voices), the amazing thing is that they can perform at all. It's difficult even for small choral groups to keep together rhythmically. With this battalion, it's perfectly possible that the tenors can't see, not to mention hear, the sopranos. Credit must be given to director Richard P. Condie for his success in dealing with this problem. The choir's work is generally orderly, if necessarily thick. This album sticks to religious chestnuts such as Jesu, Joy of Man's Desiring and How Lovely Is Thy Dwelling Place, with nondescript backgrounds by Eugene Ormandy and the Philadelphia Orchestra. What is thought of by many as the Mormon Tabernacle Choir's inspirational quality is probably more a reaction to the group's awesome bulk than to their music.

The recorded sound is a bit mushy and excusably flat on Bum pin', and the violin track here they don't slop over. They're in-

RABSONS
57 ST. INC.
119 West 57th Street, New York, N. Y. 10019
Tel. Area Code 212-247-0070

"Our 61st Year
of Reliability"

THE ROLLING STONES:
Big Hits. Rolling Stones (vocals, rhythm accompaniment). I Can't Get No Satisfaction; Get Off Of My Cloud; Good Times, Bad Times; and nine others. LONDON LPX 70110 $5.95.

Performance: Baby food Recording: Terrible Stereo Quality: Terrible Speed and Playing Time: 33 1/3 ips; 33 1/2"

The Rolling Stones are third in command among British rock-and-roll groups, behind the Beatles and the Dave Clark Five. Originally, they were influenced by blues singers like Muddy Waters, and their better numbers are still in the blues vein (Time is on My Side) But they're doing more and more originals; that's where the money is. Unfortunately, none of them can write. Presumably, fans who can't get in to see the Beatles go to see this group. It's a gyp. The Rolling Stones are musically humorless and aesthetically invisible. They spoon out their pabulum with such seriousness that they induce the greatest of show-business crimes: boredom. In fact, they make deafness seem almost an attractive disability.

The recording quality is the worst I've heard, even of rock-and-roll groups. M. A.

JIMMY ROSELLI:
Saloon Songs. Jimmy Roselli (vocals); orchestra and chorus, George Siravo cond. Caroline in the Morning; Who's Sorry Now?; Down By The Old Mill Stream; and eleven others. UNITED ARTISTS UAX 6451 $5.95.

Performance: Unoriginal Recording: Okay Stereo Quality: Okay Speed and Playing Time: 33 1/3 ips; 33 1/2"
EDITING TIPS

If you’re a serious tapester, you will have to face up sooner or later to the problems of tape editing—to eliminate a singer’s flatted high note, an orator’s cough, a commercial between the acts of an FM opera, or those tense moments of silence when your performers forget what it is they’re supposed to do next. Editing is a vast subject, and I’ll be getting back to various aspects of it periodically, but there are a couple of tips that nobody else ever seems to get around to that I’d like to mention.

- **Using the Pause Lever**: There are two ways of stopping most tape recorders: the STOP button and the PAUSE or EDIT lever. The first (in most machines) stops the tape motion and disengages the recording circuits, while the second control stops the machine without disengaging the recording circuits. You can save a lot of wasted time and tape by using the PAUSE lever whenever something starts happening that you don’t want to record—commercials, an actor’s coughing fit, a performer’s blank spell—and releasing it an instant before you think the performance will resume. I stress the word “before”; you can cut out anything you have recorded, but it is very difficult, if not impossible, to splice in something you didn’t get on the tape in the first place.

You can do this with the STOP button, too, but because the STOP button disengages the recording circuits, you will have to go through a more complicated start-up procedure—pushing two buttons instead of one—and may miss something while you’re doing it. Furthermore, the STOP control is also more likely to leave a click on the tape at the point where the recording circuits were turned off and on again.

Some PAUSE controls are labelled EDIT, and they are often very useful in the more usual “cut-and-splice” kind of editing as well as for a simple stop while recording. In many recorders, the tape lifters hold the tape away from the heads in the STOP mode, but not in PAUSE. Thus, after stopping the tape with the PAUSE lever, you can manually rock the tape slowly back and forth over the heads and hear when you have reached the point at which you want to cut the tape.

- **Not Using the Pause Lever**: When you are recording, it often happens that you can’t tell when whatever it is you’re about to tape will begin. For example, folk singers frequently noodle around for several minutes between numbers, tuning up or trying to decide what to play next—and then modulate abruptly into their next song. In such cases, it is difficult enough to decide where to cut the finished tape so that the song will seem to have a beginning, but it is impossible to anticipate far enough in advance to release the PAUSE lever promptly.

My advice is to record it all rather than to chance missing some of the music. I learned this the hard way, and now I customarily come back from a hootenanny with a good half-hour of recorded tuning-up scattered through several hours of recorded music. The result is that I can always edit out a tight, consistent program, beginnings, endings, and all. And if I ever find an audience that will hold still for about a day’s worth of aimless noodling, I’ve got it made.
COMMERCIAL RATE: For firms or individuals offering commercial products or services. 60¢ per word (including name and address). Minimum order $6.00. Payment must accompany copy except when ads are placed by accredited advertisers at 10%, for 12 months in advance. Frequency discount: 5% for 6 months; 10%, for 12 months in advance.

RECORDS: Pay for individuals with a personal item to buy or sell. 36¢ per word (including name and address). No Minimum! Payment must accompany copy.

GENERAL INFORMATION: First word in all ads set in bold caps at no extra charge. Additional words may be set in bold caps at 10¢ per extra word. All copy subject to publisher's approval. Closing Date: 1st of the 2nd preceding month (for example, March issue closes January 1st). Send order and remittance to: Hal Cymes, HI/FI STEREO REVIEW. One Park Avenue, New York, New York 10016.

HIFI/STEREO REVIEW CLASSIFIED

EQUIPMENT

LOW, low quotes: all components and recorders. HiFi, stereo. Any item.

WRITE for quotation on any Hi Fi components: Sound Reproduction Inc., 34 New St., Newark, N.J. Mitchell 2-0816.


REVIEW. One Park Avenue, New York. New York 10016.

COMMERCIAL RATE: For firms or individuals offering commercial products or services. 60¢ per word, including name and address). Minimum order $6.00. Payment must accompany copy except when ads are placed by accredited advertisers, at 10% for 12 months in advance. Frequency discount: 5% for 6 months, 10% for 12 months in advance.

RECORDS: Pay for individuals with a personal item to buy or sell. 36¢ per word (including name and address). No Minimum! Payment must accompany copy.

HI/FI PROBLEMS solved by "The Hi-Fi Doctor" on ti.


REPAIRS AND SERVICES


Hi-Fi Problems solved by "The Hi-Fi Doctor" on ti.

TAPE AND TAPERS

RENT Stereo Tapes — over 2,500 different—all major labels—free brochure. Stereo Party, 1616 G Terrace Way, Santa Rosa, California.

BEFORE RENTING Stereo Tapes try us. Postpaid both ways—no deposit—immediate delivery. Quality—Dependability—Service—Satisfaction—prevail here. If you’ve been dissatisfied in the past, your initial order will prove this is no idle boast. Free catalog: Gold Coast Tape Library, Box 2262, Palm Village Station, Hialeah, Fla.

TAPE SALE. Brand new, latest models. $1.00 above cost. Arkay Sales, 1028 A Commonwealth Ave., Boston, Mass. 02215.

Tape Recorder Sale. 2400 $2.59; 3600 $3.79. TOWERS, LAFAYETTE HILL, PA. 19444.

STEREO TAPE. Save up to 60% (no membership fees), postpaid anywhere USA. Free 60-page catalog. We discount batteries, recorders, tape accessories. Be aware of slogans "not undersold," as the discount in formation you supply our competitor is usually reported to the factory. SKYXONE, 1776 Columbia Road, Washington, D.C. 20009.

Tape-A-Rack Stereo Tapes—When narrowed down TRIMOR becomes the wide choice—Goodbye to partial satisfaction. Service and Dependability our key—ALL MAJOR LABELS—FREE CATALOG (48 States) —TRIMON Company, P.O. Box 718, Flowering, N.Y. 11352.


EDUCATIONAL Recordings, sound effects. Write Sontague, Box 176, Levittown, N.Y. 11756.

RECORDS

RARE 78's. State Category. Write Record-Lists, P.O. Box 2122, Riverside, Calif.

THE Record Collector Journal—comprehensive, valuable data, varied record mart. Introductory six issues —$1.50. Record Research, 131 Hart, Brooklyn, N.Y.

"Hard To Get!" records—all speeds. Record Exchange, 827 Seventh Avenue, New York, N.Y.

CASH for Unwanted LPs. Reder, 81 Forshay Rd., Monsey, New York.

RARE Record Finder. Write Post Office 95007, Los Angeles, Calif. 90045.

2500 Unusual—hard-to-find war, fiction, sound effects, hobby, party records, free catalogue, Recordings. 300 Charlotte, Brooklyn, N.Y. 10207.

PROTECT Your LPs. Heavy Poly Sleeves $c (Minimum 100). Loudspeaker Systems, Box 322, Kansas, Kansas 99207.

FREE Catalog Electronic parts, tubes. Wholesale. Thousand firms—just $1.00.


EMI DLS-529 Speaker. Excellent Condition. Call after 6 PM 212-WE 3-7132.


Hi-Fi Components Tape Recorders, at guaranteed "We Will Not Be Undersold" prices. 15-day money-back guarantee. Two-year warranty. No Catalog. Quotations Free Hi-Fidelity Center, 239 (HC) East 149th St., New York, N.Y. 10032.

FREE! Send for money saving stereo catalog #HRB and lowest quotations on your individual component. tape recorder, or system requirements. Electronic Values, Inc., 1024 Eleventh St., N. W., N.Y. 10001.

CANADIANS—Giant Surplus Bargain Packaged Catalogs of Components, Supplies. 50 firms—just $1.00.

TRANSISTORIZED Products Importers Catalog. $1.00.

JAPAN & Hong Kong Electronics Directory. Products, components, manufacturers to 50 firms—just $1.00.

Zalytron Current Catalog, featuring new cartridge of your choice: $1.50. Record Research, 131 Hart, Brooklyn 6, N.Y.

SALES on turntable, 10024.

POLITICAL Science—Applied Psychology—Tape Tape and Turntable Sale. Tapecore, Box 26, Buffalo, N.Y. 14202.

RARE Record Finders. Write Post Office 95007, Los Angeles, Calif. 90045.

AUTHORS' SERVICES

AUTHORS Learn how to have your book published. Promoted, for 10 months from booklet "20," Vantage 120 West 31 St., New York 1.

SONGWRITERS WANTED. Send songs for recordings—royalty contract. Tin Pan Alley, 1650-H Broadway, New York 10019. (New York 10019.)

WANTED WRITERS! Short stories, articles, books, play poetry. Will help place, sell your work. Write to local publishers, literary agent, etc. Diary of Life's Experience, 1650 H Broadway, New York 10019.

PHOTOGRAPHS

PHOTOGRAPHS and transparencies wanted, to $500.00 each. Valuable information free—Write IntraPhoto-HiFi, P.O. Box 74607, Hollywood 90020.
RUBBER STAMPS
RUBBER Address Stamp $1.00. Signature $2.88. Free catalog. Jackson Products, 1423 Winnemac, Chicago, Ill. 60640.

INVENTIONS WANTED

BUSINESS OPPORTUNITIES
I MADE $40,000.00 Year by mailorder! Helped others make money! Start with $10.00—Free Proof. Torrey, I. M. 75205.

PERSONALS
TRUTH, SCIENCE, donate $1. for tape recording, P. O. Box 52-353, Miami, Fla.

PHOTOGRAPHY—FILM EQUIPMENT, SERVICES

MEDICAL FILM—Adults only—"Childbirth" one reel, 8mm $7.50, 16mm $14.95. International H, Greenvale, Long Island, New York.

MOVIE FILMS

REAL ESTATE
FREE SUMMER CATALOG! Selected Best thruout the U.S. Thousands of properties described, pictured—Land, Farms, Homes, Businesses—Waterfront, Recreation, Retirement. 66 Years service, 490 Offices, 36 states Coast to Coast. Mailed FREE from the World’s Largest STRUT REALTY, 60-2D E 42nd St., N.Y., N.Y. 10017. OX 7-5710.

EDUCATIONAL OPPORTUNITIES
LEARN While Asleep, hypnotize with your recorder. Astonishing details, sensational catalog free! Sleep-Learning Association, Box 24-2D, Olympia, Washington.

BOOKS
"1966 DIRECTORY of Book Collectors." 120 Pages. $2.00. Hussey, Box 157-16, Webster, N.Y. 14580.

TOOLS
TOOL Catalog Send 25¢. Silver Hardware, 107 Ziff Wald, Phila., Penna. 19106.

GOVERNMENT SURPLUS

EMPLOYMENT INFORMATION

FOREIGN EMPLOYMENT: South America, Africa, Europe, Australia, USA. Earnings to $2,000.00 monthly. Construction, all trades, professions, occupations. Many companies pay fare, housing, benefits, bonuses. Write: Universal, Dept. B-B, Woodbridge, Conn. 06525.

HYPNOTISM
FREE Hypnotism, Self-Hypnosis, Sleep Learning Catalog! Drawer #400, Rudoso, New Mexico 88345.

STAMPS
WOW! 110 ALL DIFFERENT GERMANY 10¢ Commemoratives, Airmails, High Values, Big catalog, bargain lists plus selections of fine stamps from our approval service, returnable without obligation. Jamestown Stamp, Dept. AB56EG, Jamestown, N.Y. 14701.


COINS

MISCELLANEOUS
WINEMAKERS: Free illustrated catalog of yeasts, equipment. Samples, Box 7208, Minneapolis, Minn. 55412.


EMPLOYMENT Resumes. Get a better job & earn more! Send only $2.00 for expert, complete Resume Writing Instructions. J. Ross, 80-34 Kent St., Jamaica 32, N.Y. Dept. HF.
WHERE TO BUY IT
HI FI/STEREO REVIEW'S EXCLUSIVE SUMMER SERVICE

Is there a product in this issue that interests you? Would you like to see it? ... Hear it? ... Buy it? It's easy! Advertisers cooperating in our special summer service program are indicated with the little telephone symbol at the bottom of their ads, and here's how you can get prompt answers to your questions:

1. Note the page number and the brand name of the merchandise in which you are interested.

2. Dial the HiFi/Stereo Review advertising service office nearest you—see the list of telephone numbers below.

3. Give the operator the page number of the ad and the name of the product, and she will give you the names of the stores in your vicinity that carry it, plus any other pertinent information made available by the manufacturer.

DIAL THE NUMBER IN YOUR AREA

CALIFORNIA
Los Angeles 213 653-5172
San Francisco 415 GA 1-7191

CONNECTICUT
Hartford 203 247-7229

DIST. OF COLUMBIA
Washington 202 347-8668

FLORIDA
Miami 305 374-1821

GEORGIA
Atlanta 404 233-0987

ILLINOIS
Chicago 312 372-9251

ILLINOIS
Chicago 312 372-9251

HIFI/STEREO REVIEW ADVERTISERS' INDEX

<table>
<thead>
<tr>
<th>ADVERTISER</th>
<th>PAGE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acoustic Research, Inc.</td>
<td>39</td>
</tr>
<tr>
<td>Allied Radio</td>
<td>83.84</td>
</tr>
<tr>
<td>Ampex Corporation</td>
<td>106</td>
</tr>
<tr>
<td>Audio Dynamics Corporation</td>
<td>111</td>
</tr>
<tr>
<td>Audio Originals</td>
<td>101</td>
</tr>
<tr>
<td>Audio Unlimited, Inc.</td>
<td>112</td>
</tr>
<tr>
<td>Benjamin Electronic Sound Corp.</td>
<td>108</td>
</tr>
<tr>
<td>Bogen Communications</td>
<td>11,12,13</td>
</tr>
<tr>
<td>Bozak</td>
<td>40</td>
</tr>
<tr>
<td>British Industries—Garrard</td>
<td>2</td>
</tr>
<tr>
<td>British Industries—Wharfedale</td>
<td>37</td>
</tr>
<tr>
<td>Carston Studios</td>
<td>95</td>
</tr>
<tr>
<td>Citadel Record Club</td>
<td>7</td>
</tr>
<tr>
<td>Columbia Masterworks Subscription Service</td>
<td>9</td>
</tr>
<tr>
<td>Columbia Records</td>
<td>72,73</td>
</tr>
<tr>
<td>Columbia Stereo Tape Club</td>
<td>5</td>
</tr>
<tr>
<td>Command Records</td>
<td>85</td>
</tr>
<tr>
<td>Defa Electronics Corp.</td>
<td>89</td>
</tr>
<tr>
<td>Dressner</td>
<td>95</td>
</tr>
<tr>
<td>Dual</td>
<td>32,33</td>
</tr>
<tr>
<td>Dynaco Inc.</td>
<td>6</td>
</tr>
<tr>
<td>Electro-Voice, Inc.</td>
<td>69,4th COVER</td>
</tr>
<tr>
<td>Elpa Marketing Industries, Thorens Division</td>
<td>14</td>
</tr>
<tr>
<td>Elpa Marketing Industries, EDITabs Division</td>
<td>99</td>
</tr>
</tbody>
</table>

PRINTED IN U.S.A.
Nine out of ten musicians prefer the natural sound of Pickering.

Microgroove discs are recorded by magnetic processes. Naturally they sound better when reproduced with a Pickering Micro-Magnetic™; there's a natural compatibility. From the tiniest peep of a piccolo to the mightiest roar of an organ, Pickering produces sound as natural as the original performance. That's why musicians prefer Pickering. And so does everyone else who can hear the difference.

Pickering makes it easy to get natural sound in any stereo installation. There are four Pickering Micro-Magnetic pickups, each designed for a specific application. The V-15AC-2 is for conventional record changers, where high output and heavier tracking forces are required. The V-15AT-2 is for lighter tracking in the newer automatic turntables. The even more compliant V-15AM-1 is ideal for professional-type manual turntables. And the V-15AME-1 with elliptical stylus is the choice of the technical sophisticate who demands the last word in tracking ability.

No other pickup design is quite like the Pickering Micro-Magnetic. The cartridge weighs next to nothing (5 grams) in order to take full advantage of low-mass tone arm systems. Pickering's exclusive Floating Stylus and patented replaceable V-Guard stylus assembly protect both the record and the diamond.

But the ultimate test of a cartridge is the human ear. Find out for yourself. Listen carefully to a Pickering. You'll hear the difference.

For those who can hear the difference.

CIRCLE NO. 41 ON READER SERVICE CARD
FOR STORES "WHERE YOU CAN BUY"—SEE LAST PAGE.
Why turn off your love of good music when you shut your living room door? Summer or winter, indoors or out, from beach to mountaintop, from patio to summer home — the Electro-Voice Sonocaster I puts good music where it belongs . . . with you.

It's built to take any weather. The one-piece housing can't rust, crack, or peel — the color is molded right into the plastic. And tough? Just ask the schools, radio stations, and businesses that find a Sonocaster ideal for portable high fidelity sound.

Now how about the music? Well, short of 32' organ pipes (which the Sonocaster frankly ignores) you'll be hard pressed to hear any trace of "portable" sound. Whether you add Sonocasters to your main hi-fi system, or start with a portable radio, you'll find these small speakers uncommonly responsive.

Hookup is easy. Plug the Sonocaster directly into the auxiliary jack on most portables. Or add a pair to your main stereo system in moments with just a screwdriver.

Pick up the Sonocaster I today. It costs no more than $25.00 at leading audio showrooms everywhere. And now, a little traveling music, if you please!

Who says Hi-Fi is a winter sport?

SPECIFICATIONS: 70-13,000 Hz Frequency Response; 8 Ohms Impedance; 30 Watts Peak Power Handling; 120° Dispersion; 16-3/4" H x 17" W x 5-7/8" D; 6-3/4 Lbs. Net Weight; Steel Gray color.

CIRCLE NO. 19 ON READER SERVICE CARD FOR STORES "WHERE YOU CAN BUY"—SEE LAST PAGE.