THE HI-FI SET OF THE FUTURE
CHARLES MINGUS—JAZZ VOLCANO
OUTPERFORMS BEST VACUUM TUBE UNITS

From Scott... the pioneer in audio design... a product that confirms the potential of solid state. Hard on the heels of the much acclaimed Scott 312 Solid State Tuner comes another monumental engineering achievement... a solid state tuner/amplifier with Scott performance, Scott reliability, and Scott solid state quality at a price comparable to vacuum tube equipment!

The tuner section is identical to that of the Scott 312. In reviewing this advanced tuner (July 1964) Audio Magazine said: "If any doubt remains in the minds and hearts of audio fans as to the acceptability of transistors for use in high quality FM stereo tuners, the Scott 312 should still these fears forevermore. It is one of the finest tuners Scott makes. And that means it is one of the finest tuners anywhere."

The power-packed solid state amplifier section of the new 344 utilizes unique Scott-developed circuits. It represents a significant advance in the state of the art. Peak power capabilities approach one hundred watts—enough to handle the most extreme dynamics in any music material.

Scott engineers have imaginatively utilized the latest in space-age miniaturization without compromising performance. The 344 is comparable in size to an ordinary tuner... so it can easily be placed anywhere you desire. Visit your Scott dealer soon... be prepared for a new experience in listening pleasure.

SPECIFICATIONS: FM sensitivity, 2.2 µv; Frequency response, 20 to 20,000 cps ± 1 db; Power bandwidth, 25 to 15,000 cycles at less than 1% THD; 27 transistors, 4 nuistsors; 300 ohm antenna input; 13 front panel controls. Dimensions in optional accessory case 15½" wide x 13¼" deep x 5½" high.

Price slightly higher West of Rockies. Subject to change without notice.

Please send me FREE the new 1965 Scott 24 page full-color Guide to Custom Stereo, containing full information on all Scott Kits and Components.

Send me complete information on new consoles by Scott...component quality in beautiful hand finished cabinets.

Name:
Address:
City:
State: Zip Code:

H. H. SCOTT, INC., 111 Powdermill Road, Maynard, Mass.
Canada: Atlas Radio Corp., 50 Wingold Avenue, Toronto, Cable: SCOTT 245-12
COMPACT SPACE-AGE TUNER/AMPLIFIER

Convenient mode switch allows you to select either monophonic or stereophonic operation.

Input switch allows you to select whatever program material you wish to hear, whether it be from broadcast, record player or tape.

Input switch allows you to select either monophonic or stereophonic operation.

Clutched loudness control allows you to adjust the volume of either or both channels.

Precision tuning indicator reliably shows when you have tuned station properly.

Fast-acting stereo indicator instantly shows when you have tuned to a stereo broadcast.

Dual Bass and Treble controls are used to vary the low and high frequencies on either or both channels.

Compensation network automatically boosts the extreme highs and lows whenever the volume is reduced. This allows you to hear the full range of sound at any volume you select.

Noise filter instantly shows objectionable noise on scratchy records.

Compensation network automatically boosts the extreme highs and lows whenever the volume is reduced. This allows you to hear the full range of sound at any volume you select.

TUNER SECTION—Silver plated, four-nuvistor front end assures high sensitivity with no cross modulation problems. (Audio Magazine reported 2.0 μV HIF sensitivity with 82 db cross modulation rejection). Flat line limiting makes the 344 impervious to ignition pulse noises and overloading caused by strong local stations.

STEREO MULTIPLEX SECTION—Series gate, time-switching multiplex circuitry built around Scott’s advanced solid state design capitalizes on the amazing switching capabilities of transistors. Separation is in excess of 35 db. (Audio measured 36 db).*

SOLID STATE AMPLIFIER STAGE—Scott’s advanced design gives power to spare for reproducing all the dynamic peaks in the music. Even under high volume conditions the 344 will drive any loudspeaker to full room level. Music power is conservatively rated at 25 watts per channel into an eight ohm load, and the tremendous reserve peak power of transistors assures even better performance in actual use.

*Read the complete review of the 312 Solid State FM tuner . . . the same tuner section incorporated in the superb new 344 . . . in the July 1964 issue of Audio Magazine.
AN INCREDIBLE ENGINEERING BREAKTHROUGH

NEW SCOTT SOLID STATE TUNER/AMPLIFIER

$429.95
Top view of the new Scott 344 Solid State Tuner/Amplifier. Note the compact yet orderly arrangement of parts. The entire tuner/amplifier is no larger than a standard Scott tuner or amplifier.
To activate the cueing feature (at the start of a record, or during play), simply press manual tab.

The tone arm rises... stays suspended a safe half inch over the record. Leave it where it is, or position it over any other groove desired.

Now, press the cueing control. The arm lowers slowly and accurately.

Integral tone arm cueing is featured in Garrard’s new Lab 80, the first Automatic Transcription Turntable!

Here’s how it works:

To play a single record: Press the manual tab. This starts the motor and activates the cueing feature. Then, position the tone arm above the first (or any) groove. The arm is suspended a safe half inch above the record. Now, press the cueing control and the stylus lowers slowly into the groove.

To cue a record during manual or automatic play: Press the manual tab. The arm rises and suspends a half inch over the record. Move the arm to the band or groove desired, and press the cueing control. The stylus lowers gently into the groove.

To pause during manual or automatic play: Press the manual tab. The arm rises directly over the record groove. The turntable continues to revolve. When you are ready, press the cueing control. The stylus descends safely. The music continues from where you left off.

As tracking forces have become lighter, and stylus assemblies more delicate, so has the danger of damage from manual handling increased. Now, in the Lab 80, Garrard has incorporated the convenience and safety of this ingenious cueing control... built into an automatic unit for the first time. This, and other advanced features of the Lab 80 are explained in Garrard’s new 32 page Comparator Guide covering the entire line. For a complimentary copy, write Dept. GX-124, Port Washington, N.Y.
THE MUSIC
REPORT FROM EUROPE: VIEWS FROM HERE AND THERE
Random news from our European editor............................................FREDERIC GRUNFELD..........................36
THE BASIC REPERTOIRE
Rachmaninoff's Second Piano Concerto..........................................MARTIN BOOKSPAN............................39
MUSICAL ARCHEOLOGY
How ancient music is being rescued from oblivion..............................FRITZ A. KUTTNER................................43
A VOLCANO NAMED MINGUS
Perspective on a major modern jazzman.........................................NAT HEN TOFF.................................52
A PLAINSONG PRIMER
An introduction to Gregorian and Ambrosian chant....................................IGOR KIPNIS.................................60
BEST OF THE MONTH
Reviews of outstanding new record releases........................................63
THE NEW ENGLAND HARMONISTS
A new recording provides a glimpse of America's most neglected composers...................................................DAVID HALL.................................90

THE EQUIPMENT
SOUND AND THE QUERY
Answers to your hi-fi technical questions.............................................LARRY KLEIN.................................16
JUST LOOKING
Surveying the latest in hi-fi equipment................................................24
AUDIO BASICS
Definitions, Part Eleven........................................................................HANS H. FANTILL.................................28
TECHNICAL TALK
Lab reports on the Dual 1010 "automatic turntable," the Viking 77 Stereo Compact tape recorder, and the PML EK61 microphone..................................................JULIAN D. HIRSCH.................................31
AN AUDIO BESTIARY
Rare hi-fi fauna caught by an artist's pen..............................................RONRER TUCKER.................................50
THE HI-FI SYSTEM OF THE FUTURE
What's in store for tomorrow's home listener.........................................KEN GILMORE.................................56

THE REVIEWS
CLASSICAL......................................................................................69
JAZZ.................................................................................................99
ENTERTAINMENT............................................................................111
STEREO TAPE.................................................................................135

THE REGULARS
EDITORIALLY SPEAKING....................................................................4
LETTERS TO THE EDITOR..................................................................8
ADVERTISERS' INDEX; PRODUCT INDEX...........................................142

Copyright © 1964 by Ziff-Davis Publishing Company. All rights reserved. ZIFF STEREO REVIEW, December 1964, Volume 13, Number 6. Published monthly by Ziff-Davis Publishing Company at 111 South Wacker Drive, Chicago, Illinois 60606. Subscription rates: one year United States and possessions $3.00; Canada and Pan-American Union Countries $3.30; all other foreign countries $4.20 per year. Second-class postage paid at Chicago, Illinois, and at additional mailing offices. Authorized as second class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash.
EDITORIAL SPEAKING
by FURMAN HEBB

THE 1964 edition of the New York High Fidelity Show, the premiere hi-fi event of the year, was held during the first week in October. Superficially, at least, it was a show much like most other hi-fi shows—crowded, noisy, confusing, frustrating. Yet it was also an interesting show, giving some fairly clear indications of the directions that high fidelity will be taking in the near future.

The most obvious trend is toward transistorization. Whereas only a year ago many manufacturers still tended to rely on the tried-and-true vacuum tube, it now appears that the tide has turned almost entirely in favor of the transistor. It seems unlikely, in fact, that more than a few tube-operated hi-fi products will be designed in the future. This is not to say that tube models are suddenly obsolete. They aren't. But the great majority of manufacturers now feel that, for the same price, they can produce transistor units that outperform tube units. Further, the indications are that transistors will generally decrease in price, while tubes are expected to stay at about the same level.

Another trend is toward the integration of hi-fi components. The products in this category vary from such units as the turntable-tone arm combination, popularized by Acoustic Research, to the record player-amplifier, recently introduced by Benjamin, to the new breed of high-fidelity portables pioneered by KLH. The great advantage of integration is that each element in the system can be tailored to complement the others. In an amplifier-speaker combination, for example, the frequency response of the amplifier can be adjusted to compensate for the natural roll-off of the speaker at very high and very low frequencies, thus extending the over-all frequency response of the system.

One other noteworthy development at the New York Show was the emergence of some impressive loudspeaker systems at unprecedentedly low prices. In this past year we have seen the introduction of at least half a dozen $50-$70 speakers that are capable of remarkable performance. There have been low-cost speakers with good sound previously, but the present level of performance has never before been achieved.

These trends, the most obvious of which will most influence the design of hi-fi equipment in the next year or two. For a look further into the future, I recommend to you Ken Gilmore's crystal-ball article in this issue, "The Hi-Fi System of the Future," beginning on page 56.

Coming in January's HiFi/Stereo Review—On Sale December 22
THE BEST RECORDS OF 1964
Q & A ON UPGRADEING HI-FI SYSTEMS
SEVENTY-FIVE YEARS OF COLUMBIA RECORDS
MUSIC IN THE MAILS
For bird-watchers, beach bunnies, private eyes, spies, dictators... and you!

For Connoisseurs of Sound

CONCORD 330

CONCORD ELECTRONICS CORPORATION 809 N. Cahuenga Blvd., Dept. F, Los Angeles 38, Calif.

The world's first voice-operated tape recorder! At the beach, in the office, at home or in your car, you'll find all sorts of "hands-free" uses for the portable 330... applications not possible with an ordinary recorder. You don't even have to be there. Sound starts it; sound stops it. Just set it and forget it! The 330 is packed with features: automatic slide projector advance; automatic Syncronol for home movies and slides; automatic self-threading too! Up to 6 hours playing time on 5" reels; 2 speeds; VU meter/battery life indicator and an optional AC adaptor. See your Concord dealer right away for a demonstration. Under $200.00. Other Models to $450.00.

* Prices slightly higher in Canada.
EXACTLY ONE YEAR AGO...

Dual stepped

...with the incomparable DUAL 1009 Auto/Professional closed the gap between the automatic changer

As long as cartridges are used for record reproduction, the DUAL 1009 will remain well ahead of their tracking requirements. That's the way it was conceived...the way it was designed, engineered and produced. A year ago, this was a promise. Today, a fact acknowledged throughout the world of music reproduction.

Every leading audio authority has cited the DUAL 1009's superb performance. "Will function as well as any good separate tone-arm," reported HiFi/Stereo Review. "Fully capable of operating at 0.5 gram, as rated," confirmed Electronics World. "In a class by itself," concluded The American Record Guide, listing it alone among chosen components in its 30th Anniversary issue.

Cartridge manufacturers have given the DUAL 1009 unqualified approval for their most sensitive "manual only" models. Even the most die-hard of purists soon succumbed. Repeated evidence of this hard-won acceptance is in our files of DUAL 1009 warranty cards, listing as "former equipment" the most highly respected and costly manual equipment.

DUAL's relentless quality control begins with the manufacture of every component part, from the smallest spring to the complete motor...each motor individually "tuned" to its own chassis! Every unit is tested for a full hour throughout its assembly...then every tenth unit is again put through a complete testing cycle. Finally, an acoustic performance test in a component system.

All this is your assurance that the DUAL 1009 Auto/Professional Turntable you purchase tomorrow will be the equal in every respect to the original laboratory standard...now the standard of the entire world for record playing instruments. At $99.50, the DUAL 1009 is most certainly your most outstanding value.

... with the precision engineering and many advanced features of the DUAL 1009, including the renowned Continuous-Pole motor. This new type induction motor matches the highly touted hysteresis at its own game...distinctly outperforms it in rumble, wow, flutter and power. Newly designed tonearm tracks at low forces required by high compliance cartridges. Tracking force is applied simply and precisely with a finger-tip knob. Low over-all mass, rigid

AND NOW...

 Dual quality in the medium price field!

the new DUAL 1010 and 1011
Turntable. The definitive record playing instrument that and the manual transcription-quality turntable.

FRICTIONLESS BEARINGS, LOW MASS FOR LIGHTWEIGHT TRACKING
Tonearm flawlessly tracks ½" rise and fall of warped record...even tracks eccentric motion of 7" record placed off center...dramatically demonstrating virtually frictionless movement in both planes. Antiskating compensation for 1 gram tracking is neatly engineered within tonearm system.

6% VARIABLE SPEED RANGE FOR ALL FOUR SPEEDS
Assures perfect pitch with old classics, some foreign discs, when making tapes, when playing solo instruments to recorded accompaniment. Speed accuracy is maintained within 0.1% even when line voltage varies beyond ±10%.

STYLUS FORCE APPLIED AT PIVOT, READS CONVENIENTLY FROM ABOVE
You simply dial the direct reading scale continuously from 0 grams up. Multiple-coiled mainspring at pivot maintains true dynamic balance in all planes.

ELEVATOR ACTION CHANGER SPINDLE...ANOTHER DUAL EXCLUSIVE
Lifts weight of entire stack off bottom record before it descends to play. No hard pusher action against center hole. Less than 0.2 gram stylus force increase, less than 6° angle change from first to tenth record...far less than variations among cartridges!

DUAL 1009
AUTO/PROFESSIONAL TURNTABLE
CIRCLE NO. 58 ON READER SERVICE CARD

Automatic Turntables

All Dual Automatic Turntables share the same engineering underneath...clean, rugged and uncluttered. Total disengagement of all automatic functions during play result in performance hitherto unobtainable with automatic equipment.
LETTERS TO THE EDITOR

The Carmen Hall of Fame

It may I congratulate you on your brilliant October issue. It is handsomely written and handsomely put together.

But I must take issue with Robert Offergeld's roster of "The Great American Carmen." I think his article does several artists a grave injustice. Fame and memory cannot be so fickle as to have dismissed forever the superlative Carms offered us by Regina Resnik, Jean Madeira, and Winifred Heidt. No matter the casting habits of the Metropolitan—the press, audiences, and musicians of many notable opera houses have acclaimed these three often.

Nor can any operagoer forget whether he actually heard and saw her Carmen or only listened to Mary Garden, Muzio, or Raisa talk about her Carmen—the portrayal by Coe Glade. There are front-page headlines from all over the country to prove that she made musical history in the role. She also set a record of more than five hundred performances at the elusive gypsy girl.

Thomas Matthews
New York, N.Y.

Bruckner Society of America and similar organizations of informed music lovers succeeded in obtaining for him his rightful place. Why not an Alban Berg Society to aid in the removal of obstacles to the public performance of all his music? I for one would be most happy to subscribe.

Horace Butterworth
Washington, D.C.

Lees and the Beatles

It seems that perhaps Gene Lees has finally opened his eyes (or rather ears) to good popular music—vide his review of the Beatles' two new albums (October). It's about time.

Jerry Klein
Newton Square, Pa.

I am glad Mr. Lees has changed his opinion of the Beatles, for they really do some good songs.

But I want to question his statement that "Chief Beatle John Lennon is no youngster, but a seasoned, thirty-three-year-old show-business pro." I have read several times that John Lennon was born October 9, 1940, which would make him twenty-three years old. What is Mr. Lees' source for his statement?

Leslie Douglas
Berea, Ohio

Mr. Lees replies: "As I said in the review in which Mr. Douglas refers, I heard this statement about Lennon's age when I was in England recently. It was repeated to me several times by people who should know. I have not seen Lennon's birth certificate, of course, so I cannot assert unequivocally that the story is true."

Freniphilia

I very much enjoyed the October issue of HiFi/Stereo Review and the stereo "Playable Page" featuring the voice of Mirella Freni. Miss Freni is an artist with whom I was completely unfamiliar, but I shall certainly keep my eyes open for her recordings from now on. To have two such outstanding artists as Joan Sutherland and Miss Freni come along within the same decade is almost too good to be true.

Richard P. Bunting
New York, N.Y.

Opera in a Fifth City

I read Mr. George Jellinek's article about the choice of repertoire by the world's four leading opera companies (October) with great interest. I have made some of the same observations. Mr. Jellinek makes about the Metropolitan's repertoire.

We in San Francisco wish there had been some mention of our opera company, for we take great pride in it. I realize, of course, that our season is so short (six or seven weeks, this year eight for the first time) that it is not in the category Mr. Jellinek dealt with. But perhaps some of these companies could profit by looking at the repertoire practices of the San Francisco Opera Company. Our short season run the gamut of operatic tastes with few repeats from year to year. Each season we have a few of the standard offerings, but with these we usually get at least two revived productions, and almost always one work that has not been done before—Shostakovich's Katerina Ismailova this year.

In previous years Die Frau ohne Schatten, Wozzeck, Andrea Chénier, Werther, Macbeth, Medea, Die Kluge, and Carmen Burana were tremendous successes. The company strives, too, to present works that haven't been done for many years—this year Parsifal, The Girl of the..."

(Continued on page 11)
Meet the new Royal Grenadier . . . . world's most perfect speaker system. Pretty soon every stereo system 'round will be featuring this revolutionary divergent lens speaker system. The first loudspeaker ever designed and engineered for stereophonic reproduction. Lets you sit anywhere — hear everything.
The New Empire Royal Grenadier
Divergent Lens Speaker System—Model 9000M

Years ahead in design and engineering the Grenadier projects a majestic sound unlike any you've heard before. Its cylindrical shape creates a system relatively free from room standing waves and approaches acoustically flat frequency response. Sound level and tone remain constant virtually anywhere in the room. Its three divergent acoustic lenses achieve unparalleled stereo separation. With the Empire Grenadier... speaker placement becomes non-critical.

For a sound demonstration of the Empire family of “most perfect” products, go 'round to your dealer or write for complete literature.

EMPIRE
“World’s Most Perfect High Fidelity Components”

Empire Scientific Corp.—845 Stewart Ave., Garden City, L. I., N. Y. Export: EMEC, Plainview, L. I., N. Y. — Canada, Empire Scientific Corp., Ltd., 1476 Eglinton West, Toronto

Circle No. 108 on Reader Service Card.
Golden West, La Forza del Destino, Mefistofele, Samson and Delilah, Falstaff, Nabucco, and La Sonnambula.

It is interesting to note that this year there is no Bohème, Butterfly, Tosca, Don Giovanni, Aida, Rigoletto, Barber of Seville, Faust, or Lucia. Of course these works are done, but if they appear one season, they usually do not the next. Yet our seasons are never dull. Sooner or later, no matter how fond we are of the standard works, the thrill of seeing and hearing them becomes mostly a matter of memories of other performances. One of the reasons San Francisco has so much success in its programming is that the general director, Mr. Kurt Adler, is willing to try to please his public by doing works we may know of but have never seen. The Met and other houses may counter that when they give their audiences a chance to see something different, the audiences balk. Perhaps San Francisco audiences do like more diversification in their operagoing than most. But did these houses in other cities ever stop to think that some of their choices may not have been very interesting? I can understand the reluctance to do brand-new works, but there is not much excuse for unwillingness to stage Medea, La Vestale, Italian in Algeri, Die Frau ohne Schatten, Thaïs, Werther, Hérodiade, Pearl Fishers, Anna Bolena, Abduction from the Seraglio, or L’Amico Fritz, works that when done here and elsewhere have proved very successful. Though the opera lovers of San Francisco envy the Metropolitan audiences their longer season, we are very proud of the accomplishments of our company, which not only brings new works to our city but also the leading performers of the operatic world in these works. This season we have Resnik’s Carmen, McCracken’s Otello and Golbi’s Iago, Sutherland in Turandot, Nilsen in Turandot, Konya, Wächter, Dalis, and Tozzi in Parsifal. And we have been fortunate to have the services of Schwarzkopf for many years now—not many opera houses have. If all this sounds like I am tooting our horn—I am.

Lowell V. Cary
San Francisco, Calif.

Rodgers and Hart Revisited

Let us all echo Gene Lees’ vote of thanks to Goldard Lieberman (“Two Guys Named Rodgers and Hart,” October)—even if it is now ten years since the three recordings reviewed by Mr. Lees were actually made. And let’s extend another such vote to Mr. Lees himself, for the most felicitous tribute to Hart’s genius that I have read in many a day. Mr. Lees has that just-right light touch that would serve so well in editing a collection of Lorenz Hart lyrics.

Kerry S. Haxer
Palos Verdes Peninsula, Calif.

Modern-Music Oneupmanship

Perhaps this is carrying a concern for loose ends too far, but now that Mr. Leslie Gerber has quite effectively corrected Mr. Dobson’s inaccuracies (“Letters,” October) regarding omissions in the recorded repertoire of contemporary music, I would like to comment on Mr. Gerber’s statement.

Both the magnificent Harris Symphony No. 5 and the Milhaud Prélude Suite No. 2 were included in the series of noncommercial discs made in the 1950 Pittsburgh International Festival of Contemporary Music under William Steinberg’s direction. These recordings can sometimes be found in university libraries and collector’s shops. The Milhaud work—one of his most masterly—was subsequently released on a Camden disc (385), transferred from 78’s, as definitively interpreted by Pierre Monteux.

Both of these, like so many recordings of neglected contemporary masterpieces, are currently out of print.

Paul A. Snook
New York, N.Y.

Canadian Mounting

I want to express my appreciation for the practical solution, offered in your September issue, of the dilemma created by feathery tone arms and floppy floors. For three years I had been trying to lick this problem with spring suspensions, rubber foam, and different models of turntables, supposedly immune to mechanical shocks. Wall mounting is a simple and obvious solution, and has worked out well for me. My children can bounce next to the equipment now with impunity.

Actually I have not had to suspend the turntable on strings—it sits on a shelf, which is in turn sitting on brackets, and this appears to be quite effective.

Andrew Keelen, M.D.
Ortnstown, Quebec

Huzzah for Halfer

I am glad someone—specifically, Mr. David Halfer, President of Dynaco, Inc.—has finally blazed the trail back to basic a.c. theory (“Letters,” October). After all the articles I’ve read on amplifier power, I was beginning to think that basic theory no longer applied. But Mr. Halfer hits the nail on the head when he says, “No matter what the circumstances, the output of a transistor amplifier cannot exceed the limitations imposed by its power supply.” This is true of any amplifier—tube or transistor.

Allen McCroskey
Jacksonville, Fla.

Lousy Transfers

In Mr. Nat Hentoff’s September critique of Columbia’s “Jazz Odyssey, Volume Two” (CML 32), the comment on the recording reads: Generally good. As
KENWOOD
solid state stereo

New High Fidelity Stereo Units
For Those Who Are Selective

Who's selective? YOU ARE... if you choose the handsome look of KENWOOD with all-new transistorized circuitry. Here are components engineered only for those who expect the big, full sound of quality, demand superior performance and reliability and prefer all those special features.

KT-10 ALL TRANSISTOR AM/FM AUTOMATIC STEREO RECEIVER is an all-new transistorized tuner, pre-amplifier and total 40 watts amplifier on a single chassis. Exclusive custom features include an automatic protection circuit that guards against transistor damage, automatic relay switching to proper mode, stereo headset jack and so much more. $299.95

TK-500 TRANSISTORIZED AUTOMATIC FM STEREO TUNER features a Nuvistor Cascode Front-end, 5 IF Stages, Automatic Relay Switching to Proper Mode, and Tape Record Outputs. $199.95

TK-400 ALL TRANSISTOR STEREO AMPLIFIER has a total of 80 watts music power (IHF Standard) or 40 watts per stereo channel, Automatic Protection Circuit (U.S. Pat. Pend.), Output Transformerless Circuit, Front-panel Stereo Headset Jack, and Direct Tape Monitor System. $199.95

KENWOOD ELECTRONICS, INC.

New York Office: 212 Fifth Avenue, New York, N.Y. 10010, Murray Hill 6-1590
Los Angeles Office: 3700 South Broadway Place, Los Angeles, Calif. 90007, Adams 2-7217

a matter of fact, the sound of these 78-rpm recordings is in this instance lean. Columbia has done much better: e.g., Ruth Etting, Jose Venuti, Fletcher Henderson, Milt Mole, and so forth. And Columbia could do much better than these, too, I believe, using better equipment for the transfers. But the sound of the "Odyssey, Volume Two" discs is hard and shrieky, with false highs that are not on the originals.

ARNOLD BOPP
Zurich, Switzerland

Poulen Songs on Imports

I enjoyed William Flanagan's compilation of "The Essentials of a Contemporary Art-Song Library" (October). It is, however, misleading for Mr. Flanagan to say that since Poulen's death "no company—either major or minor—has either released or, so far as I can discover, even planned a release devoted wholly to the songs of [Poulen]." It is accurate to say rather that no American company has done so, nor has any made available here the recent French recordings of this composer's songs. These include a recording for the Vega label (one 12-inch disc and two 10-inch) of nearly all of his songs by his old associate, baritone Pierre Bernac. The composer is at the piano. New York record importers surely should be able to obtain this release; and doesn't Westminster still have rights to Vega releases?

A second new release on the Erato label contains some of the best-known songs, plus a few Vilminon settings not on the first-named. Young baritone Bernard Krusen and pianist J. C. Richard collaborate. I have heard it said that Music Guild is considering releasing this disc.

Finally, two song cycles not on these two—"Fiançailles pour rire" and "La Courte paixare on a brand-new recording by Deutsche Grammophon (stereo 188882 and mono 18888) already available in England, France, and Germany. The cycles are sung by soprano Colette Herzog, accompanied by veteran pianist Jacques Yévrier. This disc also contains Delays's Baudel-Ver settings. Mlle. Herzog, incidentally, has also recorded Schoenberg's "The Book of the Hanging Gardens" for the small French company Crévine.

MICHAEL S. GRAHAN
Toronto, Canada

The Institute of High Fidelity has published a second edition of its informative 64-page Introduction to Hi-Fi & Stereophonic Audio for the non-technical music listener. The booklet is available for $2.50 from the Institute of High Fidelity, 516 Fifth Avenue, New York, N.Y. 10016.
don’t let
the price tag fool you!

THE NEW ELPA PE-34 IS A LOT MORE TURNTABLE
...FOR A LOT LESS MONEY... ESPECIALLY WHEN YOU REVIEW THE FEATURES!

The NEW ELPA PE-34 4-speed Turntable combines features that up to now were found only in higher priced professional transcription-type turntables.

Features like: Belt PLUS idler wheel drive (the reason for the low, low rumble) • 4 Speeds • Built-in lowering (cuing) device that saves record and cartridge wear • Powerful four-pole induction motor (with plenty of Torque) • Heavily weighted, non-magnetic Turntable • Vernier speed control • Rugged, precision-built professional type tone arm.

What do all these features add up to?

The Elpa PE-34 not only meets, but exceeds the National Association of Broadcasters (NAB) specifications required for professional use in broadcast stations.

That means the NEW Elpa PE-34 will satisfy your strict requirements too, AND not because of price either.

Examine these Specifications:

PLATTER & DRIVE SYSTEM
- A heavy-duty precision-built 4-pole induction motor floats in a triple rumble isolation system.
- A heavy cast and machined non-magnetic platter on a precision bearing assures accurate speed and minimum wow and flutter.
- A vernier speed adjustment (3%) for perfect pitch or “tuning” the turntable and record for perfect pitch or any accompanying musical instrument.

TONE ARM
- Low resonance balance arm with double precision-bearing suspension (vertical and horizontal planes) minimizes arm drag.
- All modern cartridges can be easily mounted in a cartridge mounting slide.
- Complete 4-wire system.
- Cartridge mounting slide pulls out for quick stylus inspection.
- Built-in spring loaded stylus pressure adjustment gauge.

CONTROL SYSTEM
- Automatic tone arm lift at end of record.
- Semi-pneumatic cueing and indexed (7", 10", 12") tone arm control at start or at any point during play.
- Automatic fool-proof glide to and from record groove.
- Cueing lever incorporates positive tone arm lock.

PHYSICAL DIMENSIONS
- Width: 13"
- Depth: 103/4"
- Height: 3" above mounting board
- 3½" below mounting board

The specifications prove it: There’s a new concept in turntables—the PE-34 (backed by 50 years experience) ... just like other Elpa Marketing Industries products that have set new hi-fi standards.

Don’t let the price tag fool you ... you can’t do better at $72. (± $25.00 or 35%)

Stop in at your Franchised Elpa dealer and ask to see the new PE-34 in action.

Price includes: Full Year Guarantee, Strobe Disc and 45 rpm adapter. Satin Walnut base optional at $6.00. Base dimensions: 4" High x 15" Wide x 12½" Deep.
These new Altec PLAYBACK speaker systems contain all of the elements that are essential to give you no-compromise big sound. Each is large enough to hold a low-cutoff sectoral horn which permits the simplicity of a two-way system with a single crossover. Use of a 90° horn provides perfectly controlled, wide angle dispersion of both the mid and high frequencies to achieve big sound. This subject of "big sound" is fully covered by both proponents in THE GREAT DEBATE, mentioned elsewhere in this advertisement.

Both the 843A "Malibu" and the "Voice of the Theatre" Systems are full-size, floor-standing PLAYBACK units with impressive cabinets in walnut. They are styled to do credit as an impressive furniture piece in any living room. In fact, these are loudspeakers that you can display proudly...and listen to by the hour.
NEW FULL-SIZE PLAYBACK SPEAKERS FROM ALTEC
NEED ABOUT 3 SQ. FT. OF FLOOR SPACE TO GIVE YOU
NO-DISTORTION MID-RANGE WITH LOWS & HIGHS TO MATCH

THE ALL-IMPORTANT MID-RANGE

Almost any good speaker has good lows and highs because so much attention has been given to these extremes of the frequency spectrum in recent designs. But very few speakers have really good mid-frequencies. Yet, it is the mid-range that holds the primary attention of the recording engineer because this region embraces 90% of all musical material. Most fundamentals and all of the rich lower harmonics are in this critical range. It is the meaty part of music and is essential for life-like reproduction.

When you judge one of the new Altec PLAYBACK speaker systems through A-B comparison listening tests, we urge you to especially notice their clean, no-distortion mid-range. Their smooth, no-distortion reproduction in this region makes a subtle, though readily discernible, difference—a difference that explains why so many major recording studios depend on Altec PLAYBACK speakers for monitoring and playback in a continual comparison of the live rendition to the freshly recorded version.

While listening, ask to hear a full orchestration of many pieces performing through a wide dynamic range. This is the acid test for good mid-range. It will quickly expose any existence of "mid-range mudiness"—a distortion which has crept into many speakers of recent design due to the attention concentrated on highs and lows, with little or no regard for the mid-range.

THE GREAT DEBATE ABOUT BIG VS. LITTLE SPEAKERS

As was inevitable, the controversy about big vs. little speakers had to be settled sooner or later. Now, the tiresome argument is over, with expert proponents stating the case for each side. We're of course referring to "THE GREAT DEBATE" which appeared in the August issue of HiFi/Stereo Review, titled "IS A GOOD BIG SPEAKER BETTER THAN A GOOD LITTLE SPEAKER?". If you haven't yet read it, just let us know and we'll gladly send you this reprint giving both sides.

Not surprisingly, we were asked to speak up for the affirmative—that a good big speaker is indeed much better than the best little speaker. We are certain that if you want the best there is in musical reproduction you will give up some floor space for our good full-size speaker systems. Write Dept. SR12.

TAKE A CUE FROM THE RECORDING & BROADCAST STUDIOS: SELECT A NO-COMpromise SPEAKER SYSTEM

Professionals in sound—people whose careers as performers, directors, and recording engineers depend on the quality of their equipment—have for years relied on Altec PLAYBACK equipment in their studios. In fact, in the days before the term "hi fi" was ever coined, Altec was already producing studio-quality PLAYBACK components. And, as another fact, high fidelity as we know it today was born right there in those recording, broadcast, and motion picture studios.

You can bet your bottom dollar that the studio professional not only expects, but knows where to get sound quality that approaches the "live"... and no compromises tolerated. Perhaps that's why so much of our income comes from the professional and commercial sound industries. Here's an example of our latest design for the professional market:

NEW SPECIFICALLY FOR RECORDING & BROADCAST USE:
STUDIO VERSION OF THE "MALIBU" & "CARMEL"—Designed especially for recording and broadcast studios, the 844A Monitor & PLAYBACK Speaker System contains the same speaker components as the 843A "Malibu" and 838A "Carmel". Comes in studio grey cabinet with sectoral horn mounted below the low frequency speakers so that the unit may be mounted above the observation window in studio control rooms. Dimensions: 24" H, 31" W, 16" D. Price: $327.00.

604 "DUPLEX" IS BACK!
The most famous single speaker in history of high fidelity is back, packed with all the new engineering knowledge that has been acquired since its original design two decades ago. The new SUPER "Duplex" 604E is an updated version of the original and famed 604A, B, C, and D Models (you'll find more of these speakers still in use in quality recording and broadcast PLAYBACK and monitoring than any other speaker ever made).

The SUPER "Duplex" offers highest efficiency like all Altec speaker systems with full capability of reproducing the entire dynamic range of music with today's medium-power transistor amplifiers. Also check the 604E for purity of mid-range, exceptional attack time, and no-distortion 20-22,000 cycle frequency range. With a dual magnetic structure that weighs 26 pounds, 13 ounces, the SUPER "Duplex" 604E is the most efficient speaker offered to the home music market. Price: $199.00 including two-section dividing network.

For optimum performance, we recommend the "Malibu", furniture-styled enclosure for the SUPER "Duplex". It is available as the 855A Cabinet and comes with pre-cut baffles for easy installation. The 855A is priced at $126.00 and is also recommended for use with any other 15" Altec speaker.

DECEMBER 1964
CIRCLE NO. 4 ON READER SERVICE CARD
Printed-Circuit Boards

Q. One of the major television manufacturers makes a big point of the fact that its receivers do not use printed-circuit boards. All sorts of disadvantages of the boards are cited, including difficulty in servicing and short life expectancy. Does this also apply to printed circuits in hi-fi equipment?

A. The poor reputation of printed-circuit (p-c) boards derives mostly from their early use in television sets, when they had a tendency to dry out and crack. A crack in a printed board is serious since this usually breaks the copper-foil "wires," and repair requires replacement of the entire p-c board. This, plus the difficulty of troubleshooting circuits that are almost impossible to trace visually, was responsible for the initial bad reputation of p-c boards.

Since those early days, however, the reliability of the boards has improved considerably. As far as high-fidelity equipment is concerned, the p-c boards used are usually of top quality and are much smaller than those found in television sets. This last factor is important since it not only minimizes the mechanical stresses on the boards, but makes troubleshooting and repair far easier. In short, the absence or presence of a p-c board in a piece of hi-fi equipment today has no bearing on the unit's over-all quality or life expectancy.

Odd Resistor Values

Q. I wonder if you could explain something that has puzzled me ever since I started assembling kits. Why are the values of resistors expressed in odd figures like 68, 470, and 47,000 ohms, rather than in round-number values like 70, 500, and 50,000 ohms?

A. Electronic circuits require resistance values ranging from under 1 ohm to over 20 million ohms, but it is obviously impractical to make resistors in 20 million different values. It was therefore decided some time ago (by the Electronic Industries Association) to divide the range of values by increments of powers-of-ten (0.1, 1.0, 10, 100, 1000, and so forth) and to subdivide each group into approximately equal steps. These equal steps are not in equal numbers of ohms, but in equal increments of ohms. It is this practice that causes whole-number ohm values such as 68, 470, and 47,000 to be preferred.

Also check the impedance of your tweeter. It is best to use a tweeter that has the same or higher impedance than your woofer. If a tweeter's impedance is much below that of the woofer, the tweeter may draw excessive energy from the amplifier and be overloaded to the point of distortion, and possible damage. It is probably safe to use a 4-ohm tweeter with an 8-ohm woofer or an 8-ohm tweeter with a 16-ohm woofer, but never use a 4-ohm tweeter with a 16-ohm woofer. If you already have a 4-ohm tweeter that you want to use with a higher-impedance speaker, you might try placing a 4-ohm or higher value resistor in series with the tweeter to change its impedance and to reduce it to the desired level with a level control.
"Professionals in the recording and broadcasting industries know that Altec has been making solid-state amplifiers for some time now—for professional use only. The Three Sixty reflects the experience Altec has achieved in making these amplifiers."—Audio Magazine, April, 1964

At a time when most amplifiers were of the vacuum-tube type, we marketed our first all-transistor amplifier. Then, five years later, we presented the Three Sixty. In the past year, it has been proved again and again by satisfied users. Because you asked for it, we have improved the styling of the instrument, making it more modern, good-looking, more convenient to operate.

CHECK THESE REASONS. YOU'LL SEE WHY THE ALTEC Three Sixty IS SO SUPERIOR.

Altec's wide experience in designing solid-state circuitry for audio frequencies has given us a lead over other companies. This experience made the Three Sixty possible. Over five years ago, we designed the first all-transistor amplifier (the 351A) for high quality applications. We also developed the first successful all-transistor repeater amplifiers for use by telephone companies. We also were the first to combine transistors with vacuum tubes in the famous 708A "Astro".

All-transistor circuitry of the Three Sixty offers greatest possible durability because, unlike heat-generating vacuum tube amplifiers, it always runs cool. Hence, there's no deterioration of quality caused by heating and cooling of vital circuit components.

The Three Sixty is a genuine Altec PLAYBACK Component. It is part of a line that has won acceptance by leading recording and broadcast studios. There's a world of difference between equipment designed for and used by professionals, and ordinary hi-fi components made strictly for home use.

You'll like the looks as well as the sound of the Three Sixty. And, its size is smallest of any integrated stereo amp/preamp on the market today. The Three Sixty is priced at $389.00; matching cabinet $11.00 extra.

In addition to those shown below, other studio-users of Altec PLAYBACK Equipment include: ABC, Universal Recordings, Columbia, Sam Goldwyn, Glen Glenn, United Walton, and just about every major concert hall, auditorium and theatre in the nation, including all Cinerama Theatres. At the New York World's Fair, some of the exhibitors who selected Altec equipment include I.B.M., Du Pont, Chrysler, Ford, General Electric, Heinz, Cinerama, Billy Graham, Texas Pavilion, Johnson's Wax, and many more.

Visit your nearest Altec Distributor (Yellow Pages) and hear the finest equipment in the world of sound: Altec PLAYBACK Equipment. Be sure to ask for your courtesy copy of Altec PLAYBACK and Speech Input Equipment for Recording and Broadcast Studios. Although prepared specifically for the recording/broadcasting industry, the conclusions to be drawn about your own home music center will be obvious. Or, for free copy, write DEPT. SR12B

The Three Sixty is used by Dave Sarser's and Skitch Henderson's famous "Studio 3" in New York.

Perfect partners! Rack-mounted Altec Three Sixty works with Altec 314A FM Multiplex Tuner at Sim-O-Rama Recording Studio, N.J.

The film production service at Virginia State Department of Education relies on Three Sixy for power in conjunction with other Altec PLAYBACK amplifiers and controls.

ALTEC LANSING CORPORATION

A Subsidiary of Ling-Temco-Vought, Inc.
ANAHEIM, CALIFORNIA

CIRCLE NO. 24 ON READER SERVICE CARD
FOR CHRISTMAS? KOSS STEREOPHONES!

"I received a set of KOSS Stereo headphones for Christmas, and immediately realized they are the answer to a dream I've had for over 30 years. They fulfilled a need that has been gnawing at me since I first played my grandmother's Victrola and sat with my head inside the horn. They so delighted my wife (who doesn't particularly care for music) that I had to buy her a pair or go without mine. A musician friend of mine bought two pairs as soon as he heard mine. Thanks again for developing KOSS Stereophones, they're great and my landlord is pretty glad I have them too."

Fred J. Dehler
Brooklyn, New York

"I have been given a pair of your Stereophones for Christmas. I cannot remember when anything has met with such enthusiasm in our house. My son, who is a serious oboe student, listened to several disks and remarked 'until now we had not been hearing stereo'."

Otto J. Svejda
New Buffalo, Michigan

"Santa brought us a set of KOSS Stereophones for Christmas. If you never heard recorded stereophonic music via headphones, you are due for a real listening experience. With all extraneous noise blocked out, your skull becomes the living room, or concert hall. The sound is fantastic."

Harold T. Flartey
Dover, N. J.

KOSS PRO-4 STEREOPHONES $45.00

also manufacturers of famous Rek-O-Kut turntables

KOSS REK-O-KUT
2227 NORTH 31ST STREET
MILWAUKEE 8, WISCONSIN

(R) in series with the crossover capacitor (C) as shown in the diagram. If the efficiency of the tweeter is high enough, its output level may still match that of the main speaker.

Record Static

Q: When playing records, my system produces static-like noise. The noise occurs only three or four times a minute and is not loud, but it is annoying just the same. What can I do about it?

Robert James
Tucson, Ariz.

A: I suspect that your problem is caused by the accumulation and discharge of static electricity. There are several ways to get rid of static electricity. First try connecting a wire from the base of the turntable to the preamplifier (or integrated amplifier). If this doesn't solve the problem, you can employ a Dust Bug, Hush Brush, or other type of record cleaner that uses a moistened pad. Radioactive ionizing gadgets, such as the Audionics Stat-Elim, or one of the various Statemaster devices, are also quite effective, and are available from most large hi-fi stores. See "Record Wear and Care" in the November 1963 HiFi/Stereo Review for further information on record care.

Fuse Blowout

Q: The power-line fuse in my amplifier blows out about every other time I turn on the amplifier. Since I have had some electronic training in the Army and as there is no reliable serviceman nearby, I'd like to try to fix it myself. Do you have any suggestions?

Charles Carlton
Ames, Ia.

A: The first thing to check is whether you are using the correct fuse, not only in rating, but in type. If your amplifier requires a 3-amp slow-blow fuse, the current surges that take place when your equipment is turned on may cause an ordinary fuse to burn out. When you first turn on the amplifier, observe the output tubes for signs of excessive current drain. If the plates of one or more of the tubes glow red, this may mean that the tubes themselves are defective or that they are biased incorrectly. An incorrect bias may result either from a shorted coupling capacitor at the grid of the red-glowing tube or simply a mis-set bias control.

If the fuse is of the correct type and the output tubes are biased correctly, the next thing to do is to locate the shorted component that is causing the excessive current drain that blows the fuse. First, remove the amplifier's rectifier tube. If repeated switching on and off with the rectifier tube out of the socket does not
If, in 1631, you went to rent a horse from Thomas Hobson at Cambridge, England, you took the horse that stood next to the door. And no other. Period. Hence, Hobson's Choice means No Choice.

And, as recently as 1961, if you went to buy a true high fidelity stereo phono cartridge, you bought the Shure M3D Stereo Dynetic. Just as the critics and musicians did. It was acknowledged as the ONLY choice for the critical listener.

Since then, Shure has developed several models of their Stereo Dynetic cartridges—each designed for optimum performance in specific kinds of systems, each designed for a specific kind of porte-monnaie.

We trust this brief recitation of the significant features covering the various members of the Shure cartridge family will help guide you to the best choice for you.

**ITS FUNCTION, ITS FEATURES...**

The ultimate! 15° tracking and Bi-Radial Elliptical stylus reduces Tracing (pinch effect), IM and Harmonic Distortion to unprecedented lows. Scratch-proof. Extraordinary quality control throughout. Literally handmade and individually tested. In a class by itself for reproducing music from mono as well as stereo discs.

**IS YOUR BEST SELECTION**

If your tone arm tracks at 1½ grams or less (either with manual or automatic turntable)—and if you want the very best, regardless of price, this is without question your cartridge. It is designed for the purist... the perfectionist whose entire system must be composed of the finest equipment in every category. Shure's finest cartridge. $62.50.

If you seek outstanding performance and your tonearm will track at forces of ¾ to 1½ grams, the M55E will satisfy—beautifully. Will actually improve the sound from your high fidelity system! (Unless you're using the V-15, Shure's finest cartridge.) A special value at $35.50.

If you track between ½ and 1½ grams, the M44-5 with .0005" stylus represents a best-buy investment. If you track between ½ and 3 grams, the M44-7 is for you... particularly if you have a great number of older records. Both have "scratch-proof" retractile stylus. Either model under $25.00.

For 2 to 2½ gram tracking, especially fine if your present set-up sounds "muddy." At less than $20.00, it is truly an outstanding buy. (Also, if you own regular M7D, you can upgrade it, for higher compliance and lighter tracking by installing an N21D stylus.)

If floor vibration is a problem, fixes your records. Models for Garrard Laboratory Type "A", AT-6, AT-60 and Model 50 automatic turntables and Miracord Model 10 or 10H turntables. Under $25.00 including head shell, .0002" diamond stylus.

If cost is the dominant factor. Lowest price of any Shure Stereo Dynetic cartridge (about $16.00) with almost universal application. Can be used with any changer. Very rugged.
Eyeglass wearers see this through ordinary 8x30 binoculars

they see this much more through the revolutionary new Zeiss Dialyt 8x30 B!

Carl Zeiss introduces yet another new refinement to their world-famous binocular designs. Utilizing a new arrangement of lenses and prisms, the Zeiss Dialyt 8x30 B lets you see a full field of vision with or without your glasses or sunglasses. It gives you 4 times as much area with your glasses on as ordinary binoculars. What’s more, its unique optical system makes possible a far more elegant and slender silhouette than ever before. See these compact binoculars at your specialty camera dealer or sporting goods store. Look through them—with your glasses on. You’ll see at a glance that the Zeiss Dialyt B is the ultimate in design and performance. Write Dept. C-26 for “How to Select the Right Binocular.”
Fisher StrataKits 1965

The Fisher KM-60 StrataKit
Wide-Band FM-Multiplex Stereo Tuner (1.8 µv IHF)
$169.50 (walnut cabinet, $24.95; metal cabinet, $15.95)

The Fisher KX-100 StrataKit
50-Watt Stereo Control-Amplifier
$129.50 (walnut cabinet, $24.95; metal cabinet, $15.95)

The Fisher KX-200 StrataKit
80-Watt Stereo Control-Amplifier
$169.50 (walnut cabinet, $24.95; metal cabinet, $15.95)

The Fisher K-1000 StrataKit
150-Watt Laboratory Standard Stereo Power Amplifier
$279.50

The Fisher KS-1 StrataKit
Slim-Line 3-Way Loudspeaker System (with 10” Woofer)
$59.50 in unfinished birch ($64.50 in unfinished walnut)

The Fisher KS-2 StrataKit
Slim-Line 3-Way Loudspeaker System (with 12” Woofer)
$89.50 in unfinished birch ($94.50 in unfinished walnut)

Now anyone can build just as fine components as Fisher.

The exclusive Fisher StrataKit method makes it so easy to build a high fidelity kit that all differences between the experienced and inexperienced kit builder become totally irrelevant. Whether you are a skilled electronic technician or a fashion model, you can now build a Fisher component that is every bit as fine as a factory-wired unit.

Assembly of a Fisher StrataKit takes place by simple, error-proof stages (Strata). Each stage corresponds to a separate fold-out page in the uniquely detailed instruction manual. Each stage is built from a separate packet of parts (StrataPack). Major parts come already mounted on the extra-heavy-gauge steel chassis. Wires are precut for every stage—which means every page. All work can be checked stage-by-stage and page-by-page, before proceeding to the next stage. You can't help ending up with a faultless Fisher component when you build a StrataKit.

To receive valuable Fisher literature without charge, use coupon on page 29.
JUST LOOKING
...at the best in new hi-li components

- **Alliance** is producing the Model G-225 antenna-rotator control system. The transistor phase-sensing bridge circuit in the control box provides constant synchronization between the control (shown) and the outside motor, which rotates the roof antenna. Ressembling a small desk clock, the control unit is styled in brown and white high-impact plastic. List price of the system, including control unit and rotator, is $59.95.

- **Artisan's** new kit organ, the three-manual Cinema, is the latest and smallest addition to its line. Measuring only 10 inches deep and 16 inches high, it has free full 64-note manuals and a concave 32-note clavier. Other features include inter-manual couplers, twin expression pedals, and independent vibrators. The console style, modified for the home, is influenced by the romantic organ of the silent movie era, and offers a stop list of authentic theater voices. Chimes, orchestra bells, vibraphone, and hand box are optional. A variety of finishes and matching tone cabinets are available.

- **Bogen** introduces the RT6000, a new stereo FM receiver with a 60-watt HIF rating transistor amplifier. In addition to the usual bass, treble, balance, and volume controls, there are six sets of front-panel slide switches. These select mono or stereo mode of operation, speakers on or off, stereo reverse or normal, and tape monitoring. The FM tuner portion of the receiver is automatically switched to stereo when a stereo broadcast is received, is equipped with a tuning meter, and has a 2-microvolt sensitivity for 20 db of quieting. Stereo separation is better than 20 db from 50 to 10,000 cps. Price: $399.95.

- **Empire** introduces the Model 9000 Royal Grenadier speaker system, which incorporates a 15-inch mass-loaded woofer with floating suspension, 1-inch voice coil, and an 18-pound ceramic magnet. The woofer faces downward and radiates through a front-loaded horn with a circular-aperture throat. The mid-range direct radiator and low-frequency is a 12-inch dome tweeter employing a die-cast divergent acoustic lens for broad sound propagation. The frequency range is 20 to 20,000 cps, and the power-handling capacity on music is 100 watts. The highly damped walnut cabinet is constructed of stain-resistant polyester laminate and is available with a marble top for $10 additional. Dimensions are 22 inches in diameter, 29 inches in height. Price: $250.

- **Goodmans** introduces the Maximus 1, a miniature two-way speaker system that has a frequency response of 45 to 18,000 cps. Price: $275.


---

GUARANTEED to be the most effective, best built FM antenna made.
GUARANTEED to bring in 85% of all FM stations in a 200 mile radius when used with the Stereotron antenna amplifier.
GUARANTEED you will be 100% satisfied or your money back.

The Winegard Stereotron FM antenna will improve the performance of even the most expensive FM or FM stereo tuner. It is the most powerful receiving device you can own and will bring in FM signals up out of the hiss and noise with utmost clarity. Stereotron has an exceptionally high front to back ratio which shuts out multi-path distortion. Has extremely high gain and is highly directive.

If you want the very finest in FM or FM stereo sound, get a GUARANTEED Stereotron today.

STEREOTRON ANTENNA Model SF-8 — $22.65. Stereotron nuvistor amplifier Model AP-300—input 300 ohms, output 300 ohms. Can be used with any FM antenna—$39.95.

Amplifier Model AP-375 for use with coax cable, input 300 ohms, output 75 ohms — $46.95.

Write now for technical specs, gain charts, polar patterns, VSWR, etc., and get FREE FM STATION LOG AND MAP.

World's most complete line of FM and TV antennas, FM-TV couplers and amplifiers.

**Winegard Co.**
3018 F Kirkwood Blvd., Burlington, Iowa
CIRCLE NO. 65 ON READER SERVICE CARD
A cool 100 watts
(with low-heat Fisher transistor-amplifier design)

The new Fisher TX-300 solid-state stereo control-amplifier.
Size: 15\(\frac{1}{2}\)" x 4\(\frac{3}{16}\)" x 11\(\frac{3}{4}\)" deep. Weight: 24 lbs. Price: $329.50. Cabinet: $24.95.

A total IHF music power output of 100 watts is no mean accomplishment in a single-chassis stereo control-amplifier—but it is not unique. High power at low distortion can also be obtained with vacuum tubes. A really cool chassis can not, That takes transistors. So does lightweight, space-saving design without compromise. (The TX-300 weighs only 24 pounds and is less than 12 inches deep, despite its rugged, conservatively rated parts.) And the virtual certainty of unlimited life without the slightest service problems takes not only transistors; it takes Fisher solid-state circuitry, engineered for Fisher reliability.

One reason for the light weight of the Fisher TX-300 is the absence of output transformers. This has the even more important benefit of removing all limitations of bass performance and of transient response ordinarily imposed by transformer characteristics.

Another remarkable feature is that each channel has four output transistors for conservative operation at high power, instead of the conventional two. The rated power of 100 watts is obtained at 8 ohms, but nearly as much power is available at either 4 or 16 ohms, via the special impedance selector switch. The IHF power bandwidth (half power at low distortion) extends from 12 to 50,000 cps!

As for preamplifier and control features, the TX-300 provides 16 inputs and 10 outputs to accommodate every type of program source, recording instrument, loudspeaker or headphone—plus 21 controls and switches for total control of the sound by the listener.

Next time you are near a Fisher dealer, make a point of auditioning the TX-300. Even if you are not ready to buy it, you are entitled to hear what you are missing.

---
FREE: $2.00 VALUE! Send for your free copy of The New Fisher Handbook. This entirely new, revised and enlarged edition of the famous Fisher high fidelity reference guide is a magnificent 76-page book. Detailed information on all Fisher stereo components is included.

Use coupon on page 29.

Fisher Radio Corporation
21-40 44th Drive
Long Island City, N. Y. 11101
there's no smoke like a pipe

Kaywoodie Butane Pipe Lighter
Upright for cigars and cigarettes. Tilt for large, soft flame that won't scorch your pipe. $9.95 and up with free miniature refill. Table models $14.95 and up. Guaranteed against any mechanical defect for life of lighter in accordance with written guarantee.

Kaywoodie Tobacco

20,000 cps and a continuous power-handling capacity of 15 watts. A miniature woofer crosses over at 1,900 cps to a back-loaded high-frequency tweeter. The enclosure measures only $10^{3/4} \times 5^{1/2} \times 7^{1/4}$, and is suitable for shelf or wall mounting. The cabinet is finished in oiled walnut on all sides. Price: $59.50.

**circle 184 on reader service card**

- **JFD** is marketing four new log-periodic antennas designed for stereo FM reception. The log-periodic antennas have front-to-back ratios (up to 26 db) that are superior to present FM Yagis. The narrow beam widths of the log-periodic and its minor lobe levels (less than 21.6 db) help reject distortion-producing reflected signals. The antennas are factory-assembled for speedy installation. The dipoles are constructed of 1/2-inch aluminum tubing, and the transmission-line transformers and the feeder harness are made of solid aluminum rods. Top-suspension crossarm supports permit close-up rotator mounting and resist 100 m.p.h. winds. The antennas are gold anodized for corrosion protection and eye appeal. The four antennas range in price from $19.95 to $19.95.

**circle 185 on reader service card**

- **Lafayette** announces the Model LA-230 WX, a 21-watt AM, stereo FM receiver. The FM tuner section employs a tuning meter, has a frequency response of 20-20,000 cps ± 2 db, and a sensitivity of 3 microvolts for 20 db of quieting. A stereo search circuit sounds a tone when the receiver is tuned to a station broadcasting stereo. The amplifier has a power output of 12 watts per channel, and hum and noise on high-level inputs is 63 db below full output. There are input jacks for magnetic phono, crystal phono, and auxiliary. Output jacks are provided for stereo tape recording and headphones. Size is $17^{1/2} \times 5^{1/2} \times 12^{1/4}$ (including legs and metal case). Price: $139.50.

**circle 186 on reader service card**

Errata: The correct price for the Benjamin Model 200 table-top music system is $229.50, and the price of the matched speakers is $49.50 each. The prices were incorrectly listed in the October, 1964 "Just Looking" as $299.50 and $49.95.
The Fisher 500-C: world's biggest seller.

(In the end, the public always knows best.)

By now, most of the major high fidelity manufacturers have tried the all-in-one stereo receiver idea. Yet the Fisher 500-C continues to outsell all other receivers (and tuners and amplifiers) throughout the world. There must be a reason.

Individuals may come to wrong conclusions about competitive products; but the public, collectively, never does. It has an unerring way of selecting the top value. This is a subtle but inexorable process, based on the reputation of the maker, important little differences in performance, certain exclusive technical features, trouble-free service over the years and a host of similar considerations. It happens to Fisher high fidelity components all the time.

Of course, the 500-C is a most impressive instrument even if you know nothing about its sales record. On one magnificent chassis, only 17½” wide by 13½” deep, it combines all of the electronics of a professional-quality Fisher stereo system—tuner, amplifier and controls. The FM-stereo tuner section has a sensitivity of 1.8 microvolts (IHF Standard) and features silent, automatic mono-stereo switching via the famous Fisher STEREO BEACON*.

The power amplifier has a total IHF Standard music power output of 75 watts. And the price is still only $389.50. (Walnut cabinet available at $24.95.)

FREE! $2.00 VALUE! Send for your free copy of The New Fisher Handbook. This entirely new, revised and enlarged edition of the famous Fisher high fidelity reference guide is a magnificent 76-page book. Detailed information on all Fisher stereo components is included in the new catalogue section.

Use coupon on page 29.

Fisher Radio Corporation
21 44th Drive
Long Island City, N. Y. 11101
DEFINITIONS—XI

A quick dash to the end of the alphabet, and we will wind up this guided tour through the penetrable thickets of audio terminology.

- **Tweeters** are loudspeakers that specialize in reproducing high notes. Since the physical requirements for producing high notes differ from those for producing bass, audio designers favor a division of labor in speaker systems, entrusting the top notes to tweeters while the lower range is handled by woofers (see below). Sometimes there is a 3-way division of frequencies, which requires the use of a special mid-range unit also. By thus dividing the sound spectrum between two or more speakers, treble and bass are kept from interfering with each other, and intermodulation distortion within the loudspeaker is avoided. To a great extent, the quality of the tweeter determines the over-all character of sound in a speaker system. A good tweeter must be free of spurious resonances (response peaks) that would cause a shrill or otherwise harsh sound. Moreover, it must scatter the highs broadly, spreading them evenly throughout the room. Wide-angle treble dispersion adds greatly to the stereo effect and to smoothness of sound. Various methods are used in tweeters to achieve wide dispersion: dome-shaped diaphragms, flared horns, or sound-deflecting structures mounted in or in front of the tweeter cones.

- **Watts** are the basic units by which electric power is measured. For instance, when you ask for a 100-watt light bulb, you are using the term to describe the power consumption of the bulb—the amount of electricity it uses. In audio, however, the term is most often used to specify not the amount of electricity needed to keep an amplifier running, but the amount of audio power the amplifier is capable of feeding to the loudspeakers. This wattage is known as an amplifier's power output.

- **Woofers** are loudspeakers specifically designed to reproduce the low-frequency notes of the audio range. These bass speakers are bigger and heavier than tweeters because size and weight help them to operate more efficiently at low frequencies. A high-quality woofer should be able to reproduce the lowest notes of the orchestra (about 35 cps) without difficulty. A loudspeaker system's ability to handle even the deepest notes without faltering adds a special feeling of depth and warmth to reproduced music. A woofer should be free of frequency doubling—the adding of gratuitous harmonics to the fundamental notes, thereby giving the bass a false coloration. A good woofer should also have good transient response—i.e., reproduce heavy bass notes sharply and clearly without booming or blurring. In order to do this, a woofer must be mounted in a properly matched enclosure, for without an effective enclosure even the best woofer will not sound good.

- **Wow** refers to a waver in pitch caused by an unsteady turntable or tape speed. Wow can occasionally be cured by replacing the worn rubber drive parts in a defective turntable or tape deck. However, in poorly made components, the ailment is endemic, and the only cure is to replace the entire unit.
"The XP-10 is truly a step forward in smoothness, transient response and musical quality. It handled percussion, piano, strings, brass, and what have you, as cleanly and precisely as any speaker system we know."

—AUDIO Magazine, March, 1964

"The response range of the XP-10 was excellent and among the widest encountered in any speaker... The sound had clarity, transparency, tonal balance, excellent transient response, fine separation of instruments. The bass had no hang-over and plenty of impact. The midrange and highs were airy. Voices sounded natural."

—HIGH FIDELITY Magazine, October, 1964

**Fisher XP-10**

- Woofer: 15" free-piston; 19 cps free-air resonance; 2" voice coil with exclusive eddy-current damping; 6-lb. magnet structure.
- Midrange: 8" cone; 1½" voice coil; 5½-lb. magnet structure.
- Tweeter: 2" soft-cotton dome type; 5½-lb. magnet structure; 14,000 gauss flux density.
- Crossover: Full 3-way LC-type network with air-core coils; crossover points at 200 and 2500 cps.
- Impedance: 8 ohms.
- Frequency Response: 28 cps to beyond the limits of audibility.
- Power Requirement: 10 watts minimum; 60 watts maximum (program material).
- Cabinet: 30½" high, 24½" wide, 14½" deep; Scandinavian walnut.
- Weight: 80 lbs.
- Price: $249.50

**FREE! $2.00 VALUE!**

Send for your free copy of The New Fisher Handbook. This entirely new, revised and enlarged edition of the famous Fisher high fidelity reference guide is a magnificent 76-page book. Detailed information on all Fisher stereo components is included.

Fisher Radio Corporation
21-40 44th Drive
Long Island City, N. Y. 11101

The New Fisher Handbook

Fisher Radio Corporation
21-40 44th Drive
Long Island City, N. Y. 11101

**Price:** $249.50

OVERSEAS RESIDENTS WRITE TO FISHER RADIO INTERNATIONAL, INC., LONG ISLAND CITY, N. Y. 11101. CANADIAN RESIDENTS WRITE TO THE RTL ASSOCIATES LTD., MILLWOOD, ONT.
Should Sherwood's new solid-state amplifier be rated at 150 watts?...300 watts?...or 100 watts?

Audio power should be one of your major criteria of amplifier performance. The important thing is to use the same yardstick of comparison.

Among responsible component manufacturers, the commonly-accepted expression of audio power today is "MUSIC POWER"—the amplifier's output capability across the full spectrum of orchestral sound.

If you simply like to play with bigger numbers, multiply MUSIC POWER by two (the way some manufacturers do) and you get "PEAK POWER". It's exactly the same rating but it looks twice as powerful.

But the really important measurement is "CONTINUOUS SINE-WAVE POWER" with both channels operating simultaneously. This is the meaningful measurement, used in laboratory work. It separates the wheat from the chaff.

Sherwood's new S-9000 delivers 150 watts of MUSIC POWER...300 watts of PEAK POWER...and 100 watts of CONTINUOUS SINE-WAVE POWER at less than ½% harmonic distortion. (At normal levels, distortion never exceeds 0.15%).

Unequalled power—by any standard—is just one of the important engineering advances built into the new Sherwood solid-state amplifiers. Here are some more:

Military-type Silicon Transistors. Used exclusively throughout Sherwood circuitry. Twice the heat-reliability of ordinary germanium transistors. Safe for even the most confined custom installations.

Exclusive transistor short-circuit protection. (Pat. Pend.) New system virtually eliminates transistor failure or fuse replacement due to shorted speaker terminals or other improper operation.

Additional features: Phono input noise less than -65db., with no microphonics or hum. Professional Baxandall tone controls. Tape monitoring and tape-head playback facilities. Stereo headphone jack with speaker disabling switch. Glass epoxy circuit boards. Compact size—14" x 4" x 12½" deep.

Model S-9000 / solid-state, integrated stereo amplifier / $299.50
Also available in a 50 watt Music Power version as the Model S-9500 / $179.50
Walnut-grained leatherette cases for either model, $8.50

For complete specifications and new catalog, write Dept. R-12
INTERFERENCE: Most of us, at one time or another, have been plagued by strange noises in our high-fidelity systems. Such interference, when it originates outside the system’s components, can be divided into two classes: radio-frequency interference (RFI), and broadband interference caused by sparking electrical contacts. Signals from either source can find their way into an audio system in many ways, and the methods of eliminating the annoying interference they cause are equally numerous.

Unwanted radio frequencies can enter through the tuner, or directly through the amplifier or preamplifier. An FM tuner is susceptible to interfering signals in the 88 to 108 megacycle FM band, the 109 to 129 megacycle band (because of tuner image response), and to direct pickup (by the tuner’s i.f. transformers) at 10.7 megacycles. Good tuner design will eliminate most cases of interference from a powerful nearby FM station. This type of interference usually manifests itself as crosstalk, with the undesired signal either being audible in the background of the desired program or appearing at several points on the dial and totally blanking out the weaker stations. The only possible recourse, other than getting a better tuner, is to reduce the strength of the interfering signal at the receiver antenna terminals (1) by means of a resistive pad, (2) by rotating the antenna to reject the interfering signals, or (3) by installing a resonant trap in the antenna line to keep the offending signal from reaching the tuner’s input circuits.

Spurious signals (such as harmonics originating from an improperly adjusted ham-radio or Citizens Band transmitter) should of course be treated at their source. But it is not generally recognized that when radio signals are picked up by a hi-fi system, the fault in most cases lies with the hi-fi equipment. Regulations of the FCC require that ham stations as well as commercial broadcast stations keep their spurious radiation below a specified minimum.

Another form of RFI is caused by the interfering signal’s getting directly into the amplifier and coming through regardless of the setting of the preamplifier’s input selector. This condition is most likely to occur if you live fairly close to the source of the interfering signal. City dwellers are frequently plagued by signals from local ham stations, call services, and a buzz that is actually broadcast as part of a television signal. I have suffered from RFI in my own home, with my own amateur radio transmissions being detected and amplified by my power amplifier. In some cases, this type of interference can be eliminated by installing r.f. filters in the amplifier’s input circuits. In my case, removing the input cables entirely had no effect. Adding bypass capacitors (about 0.01 microfarad, 600-volt) from each side of the a.c. power line to ground, where it enters the amplifier, is another indicated treatment. Many amplifiers are already so equipped. In my case, this too had no effect on the interference I was experiencing. Having eliminated the input circuits and power line as the entry points for the interference, only the speaker leads remained to be considered. These, in my installation, were 20-foot lengths of standard rubber-covered lamp wire. Bypassing these leads at the amplifier’s speaker-output terminals had no effect, owing to the very low impedances involved. The speaker lines, acting as antennas, carried the strong r.f. signals from the transmitter into the main feedback loop of the amplifier, where they overloaded the input stage, were detected, and became audible. The best solution I could devise was to use shielded speaker lines. This greatly reduced the interference, but did not eliminate it entirely. I will probably have to use another type of amplifier to effect a complete cure.

Electrical, or sparking, interference is best treated at its source. Line filters are available for most appliances, such as electric shavers and vacuum cleaners. Some sparking sources, such as oil-burner ignition systems, are difficult if not impossible to suppress. Automobile-ignition systems are usually well suppressed, but occasionally one will override an FM signal. Nearby sparking sources may also enter the system through the amplifier or phono pickup. The treatment here is similar to that for RFI; try to reduce it at the source, then shield or filter all inputs and outputs from the system one by one until the noise is eliminated.

There is no sure-cure treatment for RFI or for electrical interference. No two cases are alike. The cut-and-
try technique remains the most practical approach to eliminating the interference.

For those with some technical background, there are two books that may be helpful in dealing with RFI problems. These are *RF Interference Control Handbook*, published by Howard W. Sams & Co., Indianapolis, Indiana, and *How to Locate and Eliminate Radio and TV Interference*, published by John F. Rider, N.Y., N.Y.

![Viking 77 Stereo Compact Tape Recorder](image)

- The Viking 77 Stereo Compact is a two-speed, four-track recorder measuring 13 x 13 x 6½ inches. Specifically designed for permanent installation in a home music system, the machine can be flush-mounted vertically, horizontally, or at any intermediate angle. A walnut base is also available for table-top use. Although the unit has built-in recording and playback electronics, the elimination of power amplifiers, speakers, and carrying case makes it possible for Viking to offer a good-quality recorder at a moderate price.

The tape-transport mechanism is controlled by a single knob, with positions labeled Rewind, Stop, Play, and Fast Forward. The 3⅛-ips or 7½-ips tape speed is selected by pulling or pushing a small knob located between the tape reels. Since the Viking 77 normally operates in a vertical position, it is supplied with rubber tape-reel retainers.

The electronic section of the Viking 77 is located below the transport. On the front panel are two microphone jacks. Twin VU meters monitor both the recording and playback levels. The separate input-level controls for the two channels also serve as playback-level controls and therefore require resetting when the mode of operation is changed. A slide switch selects stereo or mono operation. With the switch set in the mono position, only Channel 1 is activated for recording, bias and erase current both being removed from Channel 2 heads.

A single knob turns the recorder on and off and selects record or playback operation. The Record position is spring-loaded and mechanically interlocked with the transport control so that it will not remain engaged unless the recorder is in the Play mode. However, once the transport is set for Play, it is possible to switch accidentally to Record. A neon lamp glows when the machine is in the Record mode. On the rear of the unit are the high-level inputs and two outputs that deliver up to 1 volt at a moderately low impedance. Up to 5 feet of cable can be used without loss of high frequencies.

My tests of the Model 77 confirmed Viking’s specifications in almost every detail. The record-playback response was ±3 db from 26 to 15,000 cps at 7½ ips, and ±4 db from 23 to 3,000 cps at 3⅛ ips. The playback response at 7½ ips was within ±2 db of the NAB equalization curve from 50 to 15,000 cps. The signal-to-noise ratio was also very good—about 50 db at 7½ ips and 45 db at 3⅛ ips. Wow and flutter were 0.04 and 0.1 per cent, respectively. The mechanism’s rewind and fast forward times for 1,200 feet of tape were clocked at 75 seconds and a somewhat slow 5 minutes. It is apparent that the Viking 77 is rated with thorough honesty. In use tests, it performed exactly as might be expected. The sound quality at 7½ ips is excellent, with no audible faults. At 3⅛ ips, the quality is adequate for recording voice and popular or background music. Since the Viking 77 does not have separate record and playback heads, it is not possible to monitor off the tape while recording. However, a monitor signal, derived from the input, is present at the output jacks.

At its price of $239.95, the Viking 77 delivers high performance—in many ways comparable to much more expensive recorders. The appreciable cost saving achieved by eliminating some operating niceties seems to have had little effect on the machine’s audible performance. For those who would prefer a complete portable recorder, the 770 Stereo Compact is also available in a single case, with speakers and transistor power amplifiers.

For more information, circle 187 on reader service card

![Dual 1010 "Automatic Turntable"](image)

- In my review of the Dual 1009 "automatic turntable" (in January of this year), I commented on the fact that its performance was comparable to the better manual arm and turntable combinations. Dual has recently introduced the Model 1010, which is designed to deliver essentially the performance of the 1009, but at a considerably lower price. (The cost difference between the Model 1009 and the 1010 is about $30.) (Continued on page 34)
$78.00 TURNTABLE FOR A MILLIONAIRE: An article in the Summer 1963 Gentlemen’s Quarterly describes a "$3,824 stereo system for those who demand the very best that can be purchased today." The system includes both a record changer and a turntable; the turntable is the AR.

THE AR TURNTABLE was also chosen in a study appearing in the September 1963 Popular Science. This article describes three stereo systems, each selected by a panel of experts as the best in its price category. The AR turntable was the choice for both the medium-priced and the luxury systems.

A third study of high fidelity systems appears in the October 1963 Bravo. Components were chosen for optimum systems in three price categories—"bottom dollar", "middle-class" and "sky's the limit". The AR turntable was selected* for all three systems, with this explanation:

"You may notice that the same inexpensive turntable appears in the following three systems. That is because its performance hasn't been bettered at any price."

OTHER equipment reviewers have reported the AR turntable to have the lowest wow, flutter, rumble, acoustic feedback, and speed error of any turntable they had tested.**

* AR speakers were also scattered through the systems selected in these three studies—AR-3's were chosen for the top systems in Popular Science and Bravo, for the middle system ($1,273) in Gentlemen's Quarterly.

** Reprints on request. We will also be glad to send the complete component lists selected by each magazine.
The Dual 1010 is a four-speed record changer, with provision for manual operation. It is the same size as the 1009 (101/2 x 127/8 inches), which it resembles in style and construction. The 1010 has the same four-pole motor and basic drive mechanism as the 1009, but has a lighter turntable platter and does not have a vernier speed adjustment.

The most obvious difference between the Model 1009 and the 1010 is in the tone arm. The arm of the 1010 has no counterweight or calibrated stylus-force adjustment. Because of this difference in tone-arm design, the Dual 1010 must be set absolutely level to prevent undesirable side thrust on the stylus during play. Stylus force is set by a screw on the pivot assembly, which moves with distinct clicks and changes the force by 0.5 gram for each click. I verified the accuracy of this adjustment, and found that once the force was set accurately at any point with the aid of an external gauge, it could be easily and accurately changed to any other setting by counting the clicks.

The Dual 1010 has an extremely compliant spring suspension that isolates it from jarring and acoustic feedback more effectively than the suspension of any other automatic record player I have tested. With the 1010 on the bench next to the speaker, I was unable to induce any acoustic feedback, even at high volume and with maximum bass boost.

Measured by NAB standards, the rumble of the Dual 1010 was -35 db in the lateral plane and -30 db including vertical components. This low rumble figure is approximately the same as I measured on the 1009. The speeds were about 1 per cent fast at 33 1/3 and 78 rpm, 0.5 per cent fast at 45 rpm, and were unaffected by line-voltage variations from 95 to 135 volts. The wow and flutter figures were very good; wow ranged from 0.06 per cent at 33 1/3 rpm to 0.1 per cent at the other speeds; flutter was 0.02 per cent.

The tone arm had low tracking error (under 0.5 degree per inch) over the entire record surface, and tracking force changed by less than 0.2 gram with a 1-inch stack of records on the platter. The changer mechanism operated well at 1 gram with no evidence of side thrust on the arm, provided the player was level. This means that the Dual 1010 can be used with practically any cartridge on the market. Its change cycle was about 12 seconds, and the mechanism was very smooth and quiet at all times, whether changing or playing.

The Dual 1010 offers a very high level of performance at its price of $69.50. It appears to be especially suited for use in limited-space installations. This is not only because of its small dimensions, but also because it is virtually immune to acoustic feedback, even when mounted close to the speakers.

For more information, circle 188 on reader service card

---

**PML EK61 MICROPHONE**

- Capacitor microphones have long been known for their wide, smooth frequency response, and they are used almost exclusively for high-quality recording and broadcasting. Unfortunately for the amateur recordist, capacitor (sometimes called "condenser") microphones are usually very expensive, costing from $250 to $600.

The new Swedish PML capacitor microphones, distributed in the United States by Ercoca Corporation, offer the performance characteristics of more costly capacitor microphones at an appreciably lower price. The PML is available in two models, the omnidirectional EK61 and the cardioid EC61 (illustrated above). Both are tiny cylindrical units, 1 1/4 inches in diameter and 2 1/4 inches long, weighing only 1 1/4 ounces. The microphone with its built-in amplifier has an integral 10-foot cable that plugs into a special power-supply unit. This is a cylinder, 2 inches in diameter and 4 1/2 inches long, weighing 17 ounces.

The power supply furnishes a 67.5-volt polarizing voltage to the microphone, and contains a subminiature tube that amplifies the very small output voltage to usable levels. A battery power supply is also available for use when a.c. power is not available. The a.c. supply has a 5-foot power cable and a socket for the 10-foot signal-output cable. The normal output impedance is high, but other cables are available that connect to different taps on the built-in matching transformer to provide output impedances of 50, 200, or 600 ohms.

The microphone comes in a fitted case, together with a microphone-stand adapter. Accessories include a windscreen and boom or lavaliere mounts.

I checked an EK61 omnidirectional model. Because the EK61 is similar in size and shape to my calibrated laboratory microphone, I tested it by measuring the output of a loudspeaker with each microphone and comparing the results. Both curves were automatically plotted, and the difference between the curves, corrected for the known response of the reference microphone, was plotted as the EK61's frequency response.

The EK61's frequency response was very smooth, within ±3 db from 20 to 15,000 cps, the calibration limits of the reference microphone. PML rates it as ±3 db from 50 to 18,000 cps, and I have no doubt that it meets that specification handily. Its output level was almost identical to that of the reference microphone, and sufficient to drive almost any tape recorder.

Recordings made with the EK61 demonstrated that its sound was indistinguishable from that of the much more expensive reference microphone, without background noise, hum, or any detectable coloration. There can be no doubt that the EK61 brings fully professional performance within the reach of the serious audio hobbyist.

The price of the omnidirectional EK61 is $99.50, and the cardioid EC61 is $109.50. The a.c. power supply is $49.50, and the battery supply is $39.50.

For more information, circle 189 on reader service card
ever felt confused about adding tape to your music system?
It's really quite simple. Jaunt over to your Viking dealer. He'll cheerfully explain the virtues of tape recording. And he'll show you a Viking model designed to play tape, or to record and play, or to play forward and reverse — automatically.
Then you pick the Viking model you like best with complete confidence because you know that each is MADE BY SKILLED AMERICAN CRAFTSMEN.
Karajans: Herbert von Karajan's abrupt and pyrotechnic departure from the Vienna Staatsoper is symptomatic of the backstage and box-office ailments that afflict opera everywhere in Europe today. Despite heavy government subsidies—over five million dollars a year for Vienna and over three million for Munich, for example—opera as an art form is in serious trouble. "I don't give opera a very great chance for the future," says Oscar Fritz Schuh, the Hamburg theater director who happens to be Karajan's favorite impresario. He thinks that "today's organizational forms of our big houses will have to be changed, that current institutions merely attempt to uphold something that is untenable." Karajan was trying to get away from the traditional "ensemble" company, and to introduce a kind of permanent "festival" to the Vienna State Opera, but this involved a protracted tug-of-war with his co-director, Egon Hilbert, and with the Austrian Minister of Education, Theodor Pfiff-Perecvic. Churchilling them with obstructionism and mediocrity, Karajan announced his resignation amid a great flurry of publicity. "After eighteen years of appearing in the concert hall, sixteen years in Salzburg and eight years as artistic director of the Vienna Opera I am terminating my activities in Austria on August 31st," he told the press. His secretary added ominously: "We are finished with Austria." Karajan is a spoiled, Napoleonic personality, very much accustomed to adulation as the "world's greatest conductor." Recently he told a Spiegel interviewer: "I have established such high standards in Vienna that in foreign countries people still say it is the best opera house in the world." But now, he insisted, the machinations of his opponents had reduced the institution to the status of "an old plowhorse." As for his future plans, "It has taken me just three days to get fully hooked up for the next three years. . . .

The Strauss Years: This was definitely Richard Strauss year in Germany, and the musicians of Munich, his birthplace, have left hardly a Straussian note unplayed. Eleven of Strauss' fifteen operas were given as part of the Strauss centennial season; all of his symphonic works are due for concert-hall revival; his entire output of lieder was presented on the Bavarian state radio; his earliest pieces are being resurrected by the Wilde Gungl Orchestra Society, to which both Strauss and his father belonged in the 1880's; his military marches are featured in the repertoire of the Lottlcafe-Musikkorps I of the new German army. You can buy Strauss commemorative medallions, in gold, for prices ranging up to $200, or you can toss good-luck pennies into the hinders Richard Strauss Fountain, recently erected by Munich's grateful citizens.

Dresden, where the majority of the Strauss operas had their premiere, is giving more than fifty special performances. In Salzburg Professor Erich Werba is conducting a course for singers and accompanists on "Richard Strauss and His Time." In Vienna, along with a dozen grand-theatrical works and a cycle of lieder evenings, three lesser-known operas have had notable revivals: the youthful Feuerwehr ("Fire-Famine") at the Volksoper; the middle-period Die Frau ohne Schatten at the Staatsoper, and the late Dubhe, at the Theater an der Wien. Karl Böhm conducted Daphne, and Deutsche Grammophon was on hand to tape the dress rehearsal and two performances, from which an album will be pieced together. Hilde Gueden, James King (a tenor from Dodge City, Kansas), Fritz Wunderlich, and Paul Schöffler have leading roles.

Since Karajan's departure, music everywhere in Europe has appeared in the bookshops, including biographies by Walter Thomas (R. S. and His Contemporaries) and Heinrich Kralik (R. S. World Citizen of Music), as well as the collected correspondence between the composer and Clemens Krauss. None of these volumes, however, sheds much light on Strauss's ambiguous and still unsatisfactorily explained relationship to Hitler and the Nazis—a phase of his life that is always glossed over, ostrich-like, by his apologists.

Atypewriter Music: Europe's most successful piece of avant-garde music is Rolf Liebermann's automatgyed for business machines, Les Echoueurs, which proved to be the star attraction of the trade and commerce exhibit at the Swiss National Exposition in Lausanne. Liebermann, best known in the U.S. for his "Concert for Jazz Band and Symphony Orchestra," has scored this percussive opus for 156 office machines and mechanical devices, including typewriters, adding machines, cash registers, perforators, tape machines, telephones and what-have-you, led by a computer with a mammoth beat. The whole thing takes less than three minutes, but it points the way to a solution of all those problems with temperamental prima donnas and dictators of the baton.

Comeback: The sound that has struck me most forcibly on recent visits to Germany is the incessant and inescapable hip-two-three-four of the military marches that are being played everywhere—in beer halls and tea rooms, on radion and jukeboxes, and on Sunday afternoons in the park. During the post-war years, popular music was briefly demilitarized, but now the old march tunes are solidly back in favor as staple items of the local musical diet. German record companies report that some of their biggest best-sellers are march-music issues with titles like Come On, Kameraden—latest sales estimates, ten million discs—played by various bands of the Bundeswehr or the police force. In any friendly neighborhood beer cellar you can listen to para-military bands blaring out the Hobenfräthermarsch while dozens of haggard customers mug along with the tune, tapping out the rhythm with their beer glasses. And out along the country roads it is not at all unusual to meet platoons of infantry shouting their S.S.laulard.
New Scott Solid-State Amplifier Passes Rugged Torture Tests

Now you can own a powerful 80 watt solid state amplifier constructed to standards unique in the high fidelity industry. The new Scott 260 uses rugged pre-tested heavy-duty components, including massive heat sinks, heavy printed circuit boards and new silicon output transistors. Critical electrolytics are hand selected and have operating capabilities far exceeding circuit requirements.

To insure the thoroughness of its quality control procedures, H. H. Scott called in transistor specialists with many years experience in the design of critical military components. Rugged tests were devised to subject the amplifier to conditions far more severe than encountered in normal use. These "torture tests" include: Applying a "step-stress-test" to a selected sample of all components used, simulating hundreds of hours of normal operating life and showing up any components that might fail; applying a unique "surge and cycle" test, normally performed only on rugged military equipment, to simulate stresses the amplifier may be subjected to under the most severe home conditions; elaborate pre-test and checkout of all components, including transistors, to insure that components will not fail in service.

As a result of these extensive procedures, the 260 now combines the amazing virtues of transistors...their compactness, cool operating temperatures and fine sound...with the ruggedness and reliability that the audiophiles have come to expect of finest Scott vacuum tube components. Backed by Scott's unique 2-year guarantee, the 260 will give you countless hours of trouble-free fine listening. Less than $260.

SPECIFICATIONS: Sine-wave power, 30 watts/channel; music power, 40 watts/channel (8 ohms); all transistor design with direct-coupled silicon output stage. Harmonic distortion less than 0.8%. Frequency response 20 to 20,000 cps. Damping factor greater than 20. Load impedances: 4, 8 or 16 ohms; full tape facilities including tape monitor and direct tape head input. Operating features: Derived center channel output; rumble filter; scratch filter; impedance selector switch. Matches all Scott tuners.

FREE! NEW 1965 CATALOG AND GUIDE TO STEREO

H. H. Scott, Inc. 111 Powdermill Road
Department 245-12 Maynard, Mass.
- Please send me your new 20-page full-color 1965 Stereo Guide and complete catalog.
- Send me complete information on new consoles by Scott...component quality in beautiful, hand-finished cabinets.

Name
Address
City Zone State

To manual or to auto...

there's never a question with the Miracord

You have just selected a record, and placed it carefully on the turntable. You can now lift the arm from the rest, guide it in over the record, and lower the stylus into the starting groove.

You can, but can your wife, your son, your daughter, or other members of your household? High fidelity is a family affair, you know. And with an arm set at about one or two grams, it can become very tricky. Even you have miscued at times.

No problem with a Miracord! You simply press a button. The lightest touch sets it off. Automatically, the arm rises from the rest, and gently sets the stylus into the starting groove. There's no skipping, no skating, no chatter. And when the record is finished, the arm returns to its rest.

It's quite something to watch a Miracord in action. Once you've gotten the feel of the buttons, chances are you'll never play it manually again. Try it.

Miracord auto-manual turntables are available in four models: the 18H plays single records only, $119.50 with hysteresis motor; Models 10, 10H and 40 also handle record stacks in automatic sequence. Models 10 and 40 with 4-pole motors, $89.50 and $79.50, respectively; Model 10H with hysteresis motor, $99.50.

Prices do not include base or cartridge. Ask your hi-fi dealers, or write.

BENJAMIN ELECTRONIC SOUND CORP., 80 SWALM ST., WESTBURY, N.Y. SOLE U.S. DISTRIBUTOR MIRACORD TURNTABLES, ELAC CARTRIDGES, OTHER ELECTROACUSTIC AUDIO COMPONENTS

CIRCLE NO. 6 ON READER SERVICE CARD
A symphony by a twenty-four-year-old composer named Sergei Rachmaninoff was given its world premiere performance in St. Petersburg in 1897. The occasion turned out to be one of the genuine fiascos in the history of music. Rachmaninoff himself later described how he sat rapt with horror through part of the performance and then fled from the concert hall. A post-concert party had been arranged in his honor, and Rachmaninoff went through the motions in a daze. The newspaper reviews were the crowning blow. In The News César Cui wrote: "If there were a conservatory in hell, Rachmaninoff would get the first prize for his Symphony, so devilish are the discords he places before us."

The whole affair proved to be traumatic for the sensitive Rachmaninoff. He was plunged into a fit of depression and despair that lasted for two long, desperate years. Finally, friends persuaded him to see one of the pioneers in the field of autosuggestion, Dr. Dahl.

In his memoirs (Rachmaninoff's Recollections as told to Oskar von Riesemann), Rachmaninoff tells the story: "My relations had told Dr. Dahl that he must at all costs cure me of my apathetic condition and achieve such results that I would again begin to compose. Dahl had asked what manner of composition they desired and had received the answer, 'A Concerto for pianoforte;' for this I had promised to the people in London and had given up in despair. In consequence I heard repeated, day after day, the same hypnotic formula, as I lay half asleep in an armchair in Dr. Dahl's consulting room. 'You will start to compose a concerto—You will work with the greatest of ease—The composition will be of excellent quality.' Always it was the same without interruption.

"Although it may seem impossible to believe, this treatment really helped me. I began to compose at the beginning of the summer. The material grew in volume, and new musical ideas began to well up within me, many more than I needed for my concerto. By autumn I had completed two movements of the Concerto—the Andante and the Finale. These I played during the same autumn at a charity benefit concert conducted by Siloti. The two movements resulted in a gratifying success. This heightened my confidence to such an extent that I began once more to compose with great ardor. By the spring I had already completed the first movement of the concerto and the Suite for two pianos. I felt that Dr. Dahl's treatment had strengthened my nervous system to a degree almost miraculous. Out of gratitude I dedicated my Second Concerto to him."

Rachmaninoff himself was the soloist when the Second Concerto was given its official premiere at a Moscow Philharmonic concert in October, 1901. The score was
an instant success—for rather obvious reasons: the concerto is one long rhapsodic flight of soaring melodic inspiration. It served immediately to rehabilitate Rachmaninoff, professionally as well as personally. He became conductor of opera at the Moscow Grand Theater, he was in constant demand as a piano recitalist, and he was again able to compose many pieces for piano. As a matter of fact, so steadily did the demands upon his time and energies grow that within a few years he was obliged to leave Moscow in search of peace and solitude. He settled in Dresden with his family and during the next decade he returned only intermittently to Russia. In 1918, following the revolution, he determined that he must make a new home elsewhere, and for most of the last twenty-five years of his life he lived in the United States.

The emotional appeal of the Second Concerto was long ago exploited by music popularizers. It has figured in innumerable motion pictures (including Noël Coward’s memorable Brief Encounter), and the principal theme of the last movement of one of its most famous years ago by Tin Pan Alley and titled Full Moon and Empty Arms.

The first recording ever made of the concerto (in 1929) appropriately featured Rachmaninoff himself at the piano, with the Philadelphia Orchestra under the direction of Leopold Stokowski. (Despite the fact that on two separate occasions Rachmaninoff was invited to become conductor of the Boston Symphony Orchestra, it was the Philadelphia Orchestra that the composer maintained his closest American ties.) The Rachmaninoff-Stokowski collaboration was an extraordinary one, producing a reading of great strength and beauty, and the glowing sound that Rachmaninoff drew from the piano was captured on the early electrical recording with amazing fidelity. The performance, fortunately, was early transferred to the long-playing medium, and is still available, either as a single disc (RCA Victor LCT 1014), or in a three-disc album that also contains the composer’s other three piano concertos along with his Rhapsody on a Theme by Paganini—all in collaboration with the Philadelphia Orchestra (RCA Victor I.M 6123). Sonically, of course, the more recent recordings are more satisfying, but Rachmaninoff’s own performance is the one against which all others must be measured.

And there are plenty of others—not fewer than twenty-three at the latest count. The most worthy of these, it seems to me, are the performances by Ashkenazy (London CS 6390, CM 93901), Cliburn (RCA Victor LSC/LM 2601), Janis (Mercury SR 90260, MG 50260), Richter (DGG SLPM 138076, LPM 18596) and Rubinstein (RCA Victor LSC/LM 2068). Vladimir Ashkenazy’s is the most recent of them, and is blessed with the richest recorded sound. In many ways this is a very winning performance, supple and graceful, with an understated elegance. Kyril Kondrashin and the Moscow Philharmonic Orchestra offer exemplary assistance.

Although he is not as successful with the Second Concerto as he is with the Third, there is still much to admire in Van Cliburn’s performance. The aim was evidently to produce a reading of monumental power and grandeur, and Cliburn and his conductor, the late Fritz Reiner, come pretty close to the mark.

Byron Janis and his conductor, Antal Dorati, deliver a reading of high energy and excitement. It works very well, and one comes away from their performance with a sense of high exhilaration.

The Sviatoslav Richter performance is in many respects the most interesting of all. It is clear that Richter has some very individual ideas about the score, including subtle dynamic shadings and rather broader tempos than those to which we are accustomed. What at first may seem idiosyncratic, however, becomes very convincing—to this listener, at least—with repeated hearings.

Finally, the Arthur Rubinstein-Fritz Reiner reading is a marvelous blend of extroverted dynamism and poetic sensitivity. This is the oldest of the five versions under discussion, and its sound betrays that fact. But the directness of Rubinstein’s presentation makes the recording’s sonic faults seem unimportant.

To sum up: Rachmaninoff’s own 1929 recording of the Second Concerto is indispensable. And pending an opportunity to judge the new Graffman-Bernstein release (Columbia), which is not available for review as I write, Ashkenazy, Cliburn, Janis, Richter, and Rubinstein run about even just behind the composer.
905 is ready to go

...at the sound of your voice!

Speak — and 905 goes into action. Pause — and Sony's amazing new Voice Command tape recorder also pauses — awaiting your next command! And whether you shout or whisper, near or far, the exclusive Sony AVC (automatic volume control) instantly adjusts to the proper recording level, without ever touching a knob! This incredibly versatile new Sony is self-charging, self-starting, self-powered, and truly portable. Perfect for business, school, family fun (and surveillance work). All the best from Sony for less than $159.50!

PARTABLE: The 905 Voice Command consists of an upper and lower unit: the upper unit is a complete portable recorder, the lower unit is an electrically powered amplifier/speaker for home or office use which includes a built-in automatic battery charger for "ready to go" lifetime power for the 905's nickel cadmium batteries.

STARTABLE: The 905 built-in computerized switching circuit automatically and instantly starts the recorder in motion at the sound of your voice, and records up to two hours on one reel.

PORTABLE: The 905 is completely solid-state, extremely lightweight and compact for portability. The upper, battery powered recorder unit has a built-in monitor speaker, remote stop/start switch on the microphone and a custom leather case and shoulder strap.

For literature or nearest dealer write Superscope Inc., Sun Valley, Calif.

DECEMBER 1964

CIRCLE NO. 52 ON READER SERVICE CARD
SAVE $ AND GET MORE WITH EICO KITS & WIRED HI-FI EQUIPMENT

NEW EICO 3566 SOLID STATE AUTOMATIC FM-MPX STEREO TUNER AMPLIFIER
ENJOY HIGH RELIABILITY ALL-TRANSDITOR EQUIPMENT IN THE HIGHEST QUALITY RANGE AT HALF THE PRICE OF COMPAREABLE INSTRUMENTS. NEW ALL-TRANSDITOR FRONT-END IS NOT OVERLOADED BY EVEN VERY STRONG LOCAL STATIONS WHILE PRODUCING LOW NOISE UNQUALLED BY TUBES. SEMI-KITRequires LITTLE MORE WORK THAN BUILDING A STEREO AMPLIFIER ALONE. SINCE ALL STEREO TUNER SECTIONS ARE SUPPLIED PRE-WIRED AND PRE-ALIGNED (RF FRONT END, 4-STAGE IF STRIP AND MPX CIRCUIT BOARD). KIT ONLY $29.95, WALNUT CABINET $14.95 EXTRA, WIRED $349.95 INCLUDING CABINET.

EICO 2536 FM-MPX STEREO TUNER-AMPLIFIER
SUPERB FM STEREO TUNER COMBINED WITH A VIRTUALLY DISTORTIONLESS 36-WATT STEREO AMPLIFIER. BUILD IT YOURSELF AND SAVE $95. ALL JACKS, SOCKETS, TERMINAL BOARDS AND TRANSFORMERS PRE-MOUNTED AT FACTORY. FRONT-END AND 4-STAGE IF STRIP PRE-WIRED AND PRE-ALIGNED.
KIT ONLY $154.95, WIRED $209.95.

EICO ST97 FM MPX STEREO TUNER
- 3 UV IHF SENSITIVITY
- 0.6% IHF DISTORTION
- 30 DB SEPARATION
- AUTOMATIC STEREO INDICATOR
- IF FRONT END AND 4-STAGE IF STRIP PRE-WIRED AND PRE-ALIGNED
- 10-STAGE "ZERO PHASE SHIFT" MPX CIRCUIT
KIT $99.95, WIRED $149.95.

EICO ST40 50-WATT STEREO AMPLIFIER
- STEREO INPUT FOR TAPE HEAD, 2 MAG PHONOS, TUNER
- SCRATCH AND RUMBLE FILTERS
- DIRECT CENTER SPEAKER CONNECTION
- BAXANDALL FEEDBACK TONE CONTROLS
- 50 WATTS IHF MUSIC POWER
- POPULAR SCIENCE MAGAZINE'S FIRST CHOICE FOR "MUSIC LOVERS SYSTEM"
KIT $79.95, WIRED $129.95.

EICO ST70 80-WATT STEREO AMPLIFIER
- STEREO INPUTS FOR TAPE HEAD, 2 MAG PHONOS, TUNER
- SCRATCH AND RUMBLE FILTERS
- DIRECT CENTER SPEAKER CONNECTIONS
- OVERALL FEEDBACK TONE CONTROLS
- 80 WATTS IHF MUSIC POWER
BEST BUY...LOWEST DISTORTION OF ALL HIGH POWER AMPLIFIERS, ACCORDING TO INDEPENDENT CONSUMER TESTING.
KIT $99.95, WIRED $149.95.

SEND FOR FREE KIT-O-LOG

EICO Electronic Instrument Co., Inc.
131-01 39th Avenue, Flushing, N.Y. 11352
Send New 1965 Catalog featuring more than 230 EICO products.
Name__________________________
Address________________________
City________________State__________
Zip___________________________
For more information, please see the "EICO Wire" section in the catalog.

EICO 12A 18-WATT AMPLIFIER
TRUE HIGH FIDELITY MONO AMPLIFIER, INPUTS FOR MAG. PHONO, TAPE HEAD, TUNER, BAXANDALL TONE CONTROLS, DC ON FILAMENTS, EASY TO BUILD.
KIT $39.95, WIRED $59.95.

EICO 90A FM TUNER
MOST POPULAR FM TUNER KIT EVER MADE. PRE-WIRED, PRE-ALIGNED RF FRONT END HAS 3 IF STAGES, WIDEBAND RATIO DETECTOR, CATHODE FOLLOWER OUTPUT, UNIQUE EYETRONIC TRAVELING TUNING EYE.
KIT $44.95, WIRED $69.95.

HFT 90A FM TUNER
MOST POPULAR FM TUNER KIT EVER MADE. PRE-WIRED, PRE-ALIGNED RF FRONT END HAS 3 IF STAGES, WIDEBAND RATIO DETECTOR, CATHODE FOLLOWER OUTPUT, UNIQUE EYETRONIC TRAVELING TUNING EYE.
KIT $44.95, WIRED $69.95.

SEND FOR FREE KIT-O-LOG

EICO Electronic Instrument Co., Inc.
131-01 39th Avenue, Flushing, N.Y. 11352
Send New 1965 Catalog featuring more than 230 EICO products.
Name__________________________
Address________________________
City________________State__________
Zip___________________________
For more information, please see the "EICO Wire" section in the catalog.
**MUSICAL ARCHEOLOGY**

**HOW MUSICOLOGICAL DETECTIVES ARE RETRIEVING ANCIENT MUSIC FROM THE DEBRIS OF HISTORY**

By FRITZ A. KUTTNER

It is the eternal curse of music that it, of all the arts, dies fastest and is forgotten soonest. The general archeologist has visible fragments of artifacts, sculptures, buildings, and paintings to guide his reconstructions of ancient civilizations, but the musical archeologist is always confronted and frustrated by deathly silence. A broken musical instrument, in the absence of other information, tells us pitifully little about the music of its time. Documents are notoriously inadequate; a hundred volumes of verbal description, for example, could not convey to a future generation how the sound of a Beethoven symphony differs from one composed by Brahms or Mahler.

Happily, thanks to modern sound-recording technology, the music of the twentieth century will be left amply documented for posterity, and the same is true of the nineteenth. Going back a century or two, specialists are attempting to establish more precise rules of performance for the compositions of the classical and Baroque periods. Looking even further back in time—to the Renaissance, to the Middle Ages, to ancient Greece, Egypt, India—we enter the province of the musical archeologist. Every past civilization had its own music—now mute, forgotten. It
MUSICAL ARCHEOLOGY

is a daring new objective of the musical archeologist to reconstruct the actual sound of these ancient musics. For the first time in history, efforts are being made to review and preserve for the future the sound of music that once seemed to be condemned to eternal oblivion.

Musical archeology used to be a soundless discipline—for people without ears, so to speak—a purely abstract activity hardly related to musical practice. But now we are trying to go beyond these limitations. The interesting thing about modern archeo-musicology is that its methods and objectives are essentially the same for research into sixteenth-century music B.C. and A.D. Any clue or evidence is useful, be it either document or object. And since the sound of music is so difficult to describe, the artifact is given more credence than the document whenever the evidence offered by them is at variance.

Naturally, the difficulties of reconstruction become greater the farther we are separated from the period under investigation. This handicap is partly compensated for by the fact that ancient music was usually less complex than modern music. (Less complexity, I must emphasize, is not the same as lack of sophistication; in fact, some ancient music seems to have been enormously sophisticated.) Also, the factor of deep-rooted tradition in many ancient musics means that changes of musical customs and styles were slow and gradual. Although in modern times revolutionary changes in style follow each other at ever-shorter intervals, antiquity was orthodox and slow-moving. One other circumstance works to the advantage of the musical archeologist: music is the one art that has always been a science as well as an art; it is often built on the laws of mathematics, and subject to physical analysis. Thus, big steps back into antiquity may require ingenuity and boldness of approach, but such efforts are rarely hopeless or impracticable.

The musical archeologist’s first step, normally, is to determine the underlying acoustical principles of the music being studied. Musical instruments recovered from the soil provide some clues. If the instrument is in playable condition, measurements are taken of the pitches and intervals it can produce. If it is damaged, broken, or fragmentary, replicas are made that correspond to the physical and acoustical properties of the specimen. If it is a strung instrument—such as the ancient Asian or Egyptian harps—the number and proportional lengths of its former strings are determined, and then the body’s tensile strength. These measurements provide clues to the range of pitches for which the frame was built. If contemporary pictures or documents indicate the numbers and types of instruments that were customarily played in groups, further conclusions can be drawn about certain intervals that can be played on some instruments but not on others in the group. Sometimes historical records reveal ratios or
scale-building principles that formed the tone system. At other times, instructions for the tuning of a stringed instrument can enable one to reconstruct a tone or scale system.

Once the tonal material of a given music is established with reasonable accuracy, a search is made for any example of composed music in a decipherable notation. Such examples are then applied to the reconstructed interval or scale system and are played at "reasonable" speeds on modern or reconstructed instruments. With this, the first sound reconstruction has been achieved. Occasionally even such first attempts prove to be startling experiences.

If the examples of musical notation are undeciphered or incompletely understood, a comparison of the document with the established tone system and musical characteristics of recovered instruments may suggest a partial understanding of the notation system. Obviously there must be some relationship between notation, pitches, intervals, and playing techniques.

Some civilizations did not have a system of musical notation, or so far no specimens of notation have been discovered. This is usually the case when a musical tradition is based on improvisation and aural transmission rather than on composition in the Western sense. Such situations, of course, place enormous difficulties in the way of reconstruction, but the problem need not be a completely hopeless one. The texts or the metric and rhythmic constructions of traditional folk songs may lead to some tentative conclusions, and if there is a surviving musical tradition in the area under investigation, one can try to extrapolate backwards into history. Certain modern features can have developed from earlier traditions, while others are very unlikely to have undergone such development. Furthermore, the spoken language can suggest how the singing voice may have been used in terms of intonation and vocal technique, especially in the so-called tone languages, in which pitch inflections alter the meaning of spoken words and syllables.

To be more specific about the tools and methods of musical archeology, let me describe how reconstruction principles have been applied to a problem of Renaissance musicology.

Not so long ago, you could read in most textbooks that equal temperament was a type of keyboard-instrument tuning invented around 1690 by the German theorist Andreas Werckmeister, and then generally introduced into practice by J. S. Bach. However, some specialists suspected that this tempering method was much older. The discovery of a learned treatise by Giovanni Maria Lanfranco, of 1533, showed that this theorist had already developed an approximation of the perfect mathematical solution that came much later. In fact, a good numerical approximation of truly brilliant character had already been offered as early as 400 A.D. by the Chinese theorist Ho-Cheng Tien. But neither in antiquity nor in the Renaissance was there any clear indication that theoretical approximations actually had been used by musicians. However, it must be said that, for all practical purposes, no musical theory really exists that fails to influence the music of its time.

What could the musicologist do to show that equal temperament was already in use before 1550? There were several ways open, and I shall describe one that proved quite efficient. The musicologist went to several European museums and made precise measurements of a great number of viols and lutes depicted in paintings done during the period in question. It turned out that in many pictures painted after 1550, the frets of stringed instruments were placed at distances and locations that must have produced an equally tempered scale—or at least a closer approximation of it. Some pictures were inconclusive, and the question arose as to how accurately the painters may have reproduced such seemingly unimportant details as fret distances. Further investigation showed that certain painters were always quite accurate in such physical details, others rather unreliable. Finally it was possible to show that those painters who reproduced details accurately depicted stringed instruments with different fret distances before 1530, indicating meantone tempering, or just intonation, or a mixture of the two tuning systems. Thus it was established that equal temperament came into use about 1533.

Some of the paintings showed groups of vocalists together with string players and a keyboard instrument of the virginal or stationary chamber-organ type. This led to the further conclusion that equal temperament was also known and used for keyboard instruments after 1533, because it would have been impossible to have keyboard instruments perform together with fretted strings in two different tunings. Immediately following this came the realization that the players of the relatively primitive wind instruments of that time, both wood and brass, must have had extraordinary precision in pitch, because no acceptable performance with the collaboration of wind players was thinkable unless these players could stay...
MUSICAL ARCHEOLOGY

on pitch with the equally tempered strings and keyboards. The means and methods of musical research do not change essentially if we turn from the Renaissance to antiquity. Strictly speaking, the above example of Renaissance investigation is within the compass of musical archeology. For once the sound of a musical period has been silenced and forgotten, archeological methods must be applied to its reconstruction, and the question of bridging a gap of four centuries or of four millenia becomes only one of degree.

So now let us consider a musicological problem involving antiquity. Many learned treatises from ancient Greece have come down to us that describe numerous scales designed by the Hellenic theorists and used by Greek musicians between the years 400 and 100 B.C. Archytas, Aristoxenos, Euclid, Eratosthenes, Didymos, and Ptolemy are some of the illustrious authors. What they have preserved for us are the complete scale structures in mathematical ratios and in string lengths, as measured on an ancient interval-measuring device, the monochord.

Until recently, scholars and students always discussed these scales on a theoretical basis, but nobody ever tried to reconstruct the actual sound phenomena thus produced. This is precisely what I did a few years ago with the assistance of two co-workers. We tuned modern instruments to the mathematical specifications given in the classical sources, and the scales thus reproduced were applied to the few (eleven, in all) fragments of ancient Greek music that have been preserved.

The result was surprising. Clearly, here was the music of the Orient, of West Asia, a fact that might have been anticipated since the majority of the important Greek musicians and theorists lived on the coast of Asia Minor. Classical scholarship had known for some time about the great indebtedness of Greek culture to Asian sources in many of its arts, sciences, and philosophical ideas, but music remained excluded from this realization because its sound was unknown and because its theories had seemed to be related to later European developments. This gap can now be considered as closed by sound reconstruction, and the music of Greece is no longer the one exception that miraculously escaped the strong influences radiating westward from Asian territories.

Next we might demonstrate the application of archeological methods to a set of Chinese lithophones (stone slabs that vibrate at carefully determined pitches). These stones, now in a Toronto museum, come from a site in Honan province, the Princes-of-Han tombs at Lo-Yang. The tombs were closed in the middle of the sixth century B.C. Through a series of acoustical and physical investigations I was able to show that the stones were tuned to a "Pythagorean" scale with a precision a modern piano tuner would find hard to duplicate. On further study, I
found the stones to be funerary gifts that had been made several centuries before they were enclosed in the graves. That upset the conservative dating rules of the general archeologists, but the big trouble was still to come. For several hundred years it had been known that certain Greek achievements dating from the sixth to the fourth centuries B.C. were also known in Eastern China after 300 B.C., among them the scale system named after Pythagoras or his school. It had always been assumed that this Mediterranean knowledge had traveled eastward, presumably during Alexander the Great’s invasion of Sogdiana in the year 327 B.C., or via India when the Macedonian armies reached the Hyphasis River in 326/325. But the presence of a fabulously precise “Pythagorean” intonation in Honan between 550 and 950 B.C., long before the existence of the Pythagorean school, indicated that this knowledge originated in Mesopotamia and traveled from there eastward into China and westward to Greece.

But consider another set of stone slabs, found about fifteen years ago in Vietnam. The archeologists and anthropologists who were interpreting this find were excited and amazed, since the set of stones suggested a music of Neolithic origin, owing to the circumstances of the site. When arche-musicologists began to evaluate the find acoustically, however, it was found that the pitches of these stone slabs produced a “scale” that made no sense under any known theoretical or practical scale system. Arche-musicology also pointed out that a set of lithophones presupposes the existence of considerable mathematical and acoustical knowledge, together with a cosmological and philosophical system that believes in the importance of an incorruptible tone system which must be recorded in stone for its preservation. Since none of these conditions applied to the primitive civilization of that region and period, the idea of a great musical culture in Neolithic Annam collapsed. The stones, apparently, were cultic objects connected with ancestor worship and funerary rites, but they were not musical instruments. They produced a series of different pitches that could be produced by any set of sonorous objects of different sizes—such as Woolworth cups and saucers.

Another example. The twelve pitch names, or twelve lîr, of the Chinese semiotic scale system are of very ancient origin, possibly as old as 1,000 B.C. or earlier. The names have colorful, fantastic, or mythological connotations that generally have defied all attempts at interpretation or explanation. I have been able to solve the mystery for eleven of the twelve by applying strictly arche-musical methods and knowledge—although I should mention that two of the names were not mysterious at all. How was it done?

I had noticed that the ancient Chinese, with all their fondness for symbolism and mythological ornamentation, always had a strong sense of the practical. Furthermore, I knew that designing and naming a complex tone system calls for a fair amount of acoustical and mathematical background. No acoustician of any period, however distant, would give pitches enigmatic names just for the sake of mystification or mythological tradition. These two things convinced me that the twelve pitch names must contain practical information related to acoustics.

One pitch is called Ku Hsi—translated as “old purified.” It is the equivalent of the major third, or the tone 4 in our C Major scale. I knew from the Lo-Yang lithophones that in early Chinese music we were dealing with a “Pythagorean” tone system. I also knew that this system presents intonation trouble on the pitch of the major third, which is fixed at 408 cents.* This interval is very wide compared to the 386 cents of the acoustically “pure” intonation, represented by the mathematical and physical ratio of 4:5. The smaller-spaced third occurs in many tuning systems used by various musical civilizations. In Western music theory, it is the key interval of just intonation; in ancient Greece it took a place side by side with the wide “Pythagorean” third of 408 cents about 380 B.C.—that is, almost two centuries after the large unequal “Pythagorean” interval had been defined by earlier Greek theory. So we had here an analogous but much earlier develop-

---

*CENTS: a logarithmic unit for precise definition of interval sizes. An octave measures 1200 cents, each equally tempered semitone within the octave 100 cents. The major third in equal-temperment tuning (containing four semitones) measures 480 cents.
MUSICAL ARCHEOLOGY

ment in pre-Confucian China. At first the Chinese used the old "Pythagorean" interval, then they found it to be acoustically "impure" and unsatisfactory, then they discovered the acoustically perfect major third with the ratio 4:5 and began using it. Hence the pitch name "old purified"—descriptive, rational, unmeaningful. It followed that the Chinese must have known the "old impure" third as well, and sure enough, in the Toronto museum set the two intonations exist side by side, with an interval difference of 22 cents, the so-called "syntonic comma" which was not known in Greece until 380 B.C.

Another lū is called Ying-Chung—the "answering bell," or "echoing bell." In the Chinese tone system it appears as the tone B, the major seventh just below the octave. Now, if the octave itself had been called an "echoing bell," there would have been no mystery. Strike a bell tuned at low C, and a bell tuned an octave higher will resonate—producing a soft answer or echo. But the major seventh? Who ever heard of a resonance phenomenon on the major seventh?

The thing made no sense until I made inquiries of musicians who were accustomed to working in large halls. Oboists told me they had encountered trouble in some operas or symphonies where the score calls for playing notes or sequences backstage to produce echo on distance effects. If the performance took place in very large halls with wide backstage spaces, such as, for instance, New York’s Metropolitan Opera House, the conductor would hear the notes a semitone lower—an acoustical phenomenon still unexplained except on a hypothetical basis.

I also received reports from French horn players, trumpeters, and oboists who told me they had to play their backstage passages a full semitone higher than scored, in order to produce the correct pitch for the orchestra and auditorium spaces. This meant that instruments heard at more than average distance, and in large places, open on one narrow side of an oblong structure, could lose as much as a semitone in pitch for the distant listener. This was precisely the acoustical and architectural situation of the large Confucian and pre-Confucian temple structures, in which six bells were suspended from a stand on one narrow side of the temple building, the other six on the opposite open temple side, far away. Strike the C-bell on the far side, and it would sound as B on the other side and make the B-bell hanging there resonate, with a faint answer or echo. The mysterious pitch name had a rational explanation. It also showed how keen the Chinese were in their acoustical observations.

Next I want to tell you about a man whose pioneering work in Egyptian archeo-musicology has been outstanding. Professor Hans Hickmann was trained in Germany, but he lived in Cairo for twenty-three years. He was for many years the director of the music department in Cairo’s Museum of Egyptology, and he participated in numerous archeological expeditions and excavations. In his field, Hickmann is the ideal musical archeologist: historian, linguist, archeologist, musicologist, Egyptologist, sociologist. His most noteworthy achievements are the discovery and tentative deciphering of an early Egyptian music notation, the collection and classification of countless musical instruments from many dynasties—some in perfect condition, others in fragmentary bits. From these fragments he has reconstructed replicas, and there is now a wealth of ancient and reconstructed Egyptian instruments that can be played by modern musicians, from harps of a dozen sizes and shapes to oboes and double oboes, from percussion instruments to lutes and trumpets.

If all goes well, we should some day be hearing the first recording of reconstructions of Pharaonic music—a thrilling prospect that would have sounded fantastic twenty years ago. We can also look forward to recordings of ancient Coptic masses. These are the earliest manifestations of Christian ritual music in Egypt, antedating the
and the shapes of angular harps gave numerous clues about scales and intonations. The reconstruction of harp and lute specimens showed what pull or string tension was possible on these instruments, and thus approximate ideas about tunings and accordaturas could be formed.

The tools and methods, then, of the modern musical archeologist are essentially the same as those of general musicology, but with a few significant additions and restrictions not generally applied in other musicological specializations. The stroboscope, the oscilloscope, and other acoustical or electronic measuring instruments are very important additions to our research equipment. Logarithmic tables, graph paper, photographic techniques, and modern recording technology are more frequently and efficiently used in our research than in other investigations of musical history.

There is, to be sure, no limit to the mistakes, wrong assumptions, and faulty conclusions the modern archeo-musicologist can make when attempting his first reconstructions of the sound from a long-silent musical tradition. The musicologist who is nervous about making errors should stay away from this adventurous new discipline; anyone who equates scholarship with infallibility cannot hope to make a contribution to a field that relies, at the outset, mainly on imagination and intuition. But those who are not afraid draw their courage from the following line of reasoning: if the first attempt at reconstruction is a mere five per cent correct, it serves as a stepping stone for future improvement. Each successor might correct perhaps ten per cent of the faulty interpretation, and after a hundred or two hundred years, a reconstruction that is eighty per cent correct may be possible.

Let me summarize the perspectives of musical archeology. This discipline, with its arsenal of tools and methods growing from year to year, should be able to make more and more contributions to the knowledge of other disciplines, because the role music played in all ancient societies was enormous. In modern Western civilization, music has an ephemeral and accessory character, like something pasted onto our other cultural or social activities. Our ears have become blunted and insensitive. In ancient civilizations, however, music was something overwhelming, rare and mystical, an integral part of the philosophical and cosmological systems of rations, of their religions, political organizations, and scientific knowledge.

If we were to describe the musical life of Western civilization, we would touch on only a small fraction of our social, scientific, and cultural activities. But antiquity gave endless time, thought, and observation to the world of music and sound. Consequently, if we can describe the musical life of an ancient civilization in accurate detail, we have an invaluable key to that civilization's entire life.

Fritz A. Kuttner is one of a handful of musicologists who specialize in musical archeology. No ivory-tower theorist, Dr. Kuttner has produced, in association with Dr. J. Murray Barbour, three records that enable the modern listener to gain some idea of the sound of long-silent music. These are "Mean-tone Temperament in Theory and Practice," "The Theory and Practice of Just Intonation," and "The Theory of Classical Greek Music," which includes a recording of the Skollon of Sekilos, shown on the opposite page. Readers can order these for $10 each; checks should be made payable to Musurgia Records and addressed to Dr. Kuttner in care of this magazine.
AN AUDIO
A COLLECTION OF FANCIFUL HI-FI

THE PERSISTENT HISS

THE SHIMMERING TRANSIENT

THE MALE PLUGG

THE TERRIBLE SCRATCH

THE GASEOUS TOOB

THE THUNDEROUS RUMBEL
BESTIARY
ANIMALS BY ROBERT TUCKER

THE RESIDUAL HUMM

THE GROUND LOUP

THE EXCESSIVE WOW
A VOLCANO NAMED MINGUS

By NAT HENTOFF
Most of our established jazzmen can be readily characterized. Miles Davis is terse and ironic. Thelonious Monk is shy but proud. Dizzy Gillespie is quick and buoyant. But Charles Mingus—the increasingly prestigious bassist, composer, and combo leader—eludes firm characterization more than any other major jazz figure.

On some nights, Mingus the Militant strides through the city. The militancy is an expression of his pride in being a Negro coupled with his rage over race prejudice. When in that mood, Mingus can stagger an unwary reporter or radio interviewer as he insists that only Negroes can play jazz authentically, and goes on to proclaim that a conspiracy of white taste-destroyers and exploiters controls the music business. When one interviewer mustered enough nerve to accuse Mingus of reverse prejudice, the bulky bassist leaned forward and said, "Until we own RCA Victor, Columbia Records, and several other companies, don't talk to me about reverse prejudice. Aren't you white men asking too much when you ask me to stop saying this is my music? Especially when you don't give me anything else?"

For all his race-consciousness, however, Mingus usually has some white musicians in his bands. "I look for people," he has explained during a period of relative repose, "with something strong of their own to say, and occasionally they happen to be white." Several of Mingus' closest friendships, moreover, are with whites.

When Mingus the Militant takes over again, his fury may be triggered simply by a noisy, inattentive audience. "You don't want to see your ugly selves," he lashed out one night at the Five Spot in New York. "You don't want to see the lies you give to life, so you cover them up with talking and drinking."

Yet, on other nights, there is the Mingus who can draw his audience into his music with enveloping warmth and humor as he takes care to explain exactly what he had in mind in each piece. It is this nonmilitant Mingus who anxiously told the members of an audience in Town Hall in 1962 that what he had conceived as an informal public recording session had been billed as an evening's promoter as a formal concert, and he wanted to be sure they knew what was in store for them before the music began. "There's going to be a lot of confusion here tonight," he said, "and if that's not what you thought would happen, I'd advise you to ask for your money back—and I'll help you get it back." He looked around the stage, at the center of which two copyists were still at work on the night's arrangements. "We might be able."

Mingus faced the audience again, "to get something done this evening, but I doubt it. I'm scared as hell."

Another Mingus is the impatient perfectionist, capable of publicly indicting an erring sideman with blistering scorn. But after one such outburst, Mingus plunged into a depression that lasted for two days. Finally, in tears, he called the man he had excoriated and asked forgiveness.

Mingus is not even physically predictable. For months, he lumbers around, conspicuously overweight; and then, in a few weeks, he has slimmed down and appears a decade younger than his forty-two years. There are times when he wears a full beard and other times when his moon face emerges clean-shaven. When his spirits are up, Mingus dresses with extreme care and expensive taste—even unto a bowler hat. But he is also given to the most informal attire—with language to match.

As might be expected, Mingus' music reflects the continual changes in the man. Some of his compositions exultantly reveal his roots in Negro gospel services (Wednesday Night Prayer Meeting; Eclesiastics). Others are acid commentaries on race relations (Fables of Faubus) and powerful evocations of the history, aspirations, and pains of the Negro (Haitian Fight Song).

There are also, however, many Mingus pieces that are intimately autobiographical, and among these are a number of sensitive and graceful ballads (Celis and Alice's Wonderland). When he is preoccupied with his jazz heritage, Mingus writes perceptive tributes to musicians who have helped shape his own development—Duke Ellington (Open Letter to Duke), Lester Young (Goodbye Pork Pie Hat), Jelly Roll Morton (My Jelly Roll Soul), and Charlie Parker (Reincarnation of a Lovebird).

At times, in his compositions, Mingus broods over the destiny of man. When he is in that state, Mingus' penchant for creating evocative titles becomes intensified (Pithecantropus Erectus; Oh, Lord, Don't Let Them Drop that Atomic Bomb on Me; The Black Saint and the Sinner Lady).

Charles Mingus considers the unpredictable diversity of his music, and of his behavior, to be a natural way of life and of art. "I play and write as I feel," he emphasizes, "the way I feel. And I'm changing all the time. As long as I can remember, I've never been satisfied with the ways in which people and things seem to be. I've got to go inside, especially as far inside myself as I can."

So inassimilable is Mingus' desire to communicate that music does not fill all his expressive needs. For years, he has poured some of his prodigious energy into long philosophical letters, sketches, and autobiographical fragments. Finally he decided to embark on a mammoth book, titled Beneath the Underdog. Now over 1,500 pages long, the volume is a molten collection of reminiscences, ex posés of the music business, and reflections on race relations. Although Mingus has had offers of publication from firms in France and Japan, he has not yet found an American company that will publish the book as written. Intermittently, the book is optioned here, but when suggestions are made that Mingus omit some of the book's more incendiary passages, he takes the manuscript back. "I won't let my music be watered down," he points out.
out harmonies acidly, "so why should I let them cut up my book?"
The odyssey of which Mingus tells in his book—and in his music—began in Nogales, Arizona, on April 22, 1922. He grew up in Los Angeles in a musical home. Two older sisters studied piano, and while very young, Mingus was drawn to it also. Although only within recent years has Mingus occasionally switched from bass to piano in public performances, he has long studied the instrument on his own. "Actually," Mingus points out, "my bass technique developed from my study of the piano. I never really understood the bass until I started working out harmonies on the piano, and I eventually came to regard the fingerboard of the bass like a piano keyboard."

His two primary instruments were trombone and cello, and he played the latter in his high-school orchestra as well as in the Los Angeles Junior Philharmonic. While in high school, Mingus moved to the bass. By 1940, he was a professional musician, working with Lee Young, Louis Armstrong (1941-1943), and Kid Ory.

Mingus' experience with New Orleans veterans Armstrong and Ory established his conviction that he would not be limited in his choice of associates by changing fashions in jazz. Accordingly, Mingus has been one of the relatively few modern jazzmen to employ older musicians in his group from time to time. "It's too bad," Mingus asserts, "that so many musicians started separating themselves into 'modern,' 'old-time,' and 'bop' camps. If we had all continued together, the music would have developed into a much richer language than it has."

From Armstrong and Ory, Mingus went on to Alvino Rey and Lionel Hampton. He began to achieve a national reputation in the early 1950's through his tours with Art Tatum, Red Norvo, Billy Taylor, Charlie Parker, and Bud Powell. By the middle of that decade, Mingus was settled in New York. (He now lives on Fifth Avenue in Harlem with his wife Judy and his three-year-old daughter Carolyn.) Determined to make his own way as a leader, Mingus has devoted the last decade to shaping a series of his own units that also function as a laboratory for his work as a composer.

As a leader-composer, Mingus generally prefers not to have his men learn his pieces from manuscript. "I write compositions on mental score paper. Then I lay out the composition part by part to the musicians. I play them the 'framework' on the piano so that they are all familiar with my interpretation and feeling and with the scale and chord progressions to be used. Each man's particular style is taken into consideration. They are given different rows of notes to use against each chord, but they choose their own notes and play them in their own style, from scales as well as chords, except where a particular mood is indicated. In this way I can keep my own compositional flavor in the pieces and yet allow the musicians more individual freedom in the creation of their group lines and solos."

The strain of maintaining freedom of expression while interpreting what the magisterial Mingus wants has made it necessary for sidemen who stay with him for any length of time to be especially resilient and tenacious. Among the musicians whose styles have been strengthened by their immersion in Mingus' crucible during the past ten years are alto saxophonists John Handy and Charles McPherson (plus the late Eric Dolphy), tenor saxophonist Booker Ervin, multiple reedman Roland Kirk, trombonist Jimmy Knepper, and trumpeters Ted Curson and Gene Shaw.
MINGUS ON RECORDS

The two Mingus albums with which to begin a collection of his music are those he himself considers the most successful fusions of strongly individualistic players with his own interpretive demands as a composer: "Tijuana Moods," RCA Victor LPM 2533; LSP 2533; and "Mingus Presents Mingus," Capitol 8005, 9005. A third essential set would be "The Clown" (Atlantic 1260), which contains Haitian Fight Song and Reincarnation of a Latchbird.

To comprehend fully the degree to which Mingus' music is based on the jazz past (along with pre-jazz Negro religious music), the listener interested in Mingus should hear "Blues & Roots" (Atlantic 1305, S 1305). An especially broad view of the multiple elements of Mingus is included in his two Columbia albums, "Mingus Ah Um" (CL 1370, CS 8171); and "Mingus Dynasty" (CL 1410, CS 8236). The romantic side of Mingus' musical temperament is particularly evident in "Wonderland" (United Artists 14005, 15005).

The listener who is prepared for more ambitious Mingus works should hear "The Black Saint and the Sinner Lady" (Impulse 35, S 35) and the title number in "Pithecanthropus Erectus" (Atlantic 1237). And for a representation of Mingus at his present stage of growth, there is "Mingus Mingus Mingus Mingus" (Impulse 54, S 54).

"Mingus," recalls Gene Shaw, now a leader himself, "made extraordinary demands on the musicians. He asked for one to bring forth one's essence, and he would do anything to point the way toward the work he wanted done at the time." "After I was with him a while," adds Charles McPherson, "I figured that if I could work with this cat, I could work with anyone."

When a Mingus unit begins to achieve its potential, the music is among the most mesmeric experiences in contemporary jazz. Mingus' presence serves as a stimulus to his colleagues, and the result is an impassioned, mutual testing of wills and ideas that—when the collective spirit takes fire—spirals into a remarkable organic unity. As Mingus likes to point out—with some asperity—a number of the current innovations in jazz have been presaged in his work as far back as the early 1940's (a collection of those works, recorded twenty years later, is "Prebird," Mercury MG 20627, SR 60627). Mingus has been one of the pioneers in occasionally disregarding traditional jazz chordal patterns in favor of modal bases for improvisation. He was also one of the first jazzmen to experiment seriously with shifting time signatures and with a rhythmic pulse that slowed down and accelerated according to the emotional changes in a piece. Moreover, in a number of his earlier works and increasingly in the past few years, there have been Mingus performances without any explicitly stated pulse at all. In addition, long before the speech-like pitches and cadences of Ornette Coleman, Mingus required his sidemen to extract unprecedented cries and other exclamatory colorations from their instruments.

"Because I know what I've already done," Mingus says, "I'm skeptical whenever the critics start shouting about some newcomer 'revolutionizing' jazz. No one of us can be that revolutionary. And most of the so-called innovators are boxing themselves into a narrow groove by concentrating too much on being new. What they don't realize first of all is that you have to know the whole of what's gone before to accomplish something really different. Secondly, they aren't aware of how much farther all of us have to go. Jazz is still a comparatively simple form insofar as it allows the full expression of a human being."

"What jazz at its best can do is to communicate immediacy. When Charlie Parker put his horn in his mouth, he was going to tell you about his experiences as the basis for what he felt then. And he could sometimes make the whole room feel as he did. But jazz ought not to be just one groove. Parker was able to play sadness, love, rage, beauty. He was able to play all of life."

Mingus, too, can sometimes make a whole room feel as he does; but like Charlie Parker's, his music is more than a transitory release of emotions. The best of his recordings retain immediacy and depth because, in addition to Mingus' persistent exploration of his experiences and feelings, he is also a remarkable musician. Mingus' growing importance in jazz is owing not to his angry concern with social injustice, but to the originality and viability of his compositional and instrumental skills.

It is, of course, the emotional force of the man himself that infuses his music with so much vitality, and Mingus reciprocally utilizes jazz to chronicle the stages of his life and ideas. At present, for example, he has decided that the most basic tensions in contemporary living "are not a question of color any more. It's above that. It's getting more and more difficult for men to just love. And fewer men are making a real effort to find out exactly who they are, and to build on that knowledge. Most people are forced to do things they don't want to do all the time, and they get to the point at which they feel they no longer have any choice. We create our own slavery, but I'm going to get through and find out the kind of man I am—or die."

The significance of this to audiences is that as Mingus tries to "get through," he is able to transmute his efforts and insights into musical terms that reach all manner of listeners, many of whom may not know the specific "message" Mingus intends to communicate in a particular composition. At his best, as a composer and as a soloist, Mingus has no need of programmatic explanations for his works. They succeed in and by themselves—as music.
What will a home high-fidelity system be like ten, twenty, or thirty years from now? One thing is certain: it will be radically different from—and better than—today's most advanced installations. Under the impetus of space, military, and industrial development efforts, the electronics industry is now using techniques and producing advanced devices undreamed of only a decade ago. A few—the transistor, for example—have already found their way into high-fidelity equipment. Others will follow soon, and although predictions—particularly in a field that is marked by a rapidly developing technology—are always dangerous, a few shadowy outlines of the hi-fi of the future are beginning to appear in the crystal ball.

It seems likely that two aspects of today's electronic sophistication will have a profound effect on tomorrow's sound reproduction. One is microminiaturization; the other is improved information-storage techniques. Off-hand, neither would seem to be particularly pertinent to the problems of music reproduction. For example, today's amplifiers and tuners are already fairly convenient in size, and high-density information storage seems more applicable to the computer industry than it does to hi-fi.

Actually, however, by making it possible to record tremendous amounts of musical information in an incredibly small space, and to house a large amount of complex electronic circuitry in a few cubic inches, these two developments will play a significant part in the evolution of new audio equipment—one probably as revolutionary as the replacement of acoustical recording with electrical recording. In brief, these two advances will make possible the complete elimination of record and tape handling. More important, they will eliminate almost all of the manufacturing problems that now plague the record maker. They will introduce the age of the inexpensive, automatically reproducible, technically perfect recording.

Let us glance into the future—say, twenty-five years from now. On a table sits what appears to be a stereo receiver. In addition to the normal tuning dial and controls, there is also, on one side of the panel, a cluster of push buttons numbered 0 through 9. No turntable, tape deck, records, or tapes are in evidence.

Inside the "receiver's" cabinet is a 3-inch reel of what seems to be 16-millimeter motion-picture film, mounted in a device that appears to combine features of a miniature slide projector and a transistor radio. There are about

**THE HI-FI SYSTEM OF THE FUTURE**

SOME STARTLING DEVELOPMENTS ARE IN STORE FOR TOMORROW'S HOME MUSIC LISTENER

*By KEN GILMORE*
1,200 different frames in the 50 feet of film on the reel.

A small notebook lies next to the unit. In it is an alphabetical listing of the recorded selections available. Run down the list to Mozart, Symphony No. 40. Next to it appears a number: 247. Touch in turn the numbered buttons on the front panel—the 2, the 4, and the 7. A barely audible whirring sound comes from the cabinet as a small motor drives the film reel until window No. 247 is in place.

A minute luminous spot begins to sweep across the face of a cathode-ray tube facing frame No. 247. As the pinpoint of light shines through the pattern of black and white dots on the film, its changing intensity is noted by a photosensitive device behind the film, and is translated into a fluctuating electrical signal. The familiar sounds of the Mozart symphony fill the room.

Far-fetched? Not at all. Although a great deal of equipment development will be necessary before this imaginary scene can become reality, the basic techniques already exist. In the system described above, for example, the original recording is made by exposing photographic film either with an extremely fine beam of light or an electron beam. After conventional development, the information is played back with a device known as a flying-spot scanner—an electronic gadget already in use in optical reading machines and language-translation devices. The great advantage of such a system for high-fidelity sound recording is that it eliminates all mechanical elements, with their inherent inertia and distortion.

Just how much information can be compressed into a limited space was demonstrated dramatically a few years ago at a Boston conference on electron-beam technology. A scientist from the University of Tubingen, Germany, showed his colleagues an astonishing sight. Through a microscope, they could see that he had used an electron beam to write a series of letters one-half micron high on a collodion plate. Using letters this size, he calculated, the entire Bible could be printed in an area one-fourth the size of a postage stamp.

In recording music on film photographically, engineers may find it advantageous to translate the electrical signals that represent the sound into a digital code—the information-handling technique perfected in recent years by the computer industry. Using digital principles, the magnitude of the fluctuating voltages representing the musical
signal is measured periodically, and numbers representing these voltages are stored. On playback, the numbers are translated back into voltages, and the music is recreated.

Engineers working with digital techniques have found that if voltages are sampled at a rate ten times higher than the highest frequency to be recorded or transmitted, the music or voice is faithfully reproduced. If the system is to be perfect to 20,000 cps, in other words, the voltage would have to be sampled 200,000 times a second. This is well within the capabilities of current digital equipment. Using these techniques, music has already been successfully recorded and played back at Bell Laboratories and other scientific institutions.

The digital process of encoding and decoding is obviously more complicated than the various analog systems of recording now in use, in which the strength and frequency of a signal correspond directly to variations in the magnetic field on a tape or the undulations of a groove on a record. Yet its advantages might make the added complexity worthwhile. Most outstanding among them would be the complete elimination of many problems now involved in the mass production of records and tapes. With the present-day analog system, waveforms recorded on a tape or a disc must be reproduced with fantastic accuracy on the copies. Some degradation is unavoidable, and records and tapes are therefore never as good as the original recording.

With the digital process, the voltage values to be recorded are translated into a code—in principle, not unlike Morse code. Each voltage value is assigned a certain sequence of "on" or "off" signals. On the film, these "on’s" and "off’s" are represented by black and white areas. The playback circuit detects a sequence of blacks and whites, recognizes them as a specific voltage value, and produces that voltage. A series of these voltage values re-creates the original waveform of the music.

The big advantage of the digital system is that there is no middle ground. White is white, and black is black. As long as the signal is good enough for the decoding system to get a "go" or "no-go" indication—to recognize black as black and white as white—it re-creates the original waveform flawlessly. Noise, which would occur on the film as some value of grey, would be completely ignored by the reading head. Digital film recordings, moreover, could be produced completely automatically. Once a symphony were recorded digitally on a piece of film, automatic machines could expose and develop copies rapidly. Minor degradation in the quality of the copy print would be sonically unimportant.

Such recordings could usher in a new era in quality control, too. Present-day phonograph records are inspected visually, then spot-checked on a record player. But because a digital signal could be automatically compared with the original signal, every recording could be checked down to the last digital bit, automatically and almost instantaneously. Since the whole process would be automatic, manufacturer’s costs would be drastically reduced and record prices should drop accordingly. Digital-recording techniques appear to be capable of supplying two until-now incompatible virtues: low cost and high quality.

Perhaps the biggest problem to be solved in marketing such recordings would be finding a place to put the program notes. Presumably, record companies could use cards—say, five by seven inches, or some other convenient size—on which the notes could be printed and to which the frame of film would be attached. At home, the purchaser would splice the recording onto his record-library reel and file the card containing the notes in a small box or loose-leaf binder.

But photography is only one high-density recording process available. Another possibility for high-fidelity use is General Electric’s thermoplastic tape, which can yield information densities roughly comparable to those possible with film. In one demonstration, GE has shown a spool of tape the size of a pocket watch on which the entire Encyclopaedia Britannica could be recorded.

The key to the GE system’s information-handling capacity is again the electron beam. The beam sweeps back and forth across a special plastic tape, building up a series of minute electrostatic charges on the tape’s surface. The tape passes over a small electric heater a fraction of a second later and is softened. The pattern of charges
deposited by the electron beam hardens into a series of grooves that can then be played back optically. The tape can be used over and over again, since subsequent heating smooths out the grooves and prepares the tape for re-recording.

General Electric has built prototype thermoplastic recorders in which the recording mechanism, including tape spools, looks not very different from that used in present-day tape recorders. This device will be used first in military systems—reconnaissance satellites may employ reusable thermoplastic tape to record their pictures for later playback to ground stations—but it should ultimately be available for home use in recording both television programs and music. It could well turn out to be the preferred system for high-fidelity use.

However, in talking about possible means of information storage, let us not discount magnetic tape. Some observers feel that breakthroughs in tape technology will take place in the near future. Consequently, either thermoplastic recording or magnetic tape might win out over photographic film as the high-fidelity recording medium of the future, since both can easily be adapted for home recording. Film, by contrast, is more awkward, because it requires chemical processing. Perhaps the ultimate system may use film for commercial recordings—as discs are now used—and one of the other systems for home recording.

Aside from the question of which recording medium will ultimately be used, a big factor holding up high-density recording is not the technical feasibility of the system, but the complexity of the electronic circuitry that would be needed. Even if present-day transistor components and construction techniques were used, the equipment required for a playback system might fill a desk. However, the ultracompact electronic systems that will be necessary (for home use) seem certain to be available on the consumer level relatively soon. One of the most promising developments in this regard is the microelectronic circuit module. Techniques have been developed for manufacturing match-head-size chips of semiconductor materials that incorporate not only transistors and diodes, but resistors and capacitors as well. Westinghouse demonstrated a microelectronic audio amplifier several years ago the size of a quarter. One side was hooked to a phonograph pickup, the other to a speaker. The whole thing was powered by one tiny battery.

Microcircuits such as these are already in use in space and military gear, and a few have already appeared in such consumer goods as hearing aids—an instance where space is at a premium. Within a few years, whole amplifier sections—the preamplifier, for example—will be contained in a tiny semiconductor chip. There is no reason why complete audio or r.f. amplifiers made up of several small microelectronic modules should not be common-place within a decade. With the use of the techniques of microminiaturization, the large number of circuits necessary for a digital playback system can be made small enough to be practicable. Manufactured by automatic machinery (as they certainly will be), such microcircuits should be cheap enough for use in home equipment.

As the amplifying elements of the home music system begin to share in the new technological advances, so will the other major audio element: the speaker system. Since the early days of sound, the speaker field has been almost completely dominated by one or another form of the electrodynamic loudspeaker. Although the electrodynamic speaker, with its cone and magnet, has traditionally represented the best compromise between cost and performance, it does have various drawbacks, the main one being that even the best electromagnetic speaker tends to color the sound it is reproducing. Many authorities believe that the most successful sound-producing device built so far is the electrostatic speaker, which is, in effect, a thin sandwich of two or three conducting layers separated by insulators. When audio signals are applied, the layers attract and repel each other. Since one is fixed, the other then moves and creates sound waves.

One disadvantage of the electrostatic speaker is that its surface must be extremely large to produce adequate bass and enough sound for concert-hall volume. Current models, even the large ones, still do not produce enough sound for some listeners. But perhaps this disadvantage could be overcome by literally turning an entire wall into an electrostatic speaker. An electrostatic sandwich made up of two conducting layers separated by a spongy insulating layer might be designed so that it could be glued on the wall like wallpaper. Since the layer cemented to the wall would be unable to move, the outer layer would vibrate in response to the audio voltage applied across the two. This open-faced sound sandwich would be trimmed to fit around windows, doors, and other obstructions, and could be divided into sections as required for stereo or multichannel sound.

When will advanced systems such as those we have been considering be available? They won't be at next year's hi-fi show, nor at the one after that. Not one of the developments mentioned, however, would require any new scientific breakthroughs or discoveries. What is needed is simply a comprehensive and diligent program of applications engineering to turn present-day hyperexpensive space and military devices into simplified but superior audio equipment priced for the average pocketbook. If past experience is any guide, these developments will come faster than anyone imagines.

Ken Gilmore is a freelance writer who specializes in covering contemporary scientific developments, especially those in electronics, and in making them understandable to the layman.
EYOND the experience of most record listeners are those bodies of music called plainsong, or plainchant. The terms are used to describe traditional, unaccompanied religious music, and are generally used synonymously with the Gregorian chant of the Roman Catholic church. More accurately, they refer to liturgical music which is sung in unison, which is devoid of harmony or counterpoint, and which is rhythmically free. Such music exists in many different cultures, Western and Eastern, Christian and non-Christian.

The lack of any harmony in plainchant, or of a measured rhythm, has long been a stumbling block for those who listen to it simply as music, disassociated from its liturgical function. Until relatively recently, its importance in music history was thought to be minimal and the concern only of men of the church. Nowadays, the more general acceptance of plainchant as music is nowhere more evident than in the pages of the Schwann catalog, which lists a surprisingly large number of plainchant discs—over seventy-five, in fact.

For example, the Choir of Monks of the Abbey of Saint Pierre de Solesmes, the Benedictine monastery in France that is almost singlehandedly responsible for restoring Gregorian and Ambrosian chant in our own time, can be heard on no fewer than sixteen LP’s of Gregorian chant. However, as R. D. Darrell points out in his program notes for the most recent collection of Gregorian chant on Vox: “For [most listeners], the apparently serene realm of plainsong seems at first encounter to lack any of the direct, dramatically persuasive magnetisms that irresistibly draw most listeners to the romantic repertories. . . . Indeed the more experienced in these later repertories the listener is, the more uneasily conscious he is likely to be of the absence of familiar attractions: those of harmonic richness, polyphonic textures, chromatic instrumental tonal coloring, symmetrical formal structure, a regular metrical beat, and many other ‘normal’ characteristics of all the music he knows and loves best.”

Part of the difficulty, of course, is lack of familiarity. Plainsong is no more abstruse than any music that is at first strange to the ear, whether medieval or modern. If a Gregorian Psalm sounds roughly the same as an Antiphon to an untrained listener, he must remember that the time is not so long past when the music of Vivaldi and Corelli, or of Byrd and Gibbons, sounded just as much alike. A second difficulty, and one not solvable simply through repeated hearing, is the dual problem of context and of meaning: how the chant fits into the liturgical rite, and the meaning of the words themselves. Just as a libretto—or, at the very least, a plot synopsis—is vital for the appreciation of an opera (if it is in a foreign language), so are a text and a translation necessary for the understanding of plainchant.

During the earliest years of Christianity, hymns and psalms were sung and chanted by the entire congregation, in the manner of the older Hebrew liturgy. At this stage, the melodies were simple and easy to memorize (for centuries to come there would be no method of notation). Then came antiphonal singing, in which verses of the psalms were sung alternately by a chorus of men and a chorus of women and children. Antiphonal singing is believed to have begun in Syria, in Antioch, about the year 350. It was very popular in the East, and St. Ambrose is credited with having introduced it in the West about forty years later. However, as the style of the chant quickly became more and more complex, most of the singing came to be done by professional choirs instead of by the congregation. In this regard, too, it is interesting to note that the practice of using women for singing began to fade by the fourth century.

By the fifth century, most of the new developments involving Christian liturgy and the chant were for the first time taking place not in the East, in Jerusalem and Antioch, but in the West, particularly in Rome. At about the time St. Ambrose was introducing antiphonal psalmody and hymns to the parishioners of Milan, Pope Damasus I
(366-384) began to reorganize the liturgy and chant in Rome on the model of the Church of Jerusalem. In the next century, Pope Leo I (440-461) was the first of several popes to institute a cycle of chants for the church year. (He also founded a monastery in Rome for the training of singers.) The sixth century saw further development, as new sections of liturgy became formalized. The chief influence during the latter part of the sixth century was Gregory I, pope between 590 and 604, and the person after whom the entire body of Roman chant has been named.

Gregory's role as the author or at least the compiler of what we know as Gregorian chant is the subject of a long tradition, beginning with a biography of the pope written about 872 by John the Deacon. This tradition resulted in such fanciful treatments as paintings of Gregory "sitting on the papal throne and dictating to a scribe the melodies that a heavenly dove perched on his shoulder is whispering into his ear." Modern scholarship, however, questions the extent of Gregory's role in the codification of the chant. Recent investigations have revealed that most of the repertoire we know today dates from well after Gregory's time (the chants of the Ordinary of the Mass, for example, are believed to have developed as late as the tenth century). At the most, it can be conjectured that Gregory provided the directions for the chant's systematization, but the fulfillment of the task was not reached until much later.

Gregorian chant, or the plainsong eventually authorized by the Roman Church, was in fact only one of several kinds, or dialects, of Christian chant during the early centuries in Western Europe. In Milan there was the Ambrosian chant, in France the Gallican chant (much of which eventually went into the formulation of Gregorian chant), and in Spain the Mozarabic chant. According to Willi Apel (Gregorian Chant, Indiana University Press, 1958), "only scant remnants of the Gallican chant have come down to us, and the Mozarabic repertory is preserved only in early manuscripts, the musical notation of which cannot be accurately read."

There remains Ambrosian chant, which takes its name from St. Ambrose, Bishop of Milan from 374 until 397, who, as mentioned before, introduced hymnody and antiphonal psalmody to the West. Like the Roman, Gallican, and Mozarabic, Ambrosian chant is a regional style. Although it sounds roughly similar to Gregorian, there are many points of difference: the liturgy itself varies from the Roman rite, there are different names for some of the chants, and the Ambrosian melodies are often more orna-

Pope Gregory I (540-604) was the guiding force behind the development of the Gregorian chant, according to a long tradition. Although some accounts have Gregory dictating the music from his papal throne, the painting above (Lubin Bawin, 1610-1663, in the Orleans Museum) shows him doing his own transcribing from the dictation of the heavenly dove of inspiration. The woodcut at left is from Practica Musicae-Usseusque Cantus, by Franchinus Gafurius, printed in Venice in 1512.
mented than the Gregorian. As the Gallican and Mozara-
bic chants were gradually set aside in favor of the Grego-
rian, the Ambrosian chant underwent extreme pressure
from both popes and kings to conform to the Gregorian
style. However, it managed to remain essentially itself,
and is still used in Milan today. This is not to say, how-
ever, that the Ambrosian chants we hear now (the earliest
manuscripts date from as late as the twelfth century) did
not undergo changes and influences—but then so did the
Gregorian. Nor can one consider the Ambrosian chant as
being earlier than the Gregorian.

The dating of plainchant is an extremely complex affair,
subject to much speculation, but it is now believed that
the music of the Roman Catholic liturgy reached the peak
of its development between 750 and 850—not in Rome,
but rather in France during the period of the Carolingian
kings Pepin, Charlemagne, and Louis the Pious. The
earliest works, such as the psalmic recitations stem-
ing from Hebrew rites, are also the simplest in form,
while the more ornate ones, such as Alleluias with ex-
tended roulades on one syllable, belong to the period just
before the chant began to deteriorate.

The decline began with the advent of polyphony about
the year 1000, and even in the isolation of monasteries,
chant gradually became distorted through changes in
rhythms and melodies. It was only toward the middle of
the nineteenth century that any attempt was made to re-
form the music of the Catholic Church, but at first corrupt
texts were used. Soon, however, the newly re-established,
Benedictine Abbey of Solesmes in France began its efforts
to restore the liturgy, a task that culminated in the mota
proprio of Pius X in 1903, with a second such letter fol-
lowing the next year. The Gregorian melodies, declared
the pope, were to be restored in their integrity and iden-
tity, after the authority of the earliest manuscripts, taking
account not only of the traditions of past ages, but of li-
turgical practices of today as well. Both the Gregorian and
Ambrosian books of chants were the direct result of the
efforts of Solesmes to comply with the Pope's recommend-
dations, and their reconstruction of the method of singing
chant became the norm for Catholic use.

The latest collection of Gregorian chants to be issued
in recorded form is a three-disc set on Vox (SDLBX 5206
$9.95, DLBX 206 $9.95). The performances are by the
Choir of the Vienna Hofburgkapelle, under the direction
of Josef Schabasser. The album's contents consist mainly
of Proper of the Mass, arranged according to the calen-
dar of the liturgical year. On the whole, the album can
be considered a good compendium of the best-known and
most melodious chants. The male choir follows the tradi-
tional Solesmes method, singing with clarity, precision,
and appropriate feeling, although they do not attain the
degree of sincere conviction that characterizes the entire
services recorded on DGG Archive by the Monks of the
Abbey of St. Martin in Beuron. Vox's recording, well
spaced in stereo, is, however, a little close-up, a factor that
makes continuous listening somewhat fatiguing.

Vox's second contribution to Catholic chant, a three-
disc album devoted to Ambrosian chants, is a reissue
(DLBX 207, mono only, $9.95) of a set first released in
1958. Except for a few brief examples in historical collec-
tions, this is the only sampling of Ambrosian chant on
records. In view of this, and the possibilities of compar-
ing the Milanese and Roman chants, it is a pity that one cannot
recommend the Ambrosian set with much enthusiasm.
Although the collection includes a generous group of ex-
cerpts from the Mass and the Office, including the inton-
ing of Lessons from the Old and New Testaments, the
style of singing has more to do with opera than plainsong.
The ladies of the Choir of the Polifonica Ambrosiana
of Milan are distinctly shaky in their tones (the use of
women in itself is anachronistic), while the men are less
than accurate in their intonation. Sloppiness, both in notes
and rhythm, pervades the singing in this set, and one longs
for the precision and dignified emotion that is a hallmark
of the best Gregorian-chant recordings. The sound qual-
ity is adequate. Both the Gregorian and Ambrosian albums
contain illustrative booklets, comprehensive notes, plus
texts and translations.

For readers interested in exploring the Gregorian repetoire
further, the Solesmes recording of Easter Mass ex-
cerpts on London 5222 and the Beuron recording of the
Requiem Mass on Archive ARC 3031 are recommended.
TWO SPLENDID NEW VERSIONS OF THE VERDI REQUIEM

Ormandy and Giulini both render superlative accounts of the "Manzoni" Requiem

Verdi’s Requiem Mass has, on records at least, been lavishly treated by conductors: Tullio Serafin, Arturo Toscanini, Victor De Sabata, Ferenc Fricsay, Igor Markevitch, and Fritz Reiner have given us performances that were not only far above the routine, but very often touched with grandeur. Yet none of these superior interpretations was free of imperfections either in solo singing or—what is extremely important in a work as complex as this—in the technical aspects of the recording. Now, however, Angel and Columbia have simultaneously come up with new releases that have captured all the splendors of the unique "Manzoni" Requiem—and on such a high level of excellence that "criticism" of it can only be a tabulation of achievements and virtues.

No sharp differences of aesthetic vision separate the two conductors. Both Carlo Maria Giulini and Eugene Ormandy are noted for strong dramatic flair, which is essential for this score; but both are also known to avoid extremes either of whiplash passion or weepy sentimentality. Their tempos in the Requiem are similar, and without any trace of idiosyncrasy on either side. Giulini introduces a retard in the Ingemisco that Ormandy avoids—properly. I think. And I also prefer Ormandy’s treatment of the Sanctus, Verdi’s concession to academicism, without which the Requiem would be even more glorious than it is. Giulini, on the other hand, observes the dynamic markings more fastidiously, and his somewhat subdued reading conveys more of the work’s mystery and devotional spirit. His reading is also clearly superior in Part 3 (Domine Deus) by reason of its smoother integration of the contrasting sections. These smaller considerations, however, will not alter the fact that both readings are masterly as a whole.

The same can be said for the solo singers—all eight of them. Although the voice of Columbia’s Lucine Amara is perhaps more appropriate in weight and color to the rather Aida/
Amelia demands this part makes on the singer, it is Elisabeth Schwarzkopf's reading for Angel that emerges, in the final analysis, as the more effective. She does sing cautiously at times when her voice should be soaring, but she paces herself with seasoned artistry and floats some heavenly tones in the Overture and in the closing Libera Me. Miss Schwarzkopf is also undoubtedly the steadier singer tonally.

The two mezzos are more evenly matched. Both sing sensitively and with a consistently lovely tone, but the sensuous richness of Maureen Forrester's voice on the Columbia recording, and her more firmly supported lower register, give her a slight edge over Angel's excellent Christa Ludwig.

Richard Tucker, for Columbia, sings the tenor part with a gorgeous tone and with a passionate lyricism that is, for once, free of the exaggerations his delivery has acquired in recent years. But then I have never heard a more polished or artistic performance from Nicolai Gedda either: without quite matching the richness of Tucker's tone, he achieves a beautiful blend of lyricism and restraint. He also observes Verdi's dynamic markings more attentively, though here Giulini should undoubtedly share the credit. I would find it extremely difficult to favor one tenor over the other, for surely Gedda's Ingenioso, a faithful realization of Verdi's dolce con calma marking, is as imposing an example of singing, in its own way, as Tucker's.

As for the bassos, I must award the palm to Angel's Nicolai Ghiaurov. George London sings with fine sonority and a vivid textual projection, but Ghiaurov manages to combine these same attributes with a smooth cantabile style the American artist cannot equal. This second recorded example of Ghiaurov's voice confirms the impression I received from his first disc a few months ago: he has no equal as a vocalist among currently active bassos.

The choruses and orchestras in both recordings are excellent, and are richly captured by the respective engineering teams. Tucker seems to dominate some of his ensembles on the Columbia recording; no imbalance of this kind was permitted by Angel, however, the ensemble aspect being severely stressed by conductor and engineer alike. This one consideration aside, however, Columbia offers the more spectacular sound over-all—clearer definition, richer sonorities.
and a very successful realization of the score’s important percussion elements.

Although, when everything is taken into consideration, I slightly favor the Angel version, I would consider parting with either of these superlative recordings a serious personal loss.  

George Jellinek

@@ VERDI: Requiem Mass. Elisabeth Schwarzkopf (soprano); Christa Ludwig (mezzo-soprano); Nicolai Gedda (tenor); Nikolai Ghiaurov (bass); Philharmonia Orchestra and Chorus (Wilhelm Pitz, chorus master). Carlo Maria Giulini cond. Angel, SBL 3619 two 12-inch discs $11.96, 3649 $9.96.

@@ VERDI: Requiem Mass. Lucine Amara (soprano), Maureen Forrester (mezzo-soprano), Richard Tucker (tenor), George London (bass); Westminster Choir (Dr. George Lynn, director); Philadelphia Orchestra, Eugene Ormandy cond. Columbia MC 28 707 two 12-inch discs $11.96, M2L 3078 $9.96.

A NEW STANDARD FOR THE CLEVELAND ORCHESTRA

George Szell leads an unequaled performance of Mozart's Sinfonia Concertante

There has been no dearth of good recordings of the Mozart Sinfonia Concertante, K. 364, though not all factors in the best available performances up to now have been on an equally high plane— that is to say, if the solo violinist and violist were superior, the orchestra, as often as not, was merely adequate. Individual elements, in other words, may have been splendid, but the total entity— sometimes only because of sound quality— seldom reached the requisite level.

There can be no hesitation, therefore, about calling Columbia’s newly released version of the Sinfonia Concertante by the Cleveland Orchestra under George Szell the most outstanding performance now available. It is a home-grown product: the soloists (as is the case in all the other recordings) are members of the orchestra that accompanies them. This situation might conceivably have resulted in a lack of personality in the solo performances, but not here: Rafael Druian and Abraham Skernick play the work as though it had been written for them. Furthermore, their teamwork— accuracy of ensemble plus consistency of interpretation— is quite magnificent; listen, for instance, to the breathtaking double trill at the close of the second-movement cadenza.

Over-all, the solo playing is more Mozartian stylistically than in any other recording. Phrases are articulated without developing any of the long lines associated with the Romantic period, trills are begun from the upper note, and soupy effects of Romantic sentimentality are eschewed. There is, however, no lack of sentiment.

The credit for all of these admirable qualities, of course, must go to George Szell, from whose hands we have been receiving some of the most stylish Mozart available on records. The amount of detail in his interpretation is astonishing, yet one is never aware of any striving solely after effect. The orchestral accompaniment (one feels that the members of the Cleveland Orchestra are very much behind their own soloists) is in every way a gem, and this description is equally applicable to the light-hearted, joyful playing of the popular motet Exsultate, Jubilate on the second side. Moreover, Judith Raskin sings it beautifully. She negotiates the florid running passages and high notes with ease, and her tonal quality is expressively warm: hers is certainly one of the finest interpretations of this work on disc, complete with extremely effective cadenzas (written, I am told, by George Szell).

Columbia’s sound is first-rate. Problems of balance have been solved with great success, not only in respect to soloists and orchestra, but also within the orchestra itself, so that the all-important winds are unusually well defined in the Sinfonia Concertante. The stereo version presents a natural picture without exaggerated separation of the two string soloists.  

Igor Kipnis

@@ MOZART: Sinfonia Concertante, in E-flat Major, for Violin, Viola, and Orchestra (K. 364). Exsultate, Jubilate (K. 165). Rafael Druian (violin); Abraham Skernick (viola); Judith Raskin (soprano); members of the Cleveland Orchestra. George Szell cond. Columbia MS 6625 $3.98, M1, 6925 $1.98.

ENTERTAINMENT

THE ENDURING ARTISTRY OF JOHN MCCORMACK

The great tenor is heard again in a collection of his favorite songs

May 14, 1903 was a decisive day for John McCormack. That was the day he won (at the age of nineteen) the tenor contest at the Feis Ceoil, an Irish music festival in Dublin, and it was also the day he met his wife-to-be, Lily Foley. In 1904 he and Miss Foley both sang at the Irish Village at the St. Louis Exposition. Back in London, in 1905, McCormack financed a trip to Italy to study voice by making ten recordings for the Edison Company and twenty-five for the Gramophone Company. He made his operatic debut in December of 1905 in Savona, Italy in
L'Amico Fritz, appeared at Covent Garden in October of 1907 in Cavalleria, and at New York's Metropolitan on November 29, 1910 in Traviata opposite Nellie Melba. By 1912, however, his song recitals had become so successful that he gradually abandoned his operatic career to concentrate on concert tours. The length of his career was astounding; he sang concerts almost until the time of his death, in 1945. He attributed this to his natural gifts, training, and care—for example, no rehearsals. On performance days he never spoke above a whisper.

It was one of the singularities of McCormack's voice that it lent itself so well to the recording medium, both electrical and acoustical. It was remarkable for its smooth and effortless production and a quality that was at once a definition of "Irish tenor" and bel canto. The orchestras, solo instruments, and other voices on his recordings may fall away to labored wheezes, but the clarion sweetness of McCormack's pure lyric tenor continues to ring out amid the sonic debris, unaccountably exempt from the ravages of time.

This special "phonogenic" quality made John McCormack a household name in the first half of this century. Every family with a gramophone had at least a few of the tenor's over five hundred recordings. Now, RCA Victor has reached into this recorded legacy to bring us another superb John McCormack album—this one titled "Songs of Sentiment." It is a collection of those old-fashioned ballads that modern tastes sometimes find too sentimental for comfort. McCormack himself, however, had no such reservations about them: "If a song appeals to our better nature happens to have a sentimental touch which is simple enough to reach the simplest heart, is it any the less a song having a purpose than some song, more finely made musically, which touches only the few?"

According to pianist Gerald Moore, who became McCormack's accompanist after the retirement of his long-time associate Edwin ("Teddy") Schneider, the tenor had a very simple approach to repertoire: if he liked the tune of a song and believed in the words, he sang it. He had a simple formula for his song programs, too: "First, I give my audience the songs I love. Second, I give them songs they ought to like, and will like when they hear them often enough. Third, I give them the folksongs of my native land, which I hold to be the most beautiful of any music of this kind. . . . Fourth, I give my audience songs they want to hear. . . ."

For those too young to remember the artistry of John McCormack, the present album offers a particularly good introduction. These are the songs he loved—and the songs his audiences wanted to hear. Fortunately, the current catalog can still supply the balance of McCormack's ideal program: Irish songs (Camden CAL 407), sacred music (Camden CAL 635), opera (Asco 110), arias and lieder (Angel COLH 123).

Particularly and immediately winning here are McCormack's singing of Goodbye, Sweetheart, Goodbye; Shakespeare's Take, Oh, Take Those Lips Away; and Come Where My Love Lies Dreaming (Stephen Foster was one of McCormack's enthusiasms). If the program—with the limits of its aims—can be faulted, it is only for failing to include such songs as I Dream of Jeannie and Charles Marshall's I Hear You Calling Me, the latter perhaps McCormack's most famous single recording, but this incomparable performance can be found on Camden CAL 407. Now, however, having reawakened our appetite for the voice of this splendid artist, RCA should undertake to restore to the catalog the long-discontinued"McCormack in Opera and Song" (LCT 1036), which included such wonders as "Una furtiva lagrima" (L'Elisir d'amore) and "O Konig, das kann ich dir nicht sagen" (Tristan und Isolde).

The sound of these transfers of 78-rpm recordings from the years 1910-1922 is consistently quite good, better than that on any other McCormack reissue I have heard. A slight treble boost brings the voice into even sharper focus.

William Anderson

**JOHN MCCORMACK: Songs of Sentiment.** John McCormack (tenor); orchestra and chorus. *Dear Little Shamrock; The Low-Back'd Car; Mother o' Mine; The Lost Chord; When You and I Were Young, Maggie; Be-
A SKILLFUL AND ENGAGING BLUEGRASS QUARTET

The uniquely entertaining Dillards are presented in a varied program of country music

Although the Dillards have been a professional Bluegrass unit for only a little more than two years, the quartet has rapidly evolved into one of the most skillful and engaging groups specializing in that swirling idiom. Their new album for Elektra—"The Dillards Live!!! Almost"—is their best so far. Recorded at the Mecca in Los Angeles, it is simultaneously a delight for long-term Bluegrass converts and an extraordinarily entertaining way of orienting new listeners to this irrepressible style.

Originally from Salem, Missouri, Douglas Dillard is a virtuoso banjo player, and his brother Rodney is an able guitarist and a pungent singer. Dean Webb is brilliantly inventive on the mandolin, and Mitch Jayne is not only a good bassist but also a witty and instructive master-of-the-revels. Jayne's introductory tales and character descriptions have fortunately been included in this location recording, and they reflect the tone of the music expertly. Like the Dillards' playing, Jayne's verbal approach is at once sophisticated, earthy, and wryly irreverent. The Dillards play with the qualities of communal verve, bite, and rhythmical propulsion that are requisite for first-rate Bluegrass, and the singing by Rodney Dillard is tartly evocative.

The repertoire includes traditional tunes (Black-Eyed Susie, Old Blue, Pretty Polly) that have been thoroughly freshened and adapted to the Dillards' zestful but relaxed style. They also work with songs by contemporaries whom they admire (Don Reno's Dixie Breakdown and Bob Dylan's Walking Down the Line) and, most importantly, they add their own pieces to the Bluegrass repertoire.

Secure in their knowledge of the Bluegrass tradition, the Dillards are not intimidated by purists. They insist on doing "what comes naturally," as Mitch Jayne puts it, by expanding the Bluegrass idiom to match their own expressive needs. As a result, many of these interpretations communicate a singularity of approach—as, for one instance, when they turn the traditional murder ballad, Pretty Polly, into a rollicking farce.

It is precisely because these young musicians are convinced that country music is capable of seriousness and of its own kind of beauty that they are also free to enjoy thoroughly the lighter elements of the Bluegrass tradition. They have no need to be either solemnly pretentious or trickily gimmicked. To them the folk base of Bluegrass is so varied and so viable a foundation that it can accommodate a broad range of moods.

I know of no other Bluegrass combo with the emotional breadth of the Dillards, and there is certainly no other that is as uniquely entertaining. They are unique in the sense that their music, like Mitch Jayne's introductions, appeals both to the hip and to the home folks. This album signals the arrival of a major American folk unit. Elektra has given the Dillards an exceptionally faithful, vivid recording.

Nat Hentoff

© @ THE DILLARDS: Live!!! Almost. Douglas Dillard (banjo, guitar), Rodney Dillard (guitar, mandolin, vocals), Dean Webb (mandolin), Mitch Jayne (bass). There Is a Time; Sinkin' Creek; Pretty Polly; Backin' Mule; and nine others. Elektra FKS 7265 $5.95, EKL 265* $1.98.
THE JBL OLYMPUS

For a holiday so pervaded with music, so wrapped in song, an instrument for musical enjoyment is the classic material gift. Selection of a JBL Olympus (or a self-energized stereo pair) will make this Christmas a starred event in your family annals. The Olympus has a holiday sound—pure as a childhood memory, guileless as sleigh bells, sound etched as clean as the moon-cast shadow of a fir tree on new-fallen snow. This is the kind of loudspeaker system you need to enjoy to the fullest your heritage of Christmas music. The Olympus re-creates in your own home the profound notes of the solemn organ, the inspiration of great choirs, lilting carols, hearty songs of celebration, the antique gaiety of lute and recorder. All complete, all sounding alive, and everlastingly alive. A fitting gift. Each part in each component is fashioned with such meticulous care…Each instrument is assembled with such classic concentration on perfection…It is as though the JBL craftsmen were making a personal gift for some individual whose appreciation of excellence parallels their own. Write for your free copy of the new JBL catalog. JBL wishes each of you a melodious Christmas and an harmonious New Year.

JAMES B. LANSING SOUND, INC., Los Angeles, 39
HIFI/Stereo Review's Choice of the Latest Recordings

Classical

Reviewed by William Flanagan • David Hall • George Jellinek • Igor Kipnis


Performance: All worthy

Recording: Generally impressive


Performance: One of the better versions

Recording: Mostly good

Archive's five-disc anthology is made up of two sets of recordings previously released, plus the newly issued Musical Offering. The "Brandenburgs," performed by a team of distinguished soloists (including trumpeter Adolf Scherbaum in No. Two, recorder player Hans-Martin Linde in Nos. Two and Four, and harpsichordist Ralph Kirkpatrick in No. Five), is one of the best of the available versions, though certain stylistic failings, such as the omission of an added slow movement for No. Three, keep the set from having the stamp of authority we are accustomed to take for granted in the best Archive productions. Particularly attractive, however, are the vitality of the performances and the excellent choice of tempos. These features are also in evidence in the four orchestral suites. But again, there are some shortcomings: some of Richter's appoggiaturas are too short, others are omitted, and his opening overtures are treated exactly as written rhythmically rather than being double-dotted.

The various recordings of the Musical Offering each use a different order of pieces, solution of the canon, and instrumentation. Richter's version is based primarily on the old Bach Gesamtausgabe, published in 1885: the trio sonata, rather than being placed in the middle, as it is in so many recordings, is here played almost at the end and is followed only by the symbolic if rather anticlimactic Canone perpoteino. In many other versions, the Ricercare 2 is performed as a harpsichord solo as it is here, but to my knowledge this is the first time that the large-scale Ricercare 3 has been treated similarly. Both are played effectively though quite soberly by Hedwig Bilgram, who also plays harpsichord four hands with Richter in the Canone 4. The performance as a whole is a good one, excepting minor details, and the playing of the instrumentalists is expert. But one misses the humanity and warmth of an interpretation such as Menuhin's (Angel S 35731, 35731). Too, there is scarcely any feeling here of the g eante, that hyperexpressivity so much a part of the Musical Offering and the court for which it was written.

Archives recording of the Musical Offering (available separately as 75220, 3220) is particularly good, especially in stereo. The suites suffer slightly from end-of-side distortion (notably in Numbers Three and Four, and the "Brandenburgs") are generally very fine except for a few moments of weariness in the third concerto. The lavish album comes with extensive notes in several languages.

Paillard's recording of the four suites, like Richter's, boasts first-rate instrumentalists, notably Maxence Larriue, flutist in No. Two. Tempos are lively, and the French conductor seems a little keener on stylistic details than his German counterpart. I would have liked the Overtures double-dotted, but the performances from all other aspects are exceptionally good. The second suite, in particular, can be considered one of the best versions available. Epic's transfer from the original French Etope disc is very satisfactory for the most part, although there is some inner-groove distortion. The album includes excellent program notes on the chronology and dating of the suites. I. K.

Recording of Special Merit


Performance: Imaginative and poetic

Recording: Good enough

Imaginative as always, Glenn Gould has chosen to play the fifteen two-part and three-part Bach Inventions as suggested in the latter of two 1723 autograph manuscripts—that is, with each two-part piece followed immediately by the three-part work in the corresponding key. Since several of the two- and three-part pieces are thematically interrelated, the total listening experience thereby becomes all the more fascinating.

Perhaps in order to emphasize his highly poetic and totally nonpedagogic approach to these perennial teaching pieces (Bach began them originally for his ten-year-old son, Wilhelm Friedemann), Gould has also chosen not to group them on the disc as they are in the Bach manuscript—in the order of ascending keys. And finally—as he details in the album notes—the pianist has operated on the action of the piano used for this recording to gain "a sound of such immediacy and clarity that those qualities of non- legato so essential to Bach would be gleefully realized."

Despite occasional pianistic action noise and a good bit of audible vocal obbligato, the end result of this Bach excursion with Gould—with occasional interruptions for comparison with Mme. Landowska's RCA harpsichord recordings of the complete two- and seven of the three-part Inventions —was wholly satisfying and often deeply moving. For like conductor Wilhelm Furtwängler in his prime, Gould at his best plays a magnificent game of brinkmanship in order to extract the utmost expressive essence from the music, yet does not destroy its structural and stylistic frame of reference. And when he gets away with it, as he does more often than not on this disc, one must suppress an impulse to cheer quietly. For example, one would hardly believe...
that Landowska and Gould were playing the same piece when one hears the two versions of the three-part *Invention* in B Minor (No. 15). And I must admit that I find Gould’s gigue-like treatment the more satisfying. In general, Gould—again like Furtwängler—tends to emphasize the contrasts between rhythmic and lyrical pieces. He brings a wonderful swing and bounce to the two-part *Invention* in D Minor and E-Flat, yet to the three-part *Invention* in F Minor (No. 9) he brings an atmosphere of somber brooding comparable to that of Bach’s darkest and most monumental slow movements. In common with Furtwängler, Casals, and Landowska at their best, his phrases slow pieces very freely (C Minor, E Minor), but in the doing rather than dissipates the organic tension inherent in Bach’s melodic line.

Altogether, this is a fascinating and enthralling disc—the kind one returns to and lives with not as an object of pianistic study, but rather as the source of an intense aesthetic pleasure.

D. H.


**Performance:** Taut and dynamic

**Recording:** Good

As opposed to the poised yet full-bodied classic approach of Fleisher and Stern (Epic) and Graffman and Hendel (RCA Victor), the Serkin-Bernstein team brings to Beethoven’s youthful C Minor Concerto an almost hectic quality. This is particularly evident throughout the first movement, which is made to sound almost like an anticipation of the C Minor Symphony. Things calm down a bit in the beautifully played slow movement, and Serkin brings great verve and sparkle to the Finale.

**This reading is not particularly to my taste,** but for those who fancy a taut and dramatic treatment, the Serkin-Bernstein disc will fill the bill amply.

For me, the most intriguing music on this disc is the Beethoven Choral Fantasia in its first really good recorded performance in stereo. It’s a curious hodgepodge of a piece, beginning with a long piano solo of improvisatory cast, then orchestral variations with piano on a tune akin to one later used in the Ninth Symphony, and concluding with a choral apotheosis that makes use of, among other devices, the celebrated choral sequence that occurs at the end of the famous episode in the Ninth Symphony slow movement and again on the words “*Vor Gott*” in the choral finale. Indeed, it is impossible to escape the feeling that this Choral Fantasia is a pre- liminary essay in the style and technique that was to reach its fullest development in the Ninth Symphony and in the overture and chorus for the festival play Composition of the Horseman.

The recorded performance here is full of thrill and brilliance, the sound (as it is in the Concerto) excellent.

D. H.

**BEETHOVEN:** Piano Concerto No. 5, in E-Flat, Op. 73 (“Emperor”). Artur Rubinstein (piano); Boston Symphony Orchestra. Erich Leinsdorf cond. RCA Victor LSC 2733 $5.98. LM 2733 $4.98.

**Performance:** A la Rubinstein

**Recording:** Slightly dry

Artur Rubinstein’s second stereo recording of the Beethoven “Emperor” Concerto brings to two dozen the number of currently available versions. Save for improved balance between piano and orchestra, this reading here with conductor Erich Leinsdorf adds little to what he accomplished some years ago with Josef Krips. There is still its brio in the finale and refined lyrical sensitivity in the slow movements, but the monumental first movement rather lacks a genuine identification with the classically beamed heroics that Beethoven wrote into the score. For all the music’s anticipation of Liszt, mere Liszt-like glitter will not get by here.

**For that reason, I find the readings by Fleisher, Backhaus, and Kempff stand up best under repeated listening, with Serkin-Bernstein recommended for those who want their “Emperor” somewhat more dramatic.**

RCA’s recorded sound is full and solid in the orchestral department, but the piano sonics seem a trifle dry and close-miked.

D. H.

**RECORDING OF SPECIAL MERIT**


**Performance:** Virtue

**Recording:** Good

Justly chosen tempos, warm coloring, and nicely weighted rhythmic tension place Steinberg’s readings of the first two Beethoven symphonies high on the list of stereo versions. Other conductors have brought more refinement to the middle movements, or have whipped up the fast movements into more impressive virtuoso display pieces. But Steinberg’s main interest is what Beethoven intended, and the result is a happy one for all concerned—the listener especially.

This is a disc to live with, and Command’s full-blooded and unforced sound is another asset.

D. H.

(Continued on page 72)
Mr. Saul Marantz discusses his revolutionary new model 10-B FM Stereo Tuner

Q. Mr. Marantz, your new 10-B tuner is quite revolutionary. Do you feel it will obsolete all other tuners?

Mr. Marantz: In one sense, yes. The performance of this tuner is so dramatically superior to conventional tuners that anyone who wants or needs perfect FM reception today has no choice but to use the model 10-B. Its superiority, however, does not necessarily obsolete conventional tuners. Rolls Royce, of course, makes superior cars, but they haven't obsoleted Chevrolets.

Q. Is this superior performance discernible to the average listener?

Mr. Marantz: Very much so. The difference is quite dramatic. As you know, conventional tuners have never been able to pick up and reproduce broadcasts which could match the quality of a fine disc or tape playback system. This has often been blamed on broadcast quality. But the new 10-B disproves this theory. It reproduces the broadcast of a disc or a tape with the same clarity and separation as if played through a playback system—proving that broadcast quality is generally excellent.

Q. Is this true with weak broadcast signals also?

Mr. Marantz: Yes. In fact the Model 10-B will reach 55 db quieting at only 3 microvolts! This is better than most conventional tuners will reach at 1000 microvolts. With a 25 microvolts station the Model 10-B reaches a phenomenal 75 db quieting which is about 20 db better than most conventional tuners can achieve at any signal strength. This means that with the Model 10-B there will be excellent reception even in fringe areas, particularly so because of the tuner's high sensitivity, its extremely sharp selectivity and reduced susceptibility to multipath effects, which on other tuners cause distortion.

Q. How are such improvements accomplished?

Mr. Marantz: The answer to that question is very complex, because the 10-B is far more than an improved tuning system; it is a completely new design concept with many technical innovations developed by Marantz engineers.

Q. Can you give us some examples?

Mr. Marantz: Yes. The RF section, for example, contains a balanced-bridge device mixer—a technique used in modern sensitive radar designs to eliminate a major source of noise, harmonic distortion and other spurious interference. The whole RF circuit is balanced-tuned, using a precision tuning capacitor with four double sections, for further reduction of spurious images.

For the critical IF strip, we've developed the first commercial application of the "Butterworth," or phase-linear filter. This new concept provides a number of distinct characteristics essential for good results. The passband, for example, is phase-linear for extremely low distortion—especially at high frequencies—and it remains essentially phase-linear at all signal levels. Cutoff slopes beyond the passband are extremely steep, allowing unprecedented selectivity; it is much less subject to the effects of multipath, and it doesn't require realignment with tube changes or aging. The old standby coupled IF circuits currently in use do not have any of these characteristics.

Q. Are there any innovations designed specifically for multiplex?

Mr. Marantz: Yes. For multiplex reception we've developed our own unique variation of stereo demodulator, which permits phase correction to maintain a very advanced order of stereo separation throughout the whole audio band.

Q. What is the purpose of the tuning and multipath indicator?

Mr. Marantz: This oscilloscope device is so versatile its single trace tells many easily understood stories. It shows when a station is tuned exactly to the center of the passband. The height of the pattern shows the signal strength. The indicator shows how much multipath is present, making it easy to adjust the antenna for best reception. It shows if the station is creating distortion by overmodulating. Also, technically informed users can check stereo separation of transmissions, discs and other sources.

Q. And how soon will the model 10-B be available in quantities?

Mr. Marantz: The Model 10-B is a laboratory instrument of extremely high quality which will never be mass produced in the usual sense. However, production has been stepped up fourfold and all back-orders are now being filled by Marantz franchised dealers.
that any records and tapes reviewed in this issue can be purchased through the HI/F 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.

**ALL RECORDINGS ARE FULLY GUARANTEED**

<table>
<thead>
<tr>
<th>PAGE NO.</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>
<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.C. residents add 4% sales tax)

Total

Name (please print) .................................................................

Address ..........................................................................................

City .......................................................... Zone...... State ....

Orders must be received no later than January 4, 1965  

---

**BEETHOVEN: Violin Sonata No. 3, in E-flat (see MOZART)**

  **Performance:** Tchaikovskian
  **Recording:** Full and spacious

Using as poles of comparison Monteux's Gluckian classical approach and Munch's volatile melodramatics, Leonard Bernstein's reading of this Berlioz standard is closer in spirit to that of Munch. However, the very heavy dynamic emphasis that Bernstein employs to underline his dramatic points (in the first movement especially) add a curiously Tchaikovskian cast to the performance—the introductory pages and the middle movements of the "Pathétique" come to mind. The end result, for my taste, is not particularly good Berlioz, especially if one takes Monteux as a stylistic standard. The Columbia engineers have lavished wonderfully rich and spacious recorded sound on this performance. But even their best comes to naught in the last half of the "Witches' Sabbath" finale, for inner-groove distortion is inescapable on a thirty-two-minute side.

In short, here is one of the rare instances where I feel that division of a movement—the long "Scene in the Fields"—between two sides is justifiable.  

**D. H.**

  **Performance:** Warily lyrical
  **Recording:** Good

Wilhelm Kempff excels in the lyrical and introspective aspects of Brahms, and is therefore able to bring to such pieces as the tender Op. 116 No. 6 Intermezzo and the graceful Op. 76 No. 2 Capriccio a singular beauty of inflection and tone. He is no match for Rubinstein or Backhaus in the virtuosic fury of the Op. 79 Rhapsodies, and his playing of the D Minor Capriccio from Op. 116 renders it more an allegro pesante than the presto energico required by Brahms. Nevertheless, the collection as a whole makes for an affecting listening experience, and as such belongs with the Backhaus London disc as one of the outstanding recitals devoted to the shorter Brahms solo piano works. Excellent sound.  

**D. H.**

**RECORDING OF SPECIAL MERIT**

- FAURE: Requiem: Cantique de Jean Racine. Bernard Kruysen (baritone). Denis Thilliez (bass soprano), Henri Carol (organ); Philippe Caillard Chorale, National Orchestra of the Monte Carlo Opera, Louis Frémaux cond. EPIC 1285 $5.98, LC 3863 $4.98.
  **Performance:** Melodious
  **Recording:** Lustrous

(Continued on page 76)
ARCHIVE PRODUCTION

Two Truly Outstanding Musical Accomplishments

Inspired music-making in the great tradition, coupled with the most meticulous standards of record manufacturing in the world.

A GREAT NEW ADDITION TO THE WORLD’S FINEST COLLECTION OF BACH RECORDINGS

J. S. BACH

3228-29-30 73 228-29-30

TEN CENTURIES OF MUSIC

An ARCHIVE Anthology from Gregorian Chant to Leopold Mozart. 10 records, boxed with 16-page booklet.

KL 52/61  SKL 152/161

NEWLY RELEASED IN TIME FOR CHRISTMAS GIVING!

VERDI RIGOLETTO

D. Fischer-Dieskau, Renata Scotto, Carlo Bergonzi, others. La Scala/Rafael Kubelik (Sung in Italian)

LPM 18 931-2-3 SLPM 138 931-2-3

NICOLAI THE MERRY WIVES OF WINDSOR HIGHLIGHTS.

Evelyn Lear, Ernst Haefliger, Franz Crass, Marcel Cordes, others. Bamberg Philharmonic / Loewlein. (Leaflet of texts)

LPEM 19 421  SLPEM 136 421

DVORAK SYMPHONY NO. 5 “New World”

Richly expressed and recorded, with Herbert von Karajan conducting the Berlin Philharmonic. An essential album.

LPM 18 922  SLPM 138 922

MUSIC FOR THE HARP – NICANOR ZABALETA. The superb harpist plays Bach, Handel, Corelli, Spohr, Faure, Albeniz, including, “Malagueña.”

LPM 18 890

CHOPIN PIANO SONATAS 2 & 3. Newest in the acclaimed Chopin series by young Hungarian pianist, Tamas Vasary.

LPEM 19 450

RITA STREICH—CRADLE SONGS & FOLK SONGS. Fetching collection by a great soprano w/Regensburg Boys’ Choir & instr. ensemble. (Leaflet of texts)

LPEM 19 462


LPEM 19 463

and... the unforgettable gift!

“A set that will go down in history as one of the best the mid-20th Century had to offer.” —High Fidelity


DECEMBER 1964 CIRCLE NO. 17 ON READER SERVICE CARD
A SPECIAL RECORD OFFER:
BUY 2 AUDIO FIDELITY RECORDS FROM YOUR DEALER AT REGULAR LIST PRICE ($4.98 mono or stereo),
YOU GET THIS RECORD FREE!

SPECTACULAR DEMONSTRATION & SOUND EFFECTS

An exciting, fast-moving, narrated tour of dramatic situational stereo effects plus varied selections from Audio Fidelity's vast library. Cited for engineering excellence by the National Academy of Recording Arts & Sciences.

When more exciting sounds are made, they'll be heard from these death-defying speedsters. Starting first 5 lap heat; Shifting on hill; Down hill, turn, Past start line, up hill; Drivers' talk; 2 races, 6 seconds apart; Pit area after a race; and much more.

JOHNNY PULEO and his Harmonica Gang
Johnny's most beguiling set. A standout album featuring: Begin the Beguine, Yes We Have No Bananas, I Saw Her Standing There, Tea For Two, All My Loving, Dark Eyes, Malaguena, others.

Countdown! The grandstands scream their anticipation and then 25 old stock cars race to destroy each other. The winner outlasts all others and the field is strewn with buckets of bolts.

SWINGIN' LATIN, Jo Basile & his Orchestra
Admirers of Jo Basile will welcome this sparkling, new album of Bossa Nova hits. Menina Feia, Zelao, Voce E Eu, Chora Tua Tristeza, Nao Faz Assim, Bossa Nova Guitar, others.

ORIGINAL BROADWAY SHOW ALBUM!!
FOLIES BERGERE—starring PATACHOU with Georges Ulmer, conducted by Jo Basile.

Please write us for a FREE catalog.
sound reproduction!

The Wonderful BELGIAN BAND CIRCUS etc. sensation!

Puro Mexicano, Paloma, etc.

Cowboy yells. Guadalajara, Guitars. Violins, Achi
EL HOMBRE MEXICANO, Mariachi Nacional, Arcadio Elias—Guitars, Violins, Trumpets—Cowboy yells. Guadalajara, Soy Puro Mexicano, Paloma, etc.

ORGAN-A Wurlitzer Hall, Sergeant, The Organist.

Calliola, The Fair. AFLP2127/AFSD6127

The Wonderful BELGIAN BAND ORGAN—A truly majestic instrument. Awesome musical sensation! Over The Waves, etc.

AFLP2118/AFSD6118

CIRCUS CALLOPE—From Gay 90s Village comes the Wurlitzer Caliola to the N.Y. World's Fair.

AFLP2127/AFSD6127

RAILROAD SOUNDS—Vanishing era revisited! Steam & diesel engines. Dynamic realism! Perfect model train background.

AFLP1843/AFSD5843

HITLER'S INFERNO, Vol. 2—Marches, Songs, Speeches. Nazi German WWII. Another documentary shocker. AM2450

UNITY, Walt Dickerson

"Unity" is the title tune of this album as well as its hopeful theme. Second side offers "High Moon." Walt Dickerson, vibist, heads an impressive jazz group: Edgar Bateman, Bass; Andrew Cyrille and George Tucker, Percussion; Walter Davis, Jr., Piano.

AFLP2131/AFSD6131

of all Audio Fidelity records.

Very danceable performance of the latest hits. Diversified variety that will insure the success of any Discotheque dance party program.

A Hard Day's Night, Walk Don't Run '64, Cmon and Swim, G.T.O., Say You, And I Love Her, No More Tomorrows, 7 others.

DFM3042/DFS7042

Includes: Chicken Back, Twistin' Lindy, Waltz, Fast Lindy, Hully Gully, Frug, Fox Trot, Rhythm & Blues, Cha Cha, Merengue, Cumbey, Bossa Nova, Swing, Monkey.

DFM3049/DFS7049

Includes: Fox Trot, Mashed Potato, Slip, Merengue, Cha Cha, Lindy, Rumba, Charleston, Bossa Nova, Waltz, Swing, Monkey.

DFM3040/DFS7040

Includes: Monkey Twist, Chick, Back, Slow Lindy, Ragtime, Slip, Fox Trot, Bamba, Waltz, Frug, Limbo, Samba

DFM3041/DFS7041

A remarkable new series of albums of programmed dance music. Especially selected and dance tested. Musical numbers are identified with suitable dance on front of album jacket.

Audio Fidelity Records...

AT BETTER RECORD SHOPS EVERYWHERE!

OR WRITE TO:

Audio Fidelity Inc.
770 Eleventh Avenue
New York 19, N.Y.

$4.98—mono or stereo
If you are a long-time addict of the Requiem, that lovely, earnest, quintessentially French, and almost unbelievably graceful lesser masterpiece of Gabriel Fauré’s youth, you will welcome this new performance of it by Louis Frémaux and the National Orchestra of the Monte Carlo Opera. I stress duration of familiarity or addiction to the work not without purpose. For this new performance has a certain softness, a certain delicacy, an inclination toward the retiring that could make the work seem innocuous to those less partial to the special Frenchness of the piece. Certainly, a work be made for its being more severe of line and more definitely shaped in performance.

But personally I find this new disc quite specially appealing—the singing of Denis Thilliez, an enchanting boy soprano, is a joy in itself—and even those who care less for it will surely find no lack of affection and scrupulousness in the performance. The recorded sound, moreover, is clean but quite gentle and delicate—a suitable counterpart to a rather special performance—and a well-schooled reading of Fauré’s beautiful and rarely heard *Contique de feu Roucuan* a welcome bonus.

"F.

**RECORDING OF SPECIAL MERIT**


**Performance:** Avid

**Recording:** First-rate

If we are to heed the composer’s liner note, Lukas Foss’ *Echoi* (1960-1963) is a sort of music-organic Mutation for Four Solists. Parts I and II, writes Foss, “were first heard in 1961 at a New York concert,” and “a second version of these two parts was presented during a European tour in 1962.” Further, “Part I and yet another version of II was performed at a Tanglewood Fromm Foundation concert in 1965,” while “The Group for Contemporary Music . . . played the first performance of all four *Echoi* in November 1963.” This pictorial presentation, Foss concludes, “is not uncommon today (Boulez: Mallarmés settings) and reflects a ‘work in progress’ attitude typical of our time and typical of serial composition.”

So put that in your pipe and smoke it! Foss’ belittled but nonetheless neatly managed defection from the rear guard of neo-classicism is, we must presume, a last attempt. He is now an avant-garde revolutionary, and if the content of *Echoi* were not enough to establish this fact, the composer’s description of its performance history leaves no room for mistake.

But in asking the real Lukas Foss to stand up, please, why are we vaguely uncomfortable with what we see? Why does the ingenuousness of this forty-one-year-old wonderkind seem somehow disingenuous? Why does the old French proverb—altered only by a useful personification—seem to suit him so perfectly? “The more he changes, the more he remains the same?” The answer is patent. If, through some cosmic eccentricity, all other Western music composed during the last two decades were suddenly and mysteriously to be stricken from existence and from the memory of man, a perfectly accurate record and timetable of what sort of music was *there* at any given moment during that time could be ascertained by a competent musicologist simply from studying the Foss scores to date.

What should logically follow here, of course, is a critical demolition of *Echoi*, but I have no such spectacle to provide. The piece is, in a word, stunning. As pure sonic display, it holds the attention all but unabated from beginning to end: it is vividly imagined, and graphically—perhaps even mustertely—realized. I have never quite been able to decide from their writings how to react to the new music and the old. And even if I sense something of this phenomenon where *Echoi* is concerned, I nonetheless recommend it emphatically to anyone seriously concerned with what is new in music—especially to those who have found the Stockhausen, the Boulezes, and the Carteres imperishable and hopelessly forbidding. Heaven knows, *Echoi* is wild, woolly, and triumphantly cacophonous, the young rebel tearing up the pea-patch. But it abounds in fantasy and striking musical images, as well as subtle but helpful allusions to Copland, Stravinsky, Elliott Carter, and jazz. All of which is only little easier for us to keep our place without feeling compromised.

The new chamber version of Foss’ *Time Cycle* that completes the release is, quite as Foss suggests, no mere convenient chamber-size duplication of the original that Leonard Bernstein recorded with large success a couple of years ago. What Foss does not mention, however, is that the new version is infinitely better. It has been gratifyingly relieved of the tiresome “improvisational” interludes that separated the vocal sections of the orchestral version, and the chamber-size accompaniment of the new version frees the more contrapuntal aspects of the texture. For better or for worse, Mahler, rather than the Webern that was so new in Foss when the work was first heard, seems to emerge more substantially than one had first realized. But that, after all, is the point that I have been making.

The performances seem magnificent: if Grace-Ly whole Martin’s performance of *Time Cycle* in any substantial way inferior to Adele Addison’s brilliant original, I do not ascertain it. The recorded sound and stereo are dazzling and elucidating.

"F."

© Haydn’s last Mass but one was written in 1801, when the composer was sixty-nine. It takes its subtitle from a section of the Gloria, sung by the bass, which uses the same passage Haydn wrote for Adam in the third part of the *Creation*—“The dewy morning, oh how it charms us!” The music is typical late Haydn, in part *Dal), a delIGHTful if rather disconcertingly religious *obbligato aurea* that keeps out of the *Ego natum est* (for instance), and yet as Romatically inclined as any contemporary work of Beethoven. At present, this is the only available performance of this fine work, and we should be grateful to Vox for providing it. It is most enjoyable—the conducting is spirited and sensitive to the stylistic demands, and the choral work, if not ideally steady in tone, is nevertheless quite clear and well projected. The soloists are capable though not outstanding. The recording is fine, and the stereo is well separated, especially in the solo sections.

In *HINDEMITH: Five Pieces for Strings*, *Op. 44, No. 4*; *Transmurris* for... (Continued on page 78)
To lots of people, there's trauma in a small stereo tuner. Traditionally, the multiplex tuner has been a big heavy monster. It's hard to accept that a unit that sits easily in the palm of your hand can outperform most of its bulky and cumbersome predecessors.

KLH's brand new Model Eighteen multiplex tuner is just about nine inches long. And no matter how you look at it, that's small for a high performance stereo tuner.

But the Eighteen isn't small just so that you can amaze your friends. It's small so that it will be the perfect mate for the KLH Model Eleven, Model Fifteen, Model Sixteen or any other good amplifier. It's small so that it won't waste precious space in today's homes and apartments. It's small so that it's less likely to be damaged or thrown out of alignment in normal handling and transportation.

And it's small because it works best that way.

Judged on an absolute basis, the performance of the Model Eighteen is comparable to that of tuners costing much more. When its price is taken into consideration, its performance can be described as truly incredible.

Like the most expensive tuners, you'll find the Eighteen a pleasure to tune. With Zero Center Tuning, there's no 'maybe area'. The meter tells you when you're tuned in and when you're not. The planetary tuning system we've used is mechanically the most accurate and trouble free. The tuning vernier has the silky yet positive feel that marks high quality engineering. The Stereo Indicator Light automatically identifies multiplexing stations as you tune.

But there is no vacuum tube tuner, at any price, with the ultimate reliability of the Model Eighteen. Beyond the fact that the Eighteen runs cool; beyond the fact that transistors don't age, the Model Eighteen has 4 IF stages employing transformers of extremely low mass. The slugs are less subject to jarring and misalignment when the Eighteen is shipped from the factory, or handled, than with heavier instruments. As a result, Model Eighteens in normal use will require substantially less maintenance and service than old fashioned tuners.

There's one more way the Eighteen differs from expensive tuners. It's not expensive. About $130. Hear it at your KLH dealer's and judge for yourself.

Just don't call it cute. It's very sensitive.
DO YOU SAVE YOUR COPIES OF HiFi/Stereo Review?

Make sure they're kept neat and always handy for instant reference—with a handsome file that's designed to hold a full year's copies!

- washable Kivar cover creates a leather-like appearance
- available in maroon backing with black sides or black with maroon
- 24-carat solid gold leaf embossed lettering for magazine's name
- attractively priced at only $2.95 each, 3 for $8.00, 6 for $15.00
- files are shipped to you prepaid and are fully guaranteed

NOTE: these special-quantity prices apply for any combination of titles, so you can have them for all your favorite magazines.

Order several today—for all the Ziff-Davis magazines: Popular Photography, Modern Bride, HiFi/Stereo Review, Electronics World, Popular Electronics, Flying, Car and Driver, Popular Boating, Amazing, and Fantastic, and for your other favorite publications, as well. Ziff-Davis magazines available in colors of your choice as noted in coupon. Other publications will be shipped in standard colors available.

Please send me: Fill in title, quantity and check appropriate column for color desired.

<table>
<thead>
<tr>
<th>MAGAZINE TITLE</th>
<th>QUANTITY</th>
<th>BLACK BACKING/ MAROON SIDES</th>
<th>MAROON BACKING/BLACK SIDES</th>
</tr>
</thead>
<tbody>
<tr>
<td>HiFi/Stereo Review</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$2.95 each, 3 for $8.00 or 6 for $15.00—shipped prepaid—fully guaranteed

Total amount enclosed

Name

Address

City...Zone...State

87


Performance: Shriftly; Recording: Good

Good intentions have gone just enough off course in this perfectly honorable enterprise to have produced something less than the success that might have been expected. The Hindemith pieces to begin with, are the quintessence of dull competence—and the Shostakovich sounds just faintly uncomfortable in the company it has been asked to keep.

The Kelemen work has the merit of novelty—not just in the piece itself, but in its presenting to us a young Croatian composer (b. 1924) whose work is unfamiliar in this country. He is a good composer, I think, of no startling originality, but with an honest gift that is used with integrity.

The Roussel Sinfonia is, of course, a superbly brittle piece of French neoclassicism, but it has been somewhat let down by an instrumental performance that here, as elsewhere in the program, is a little shriftly, a little edgy in intonation, and just the least bit grating all around.

The recording is bright and clean, the stereo treatment helpful.

II. F.

RECORDING OF SPECIAL MERIT

© JANÁČEK: Tagebuch eines Verschollenen (The Diary of One Who Vanished). Ernst Haefliger (tenor); Kay Griffith (mezzo-soprano); Rafael Kubelik (piano). DEUTSCHE GRAMMOPHON SLPM 138904 $5.98, LPM 18904 $5.98.

Performance: Excellent; Recording: A shade distant

A virtually unknown work a decade ago, Janáček's strange and haunting Diary has gained many partisans since its first appearance on records, sung by Ernst Haefliger (Epic LC 3121, now deleted). This is a unique little masterpiece in form as well as content. Basically it is a song cycle, but its dramatized portions—mezzo-soprano solo, duets, and a background chorus of three female voices—bring it formally closer to a dramatic cantata, with a very significant piano accompaniment. The text, based on an unidentified source, relates how a Moravian country lad leaves his home and family under the seductive spell of a gypsy girl. Janáček's music is characteristic in its adherence to Slavic speech patterns; it is harmonically advanced, and blends folk strains very skillfully with its basic structure of Mousorgsky-influenced declamation.

As was demonstrated in an original-language recording that appeared a few years ago (Artila 102), Janáček's music, when fitted to particular Czech rhythms and cadences, gives an impression of absolute rightness that not even a very fine German translation can duplicate. For many listeners, however, the unfamiliarity of the Czech language might prove too great a drawback. At any rate, Haefliger is a more polished vocalist than his Czech counterpart. Furthermore, he has performed this cycle many times in Europe and America, and has made it his specialty.

If possible, his singing on this disc is even more expressive and tonally more colorful than the first time around. He has also learned to use his voice more sparingly, leaving enough reserve for the two high Cs in the concluding poem, which Janáček inserted not to please the crowds but to stress the hero's searing anguish. Kay Griffith's voice is lighter than the dusky contralto timbre of the gypsy temptress calls for, but she sings appealingly. At the piano, Kubelik not only executes an exciting part brilliantly, but also exerts more leadership than was evident in both of the previous recordings.

DGG's sound is unobjectionable in clarity but somewhat wanting in immediacy—all the participants seem distant. Also, in the placement of the chorus the engineers failed to exploit stereo's facilities to full

ORALIA DOMINGUEZ

Spectacular singing in "Poppea" effectiveness. The advantages of original Czech to translated German are open to debate—but at least one version of the Diary definitely belongs in any representative vocal collection.

G. J.

KELEMEN: Concert Improvisations (see HINDEMITH)

RECORDING OF SPECIAL MERIT

© MONTEVERDI: L'incoronazione di Poppea. Magda Laszlo (soprano), Poppea; Richard Lewis (tenor). Nerone; Oralia Dominguez (contralto), Arnalta; Lydia Marimpietri (soprano), Drusilla; Walter Alberti (baritone), Ottone; Carlo Cava (bass), Seneca; Frances Bible (mezzo-soprano), Ottavia; Duncan Robertson (tenor), Valetto; Hugues Cuener (tenor). Lucano. Royal Philharmonic Orchestra, Glyndebourne Festival Chorus, John Pritchard cond. ANGEL SBL 3644 two 12-inch discs $11.96, B 3644 $9.96.

Performance: Very fine; Recording: Good

This recording perpetuates the highly successful 1962 Glyndebourne production of L'incoronazione di Poppea, and I have only
one serious reservation concerning it: about one third of the opera had to be eliminated for this two-disc condensation. With all due respect to what must have been stringent commercial considerations, I must register serious disappointment with such an incomplete presentation of this early glory of the operatic literature.

Fortunately, the abridgement was done by skillful hands; though some scenes have been shortened, the continuity remains almost intact, and with it the masterly design and great expressive strength that evidence Monteverdi's creative genius. The full measure of that genius, unfortunately, can never be experienced first-hand, since the opera's surviving manuscript contains only the vocal line, with the sketchiest indications possible of Monteverdi's instrumentation. In keeping with modern scholarship, Raymond Leppard, who prepared the Glyndebourne production, scored the work for continuo and strings, adding trumpets only for the concluding coronation scene. His continuo group, however, is quite varied—two harpsichords, two organs, lute, harp, guitar, two cellos, and a double bass. The instrumentation underlines the dramatic action effectively, and Leppard's realization of the music is generally colorful and imaginative.

Fortunately, conductor Pritchard treats the score not as an antiquity, but as the vividly dramatic piece it is. With the exception of a few weak voices in minor roles, the cast is uniformly good. Particularly strong characterization is offered by Oralia Dominguez in the role of the nurse Arnita. She is overly vehement at times, but reveals a spectacular profundo register, and sings the lament "Oblivion sore" with a lovely tone and admirable restraint. Magda Laszló's Poppea is exemplary in style: Carlo Cava sings Seneca's music with sonorous dignity, and Lydia Marimpietri and Hugues Cuénod excel in smaller assignments. The Ottavia and the Nerone perform creditably, if not up to their best form.

The set faces stiff competition from Vox 5113, issued last year, which has the advantage of being nearly complete on three discs. Its cast is very respectable, too: a good Poppea, a better Nerone than Angel's, and an altogether superlative Seneca. Unfortunately, Vox, in pursuit of authenticity, uses a countertenor for the part of Ottone, and his contribution nearly wrecks the performance. By contrast, Angel gives us a baritone (after all, absolute authenticity is probably unattainable here, for Monteverdi wrote the part for a castrato) who copes with his assignment very well. Since I also find Leppard's instrumental realization the more imaginative of the two, the Angel set is my preference. Concerning Angel's sonics, the stereo version offers distinct advantages over the mono, but neither is extraordinary from the technical point of view. Text, translation, and a good illustrated booklet enhance the production.

G. J.

© © MOZART: Concerto, in C Major, for Flute and Harp (K. 299). TELE-MANN: Suite, in A Minor, for Flute, Strings, and Continuo. Elaine Shaffer (flute); Marilyn Costello (harp); Roy Johnson (harpischord continuo); Philadelphia Orchestra, Yehudi Menuhin cond. ANGEI S 36189 $5.98, 36189-9 $4.98.

(Continued overleaf)

Featherweight . . .

The KLH Model Sixteen is probably the smallest integrated stereo amplifier in its power class.

We designed it that way. Small enough to fit into any room. Handsome enough to be welcome there.

But small size and good looks are only the beginning. The Model Sixteen really delivers all the advantages of transistor design that you've been promised for so long.

This is a full powered, full performance amplifier, with 70 watts of wide-band steady state power — 200 watts of peak power.

This is clean power . . . KLH clean. Distortion levels are insignificant from 25 to 20,000 cps.

This is reliable power, far beyond the potential of any tube amplifier. (There is no known aging process in a transistor.) The Sixteen can't be shorted out or burned out in use. A unique electronic circuit, designed by KLH, eliminates the need for fuses or circuit breakers in the speaker outputs.

We saved the best for last. The price is a feather-weight, too.

Just $219.95. The cabinet is optional at $19.95. That's less than you'd pay for one of those big heavy old-fashioned jobs.

We designed it that way.

* Slightly higher on the west coast

KLH RESEARCH AND DEVELOPMENT CORPORATION
90 CROSS STREET, CAMBRIDGE 39, MASSACHUSETTS

CIRCLE NO. 40 ON READER SERVICE CARD
The latest version—there are now eleven in the catalog—of Mozart's pleasant if inconsequential Concerto for Flute and Harp is an exceptionally good one, and may easily be considered one of the best, along with the interpretations by Baron Grandjany, Nicolet-Stein, Rampal-Laskine, Tripp-Jellinek, and Zoeller-Zahoura. What distinguishes this performance among so many good ones is the spirit of Yehudi Menuhin's leadership, always musical to the highest degree and extremely gracious in sound. Little effort is made by either soloists or conductor to appear virtuosic—it is really not that type of concerto. The stressing of the very subtle elements in the score, however, provides a reading that is persuasive in its own way, and my reaction was one of complete delight. The second side, devoted to the popular Telemann suite (also frequently recorded) is also on a high level. The playing by both Miss Shaffer and the orchestra is quite stylish (the double-dotted ritornello, for example), but there are many opportunities for embellishment of repeated sections that could and should have been taken, and that, if taken, would have made the performance even more effective. The mood again is relaxed, with never an unduly hurried tempo. The recorded sound, a trifle strident in spots, is very good overall. I. K.

MOZART: Sinfonia Concertante, K. 364; Exsultate, Jubilate, K. 163 (see Best of Monih, page 65)

RECORDING OF SPECIAL MERIT


Recorded music has boasted some notable violin-piano collaborations in the great sonata repertoire: Fritz Kreisler and Franz Rupp in Beethoven, Semyon Goldberg and Lily Kraus in Mozart. Adolph Busch and Rudolf Serkin in Brahms. Yehudi Menuhin in a variety of classical, Romantic, and modern repertoire. In more recent years we have had Arthur Grumiaux and the late Clara Haskil in their Epic recordings of Beethoven and Mozart.

Now that the superlative sonata recordings for Decca by Erica Morini and Rudolf Firkusny have reached the total of four, and encompassed works of Mozart, Beethoven, Brahms, and Franck, I am prepared to go off the deep end and say that these two seasoned and civilized artists represent an artistic collaboration on the same high level. On their latest disc, they give us Beethoven and Mozart in a predominantly light and lyrical vein, though there is stern stuff to be found in the slow movements. These are acts of musical communication utterly selfless and wholly concentrated upon the music and its essence. The Mozart has a wonderful sweetness and flow throughout its first two movements, and the finale ripples along like fresh spring water. To the early Beethoven sonata, the artists bring the necessary added element of strength and virility, achieving a fine peak of expressive warmth in the slow movement. The finale is played with superb élan. Nowhere—but nowhere—on this disc is there the slightest show of virtuoso trickery. We have here music-making at its purest and most joyful. D. H.

RECORDING OF SPECIAL MERIT

PUCCINI: Madama Butterfly. Anna Moffo (soprano), Cio-Cio-San, Rosalind Elias (mezzo-soprano), Suzuki. Cesare Valletti (tenor), Pinkerton. Renato Cesari (Continued on page 82)

Telex Hi-Fi Stereo headphones add a thrilling new dimension to your stereo. Deep mellow bass. Brilliant highs. Separation that puts you "in" the concert hall. And best of all, feather light for comfort. Your stereo deserves the unmatchably good performance of Telex headphones. You deserve the assurance of quality that only 25 years of acoustic engineering leadership in headsets can provide. Telex Corp., 3054 Excelsior Blvd., Minneapolis.

ST-10: 16 to 15,000 cps response, 12 oz., super-soft ear cushions, tan, precision constructed of stainless steel and high-impact plastic. $24.95

ST-20: same as ST-10, but with separate channel control on each earpiece. $29.15

ASK YOUR DEALER FOR A DEMONSTRATION OR WRITE FOR INFORMATION
the speaker
that will make us eat our words

"... a threshold beyond which advance for some time may be so difficult as to appear impossible. In the light of known technology, nothing further can be done to improve this performance without sharply increased costs."

That’s what we said in 1961 when we introduced the Model Ten, our first speaker under $100.

Now we are preparing for an extended diet of our own words. We are introducing a new speaker, the KLH Model Seventeen, which delivers a quality of performance we believed unattainable at a price we considered impossible just three years ago.

You’re going to hear a lot of comment about this astonishing new speaker. And you will undoubtedly hear the Model Seventeen for yourself. So all we’ll tell you now is —

It's a handsome speaker.
It costs $69.95*.
It represents a threshold beyond which advance for some time may be so difficult as to appear impossible. In the light of known technology, nothing further can be done to improve this performance without sharply increased costs.
It’s at your KLH dealer’s now.
Bon appetit.

*Suggested retail; slightly higher on the west coast.
This Model Eleven Goes With You

Model Eleven — $199.05

This is the famous KLH Model Eleven Stereo-phonograph System. This is the component system in a suitcase that started all the other companies trying to make a high performance portable.

Nobody has matched it yet, because nobody has yet matched the revolutionary long-excitation, full-range speakers we developed especially for the Model Eleven. Nobody has yet matched its solid state amplifier, designed with the speakers as an integrated team through the advanced technique of Frequency Contouring. Nobody has matched the new automatic turntable, made for KLH by Garrard, with its unique low mass tone arm. Or the Model Eleven’s unprecedented five year guarantee.

And no portable phonograph of even passable quality has yet made the weight—28 incredible pounds.

If you want to take your music with you—a stereophonic portable that needs no apologies—there is still no substitute for the KLH Model Eleven.

KLH RESEARCH AND DEVELOPMENT CORPORATION
20 CROSS STREET, CAMBRIDGE 39, MASSACHUSETTS

CIRCLE NO. 71 ON READER SERVICE CARD

baritone), Sharpless; Mario Carlin (tenor), Goro; Noreste Catalan (baritone), Yamadori; Fernando Corena (bass), The Bonze; Leonardo Monreale (bass), Imperial Commissioner; Mitz Truccato Pace (mezzo-soprano), Kate Pinkerton. Rome Opera House Orchestra and Chorus, Erich Linderoff cond. VICTROLA VICS 6100 three 12-inch discs $9.00, VIC 6100 $7.50.

Performance: Very fine
Recording: Bright and clear

When this recording was new, in 1958, a great deal of promotional effort was expended in support of the theory that Alabama Butterfly should be presented on an intimate scale, using principal singers of predominantly lyrical expressiveness. Anna Moffo and Cesare Valletti seemed to fit the theory very neatly, but something must have happened in the practical application, for RCA Victor recently found it necessary to come out with a new version of the Puccini opera built around Leontyne Price and Richard Tucker. And there is nothing intimately scaled about those artists. The new release has relegated the old one to low-price status, and this is definitely good news, for this performance belongs with the best the opera has ever received.

Moffo’s Butterfly is a creature of irresistible charm. She has the requisite fragility for the first act, and all the fervor for the lyric climaxes, to say nothing of the soaring ease with which she rises to the exacting demands of the spirit as well as the letter of the score. Valletti’s Pinkerton offers characterization to go with his intelligent and attractive singing, which is in full command of the vocal line up to “Addio, fiorito sol,” where the music calls for more slancio.

There is not a weak member in the cast. Although Rosalind Elias does not offer a strong enough portrayal as Suzuki, she does offer excellent vocalization. Fernando Corena is probably the most imposing Angry Uncle in any recorded Butterfly, and the other characters, Sharpless included, are at least on a par with their recorded counterparts on other labels.

Other recorded versions of the opera may surpass this one in lyric fervor, but Leinsdorf rates very high for a firmly controlled, purposeful reading, in which strands of action and orchestration are always clarified. The sound is bright, the stereo not particularly adventurous but always clear and well balanced. In sum, a first-rate performance and an outstanding bargain.


Performance: Clarity
Recording: Favors piano unduly

Rachmaninoff’s D Minor Concerto offers fewer obvious big moments than the more popular C Minor. Yet, in the hands of Cliburn or Ashkenazy, and with a sympathetic and knowledgeable conductor, this music can emerge as one of the most sublime and sophisticated of all the composer’s scores—a fascinating combination of Rachmaninoff’s special brand of melodic polyphony, filigreed decorative keyboard devices, and thematic interrelationships.
Because Rachmaninoff himself sanctioned cuts in the first and last movements when he played the music, and wrote a later cadenza for the first movement, recorded performances of the D Minor Concerto vary somewhat in content. Most performers use the later first-movement cadenza and the composer’s cuts, but it should be pointed out that Gibbons on RCA Victor and Pannonia on Capitol both play the music in its original uncut version, including the long and difficult first cadenza.

Malczynski uses the cut version in this Angel recording, but fails to give a very convincing account of the score as a whole. Part of this failure must be ascribed to the recording engineers, who miked the piano so closely that the soloist seems to clutter his way through the score rather than flow and ripple in, around, and through the orchestral textures as the composer intended.

In general the performance, orchestral as well as pianistic, seems lacking in dynamic sensitivity and subtlety, while tempos seem a shade too fast in the first movement and rather lacking in lightness and momentum in the finale. The recorded sound is rather classy and shallow, to boot.  D.H.

RECORDING OF SPECIAL MERIT

Clément Rameau: La Guirlande, Clodie Sanova (soprano), Zélide the Shepherdess; Jean-Jacques Lesueur (tenor), Mirtil the Shepherd; Laurence Boulay (harpischord continuo); Chorus (Elisabeth Brasseur, director): Versailles Chamber Orchestra, Bernard Wahl cond. Nonesuch H 71023 $2.50, H 1023* $2.50.

Performance: Enjoyable
Recording: Satisfactory

Rameau wrote La Guirlande ("The Garland," or, as Nonesuch translates it, "The Enchanted Flowers") in 1751 as a pastoral ballet to be performed with the revivial of Les Idees Galantes that year. The story is typically rococo—a rustic setting, a shepherd and shepherdess, and a mythological background. Though most of the work was sung, the prime appeal for the eighteenth-century audience was the ballet at its conclusion. Rameau's music is perfectly delightful, most especially at the end, when he trots out the favorite dances of the time. This performance is extremely enjoyable: the conducting is vivacious, the prominent harpsichord continues is extremely imaginative, the chorus in its brief passages near the end is excellent, and the two soloists (even though the tenor has some difficulties around high A) are fine. Add to this the fact that there is a profusion of French Baroque ornaments, quite stylish in their execution, and it may be seen that the disc must be highly recommended to the Baroque enthusiast. Nonesuch's transfer of the recording, originally made by the Club Francais du Disque, is quite bright and high-level, and the concluding section (notably the chorale portions), suffers from overload distortion. Good notes but no texts or translations. L.K.

ROCQUE: Sinfoniastra (see HINDE-MITH)
SHOSTAKOVICH: Scherzo for Strings (see HINDE-MITH)

This Model Eleven Stays Home

Model 11-W — $209.95

When you find that you can build a good component system in about 28 pounds of weight, you naturally make it into a portable. That's how the Model Eleven was born.

But it seems that a lot of people have discovered that they couldn't buy this much performance at this price in any other form, portable or otherwise. So they've been buying Model Elevens for 'non portable use' in homes, offices, dormitories, apartments, etc.

This being the case, we surrender. For $10 more you can now have it in furniture. It's called the 11-W. And there's a handsome matching dust cover in wood and smoked plexiglass as an optional accessory.

Incidentally, it still weighs less than most of the other expensive portables. If you feel you must, you can even put handles on it and carry it around.
highly knowledgeable spokesman, ventures the opinion that "in some of the other recorded versions, as in some of the live performances, Die Fledermaus has been . . . treated too operatically. Some of its lightness, its insouciance . . . have been stiflened. In short, it has lost some of its 'operetta quality.' And, while gallantly citing one of these competitive versions, Mr. Marek stylishly identifies its conductor, the late Clemens Krauss, as a specialist in the music of Richard Strauss.

Well, I don't envy Mr. Marek's predicament in trying to combine musicology with record promotion. But it would be sheer disaster to entrust this music to anyone but singers of high operatic caliber. The competitive Angel, London, and Richmond sets worked on this premise—and, make no mistake, so did Mr. Marek. Further, I doubt very much that this RCA Victor effort supplies any 'operetta quality' that is alleged missing from its predecessors. It is well known, incidentally, that Clemens Krauss was as brilliant with Johann Strauss as he was with Richard Strauss, and he could conduct rings around Mr. Marek's choice for this particular enterprise.

All the same, Oscar Danon's way with the music is extremely sympathetic, and he is obviously at home in the Viennese idiom. In common with other conductors of our restless age, he often adopts tempos that turn baldness into genius. In the Overture, the opening of Act Two, and Orlofsky's "Im Feuerstrom der Reben" come to mind. Nor is Danon's leadership as tight (Continued on page 86)

IN MEMORIAM: WILHELM FURTWÄNGLER
By David Hall

Wilhelm Furtwängler was the youngest of the conductors who dominated the podiums during the 1930's, the others being Toscanini, Beecham, Walter, Monteux, Koussevitsky, Mengelberg—all now dead—and the still very active Leopold Stokowski. I never heard Furtwängler in person, but I have at various times heard all of the records he made.

Listening at one sitting through this five-disc "In Memoriam" album issued by Deutsche Grammophon brought back to me the feelings of intense exhilaration and violent exasperation that used to attend my listening sessions to the Furtwängler 78's. Like pianist Glenn Gould in our own time, he could perform miracles of musical and stylistic brinkmanship in order to achieve overpowering intensity of phrasing—an intensity quite different, by the way, from the fluctuations of orchestral dynamics and sonority exploited in their very different ways by Stokowski and Toscanini. When the Furtwängler technique worked, as in the Prelude to Tristan, it was an overpowering experience, and when it missed fire, the results were aggravating. However, unlike the Stokowski of the 1930's, Furtwängler's striving for utmost flexibility of phrasing arose not from showmanship but from aesthetic conviction.

Lest it be thought that Furtwängler indulged in such readings at the expense of thrust and musical momentum, the listener can be referred not only to the Bach and Haydn readings in the present album, but also to the remarkable interpretation of the Mozart G Minor Symphony with the Vienna Philharmonic on Odeon 91075.

This DG album is more or less a microcosm of the whole Furtwängler discography on domestic and imported LP's. Not all of the interpretations represent the conductor at his best: bad sound sometimes stands in the way, and there are conspicuous omissions of some of the greatest readings by Furtwängler and the Berlin Philharmonic issued originally on 78's.

Bad sound certainly prevents any real enjoyment of the Bruckner Ninth Symphony as recorded at a 1944 concert. Likewise, coughs, peaky string sound, and an uninspired soloist mar the Beethoven Violin Concerto recording of a 1953 concert. The Mozart E-flat Symphony performance, recorded from an undated concert, is no joy either, because of peaky treble. Besides, the conductor seems rather off form, at least in comparison with the standards of the studio-recorded Bach Suite No. 3 (1948), the Haydn and Schubert symphonies (1951), and the Schumann D Minor Symphony (1953).

The sonics of these last four recordings stand up quite decently, even by modern standards—at least to the extent that one feels an honest account of the performance is emerging from the grooves. The Bach has both line and thrust, and on its own terms, which may not be those of the purist, the performance has ample strength, breadth, and momentum. The Haydn Symphony No. 88 measures up even better in momentum and intensity. On the other hand, both the Schubert and Schumann recordings are exercises in that kind of brinkmanship I described earlier, and thus have their moments of revelation and exasperation. Let it be said, however, that the finale of the Schubert C Major is a real thriller under Furtwängler's baton. Indeed, his readings of classic repertoire always tended to revolve about the concept of a culminating finale, hence the peculiar effectiveness of the Furtwängler reading of the Beethoven Fifth Symphony.
any album is a thoughtful gift; an angel album is a compliment.

Give reign to your good taste. Give the finest of its kind. Like Swedish crystal. Or English leather. Or Angel Records. Such a gift tells the people you're remembering that you know they appreciate good things. It is a compliment to them. And to you.

Brahms: Four Symphonies
Klemperer and Philharmonia Orch.
Approximately twenty-four dollars

Beethoven: Violin Concerto in D Major
Nathan Milstein
Approximately six dollars

Beethoven: 32 Piano Sonatas
Arthur Schnabel
Approximately seventy-eight dollars

Strauss: Der Rosenkavalier Highlights
Elisabeth Schwarzkopf
Approximately six dollars

Beethoven: Nine Symphonies
Klemperer and Philharmonia Orch.
Approximately fifty dollars

Puccini: La Bohème
Freni, Gedda, Schippers, Cond.
Approximately twelve dollars

Puccini: Madame Butterfly
de los Angeles, Björling
Approximately eighteen dollars

Ravel: The Complete Orchestral Works
Chynten, Paris Conservatoire Orch.
Approximately twenty-four dollars

Poulenc: Gloria; Organ Concerto
Georges Prêtre, Conductor
Approximately six dollars

Prices optional with dealer.
NEW 1965

"ZERO DISTORTION"
ampifiers for those who demand the best
Two new series to give the true audiophile the purest sound reproduction, the greatest performance, and the highest styling...

The VELONTE Series
The model 250 integrated stereo amplifier, 40 watt HFM power per channel, is a major breakthrough in the medium-priced amplifier market. All the outstanding performance features of the Pure Quadratics patented circuits are built into this series, including "Zero Distortion" within the normal 0 to 20 watt listening output level. These units dramatically out-perform any integrated stereo amp in their price range. Handsomely styled by one of America's leading designers. Five year guarantee...

The CANTABLE Series
The model 112 pre-amp control center and model 410-C basic amp, 40 watt per channel true power, are the last word in performance and styling. Absolute immeasurable distortion within the normal 0-20 watt listening level makes the CANTABLE Series superior to any amplifying at any price. Beautifully styled to enhance any decor. Unconditional lifetime guarantee qualifies its workmanship and materials...

Puroamp
$319.00

Control center...
$289.00

CUSTOM SERIES Model 402-C power amp and 110 stereo control center... for the male individualist who wants pure sound and pure design. Retains optimum performance electronically and automatically. If you consider yourself above social conformity this is your unit. "Zero distortion" between 0.33 watts output. Completely hand assembled by our engineers. Lifetime guarantee for amp...

$298.00

PROFESSIONAL SERIES Model 1100 power amplifiers, 90 watts. Designed for sound and laboratory application. Quality and performances unequalled in its class. "Zero distortion" 0.05 watt output...

$249.00

See and hear the new Quadratic line at one of our many franchised dealers, or send 25c for the Quadratic Line and Literature...

Pure Quadratic Promotions Inc.
9 E. Ohio St., Chicago, Ill. 60611

CIRCLE NO. 45 ON READER SERVICE CARD

controlled as it should be when it comes to rapport with the singers, though his car for detail and balance is excellent.

In the role of Adèle, the chambermaid with theatrical aspirations, Annelise Rothenberger towers over the cast—a delightful figure radiating instant charm in warmly, imperceptible tones that are marvels of accuracy. Sándor Kónya brings a welcome touch of humor to his ardent portrayal—his work in the third act is particularly satisfying. The choice of a baritone for Eisenstein has merit, since it clarifies some ensembles. Eberhard Wächter handles the assignment very capably, though without the touch of supreme urbanity an ideal Eisenstein should possess. Adèle Lichiardopol (Suzanne) is a workhorse, but she is not fully endowed with the Gueden-Schwarzkopf kind of allure. The veteran Erich Kunz and Erich Majkut turn in seasoned portrayals, but the contributions of the two American artists are less successful: Rüs Stevens is unnecessarily blatant, and George London makes the debonair Falke sound like Eafner.

When it comes to the text, all productions of Die Fledermaus are different. This one retains virtually all the important musical portions and enough dialogue to make sense, with one glaring exception: the omission of Falke's explanation to Orlofsky before all hell breaks loose. The episode involving the drunken Frosch is also omitted—"it is funny only to Viennese audiences," according to Mr. Marek, and he is right. The interpolations for the ball scene are well chosen and appropriate: Voices of Spring, as sung by the enchanting Miss Rothenberger, and a Viennese Schlussmel—specialty by Mr. Kunz. One damaging departure from the printed page occurs when George London sings "Rüdelein" in a lower and more comfortable key than its original F, for this leads to an awkward moment when the ensemble joins him without the benefit of a modulatory bridge.

The stereo sound is truly superb in every way—rich, bright, beautifully balanced. The translation by Hans H. Fontel is also commendable: The English is faithful to the original German, yet convincingly colloquial. This is by no means a bad performance of Die Fledermaus; it is our good luck that the catalog offers four better ones.

G. J.

®

TCHAIKOVSKY: Cherevichki (The Little Shoes), G. Ncélep (tenor). Vakula; E. Antonova (contralto), Solokha; A. Ivanov (baritone), the Devil; M. Mikhailov (bass); Chub; E. Kruglikova (soprano); Okhatina; F. Gosolovkin (tenor); Panas; A. Ivanov (baritone). Grand Duke Chorus and Orchestra of the Bolshoi Theatre, Alexander Melikh-Pashaev cond. ULTRAPHONE ULP 111/113 three 12-inch discs $14.94.

Performance: Flavorful

Recording: Adequate

This opera is based on Nikolai Gogol's comic-fantastic tale Christmas Eve, which was later to provide the basis for Rimsky-Korsakov's opera by the same name. Tchai- kowsky, however, used the story first—and in two different versions. The first of these was produced in 1876 under the title of Vakula the Blacksmith, and received a cool reaction. In 1887, after the completion of Eugene Onegin and Mazeppa, a thoroughly revised version was introduced at the Bolshoi under the present title. It fared better than the first and has been heard frequently in Russia since, but elsewhere it has remained virtually unknown.

The central thread of the story is this: with the unwitting help of the Devil himself, the resourceful Vakula obtains the golden slippers of the Craina to satisfy the capricious demand of his bride. As is generally the case with Russian operas, however, this seemingly simple tale unfolds very elaborately, in eight colorful scenes that do not entirely hang together. This episodic quality is the opera's main flaw; while by no means a significant work, it is one of considerable charm, melodic richness, and variety. Colorful dances, ardent love music, pomp and pageantry enrich its pages—something for everybody. And the orchestral writing has the mark of the composer's mature authority.

Vakula is interpreted by Ncélep, one of the best Russian tenors, a robust and ardent but somewhat unpolished artist. The soprano Kruglikova is also one of the better-known members of the Bolshoi, but she does little here that would entitle her to broader recog- nition. Strong characterizations are offered by the baritone Ivanov and, particularly, by Mikhailov, whose typically Russian bass seems ideal for the character of the bride's father, Chub. For the rest, the singing is adequate; the orchestral performance—as far as it is revealed by the limited facility—very spirited and effective.

The recorded sound is uneven, with fre- quent distortion in the orchestral climaxes and nearly all choral passages. Nor is the technical processing—surfaces, tape quality—up to this company's previous level. There is no libretto with the set, but the notes and synopsis are of some help.

G. L.

TELEMANN: Suite for Unit, Strings, and Continuo (see MOZART)

®

THOMAS: Mignon (excerpts), Jane Berbié (mezzo-soprano). Mignon; Mady Mesplé (soprano), Philine; Gérard Durin (tenor), Wilhelm Meister; Xavier Depraz (bass). London. Raymond St. Paul Chorus and the Larmouresse Orchestre, Jean Fournet

(Continued on page 88)
Only on Command Records do you get the ultimate in brilliant artistry combined with incredible technical perfection!

The person who receives a Command album receives the ultimate. More incredibly beautiful recordings simply do not exist. Each brilliant Command album demonstrates Command’s fanatical devotion to perfection, unswerving dedication to incomparable artistic performances. This season be sure. For the perfect gift give Command!

Write for FREE full color brochure of all Command releases.
A form:nice that Seem 1362-9 cites the FAMOUS ARIAS THE VIOLIN -PIANO Schubert I Peter No. No. 1374, 1345. Chamber First of Oriana Concert of ALEXANDER'S FEAST MAUREN Ifonor First from del's recording of music of Handel. Connoisseur for the new HANDEL. BGS-70661, 70662, 70663, and yet other works included on this record. Ian and Sylvia "NORTHERN JOURNEY" You were on My Moonshine Can The Jealous Lover Four Rode By Brave Wolfe Nova Scotia Farewell Some Day Soon Little Beggarman Texas Ranger The Ghost Lover Captain Woodstock's Courtship Green Valley Swing Down Chariot "Critical accolade for Ian and Sylvia's previous record. FOUR STRONG WINDS VERDI: Queen Anne: Three Coronation Anthems: Verdi: Ode for the Birthday of Queen Anne & Three Coronation Anthems: Honor Sheppard: Mary Thomas: Alfred Deller: Mark Deller: Maurice Bevan: Oriana Concert Choir and Orchestra: Alfred Deller, conductor BG-661 & BGS-70661 a valuable addition to the Handel discography and yet another example of Alfred Deller's impressive skill as a conductor as well as a singer.-I. Kipnis, HiFi/ Stereo Review J. S. Bach THE MUSICAL OFFERING: The Wiener Solisten: Wilfried Bötzsch, director BG-659 & BGS-5076D: "The greatest interpretation of this work I have yet heard."-H. Glaub, American Record Review BAROQUE MUSIC SALZBURG Works of Biber & Muffat The Concerto Musico BG-652 & BGS-70652: "If I had to get rid of everybody else I have acquired this year except one, I should not hesitate before choosing this wonderful Bach Guild release."-M. Steinberg, Boston Globe

Maria Callas: Fire and brimstone for Verdi arias show-paced "Conquistà," the orchestral performance is excellent, and so is the recorded sound. But DG should pay closer attention to the quality of its liner notes. The present opera contains (in three languages) this gem of musicology: "Ambrose Thomas was among the 19th century composers whose works paved the way for the 'grand opera' of Meyerbeer, Verdi and Wagner."-G.F.

VERDI: Requiem Mass (see Best of Month, page 63)

COLLECTIONS

RECORDING OF SPECIAL MERIT

MARIA CALLAS: Verdi Arias, Ortolan: Ma ma in by li poco in cadence (Willow Song) ... Aria Maria Avodano C'è chi ripri ... Salve, Salmi: O Cast: Don; don in; Don Carlos: O don valu: Non pranger, ma compagnia, Maria Callas (soprano); Paris Conservatoire Orchestra, Nicola Rescigno cond., Angel S 56221 $5.98, 56221 $4.98.

Performance: Flowed but thrilling Recording: Voice heavily favored

As she did in her first album of French arias, Maria Callas here enters simultaneously into the soprano and mezzo arenas, and emerges triumphant, if not entirely unscathed, from both.

Two arias from Aroldo, a singularly unsuccessful opera from Verdi's middle period (between I due Siciliani and Un ballo in Maschera) represent the novelty side of the recital. In his extensive Verdi volume, there deals rather contemplatively with Aroldo, but judging from these excerpts, perhaps the time has come for another look. Or is it only the art of Callas that elevates this music to unexpected heights? Surely the long dramatic scene "O dolce! O dolce!" is almost top-drawer Verdi, and Callas delivers it with the intensity, volubility, and dauntless bravado of the old days. This is thrilling dramatic art, and the devil take those troublesome high notes!

Now can any other recorded version match this "O dolce faith," for sheer excitement. The control is not secure, but again one must admire the dauntless Callas as she lunges into those imperfect Bilats. At the other extreme of the vocal scale, her deep chest notes are superbly powered.

We are given the entire opening scene of Callas's last act, and it is surprising that,
having done such a laudable thing. Angel could not have supplied a singer for Emilia's brief part. Callas illuminates Desdemona's music with her customary profound insight, and her singing is hauntingly beautiful most of the time, though she fails to observe a true pianissimo for the ascending phrase "To per amar," and her final A-flat in the Ave Maria is not well placed. The second-act Romanza from Don Carlo is a puzzling choice for the program: it is weak music, unconvincingly sung, with shaky tones in the crucial 4th and 5th bars. Despite its faults, this is a record no one should miss. Both stereo and mono offer rich sound, but there is little directionality in the stereo and the level seems higher. The voice is not ideally balanced with the orchestra—it is placed too close to the microphone.

**CITADEL**

**Complete recital program.** Whether your music interests are classical, popular, jazz, show hits, folk—whether you prefer one label or a variety of labels—recital programs are available through Citadel.

**MEMBERSHIP — THE PROVEN METHOD OF RECORD BUYING USED BY THOUSANDS OF SATISFIED CLUB MEMBERS BECAUSE . . .**

- **YOU DECIDE ON YOUR PURCHASES.** You are not obligated to purchase any particular quantity of records.
- **YOU HAVE COMPLETE FREEDOM OF SELECTION.** Virtually any record or album by any artist on any label—commercially available including Angel, Atlantic, Capitol, Columbia, Command, Decca, DGG, Folkways, London, RCA, Vanguard, Verve, and hundreds of others as well as imports. We do not limit your choice in any way.
- **PROMPT SERVICE.** Many orders are shipped the same day received, rarely later than the next several days.
- **PERIODIC SPECIALS.** Periodically you receive a list of hit albums from all categories of music at prices up to 55% off list. Again, you are under no obligation to purchase any of these selections.
- **FREE SCHWANN RECORD CATALOG.** With your membership you receive this quick reference to over 25,000 records. This day-use-size catalog contains separate sections for classical, popular, ballet, operas, musical shows, folk music, jazz, etc., and lists a separate section for all new releases.
- **100% GUARANTEE.** All records Citadel supplies to members are guaranteed factory fresh and free of defects or damages of any sort.

**Satisfaction Guaranteed.** Try our Membership in the Citadel Club for 30 days. You are under no obligation to purchase any of the albums you receive. You are welcome to keep them or return them for a full refund regardless of the condition of the record.

**CITADEL RECORD CLUB**

545 Fifth Avenue, New York, N.Y. 10017

CIRCLE NO. 13 ON READER SERVICE CARD
THE NEW ENGLAND HARMONISTS

By David Hall

During the fifty-year period between 1770 and 1820, the then a-borning United States of America was at the point of developing a vital native school of musical composition completely its own. A group of New England hymn-tune composers and singing teachers (making their living as musicians and composers on a part-time basis) had hit upon a way of synthesizing the English tradition with the new pulse, the musical thinking and feeling of the New World. A goodly proportion of these New Englanders are represented on a new Folkways album, aptly titled "The New England Harmony," and on a disc issued by Washington Records some years ago under the title "The American Harmony" (SWR 416; WR 418).

Unhappily, the academic and cultural establishment that developed in urban America before the War between the States was too intent on assuaging its sense of inferiority by importing European ways into its art music to cultivate what it considered barbaric and uncouth home-grown talent. Thus the genteel academicians represented by Boston's Lowell Mason (1792-1872) and his followers, and later the influx of post-1818 immigrant professional musicians from Germany, smothered the flame that might have lighted the way to a genuine American art music a century before that art music became an actuality. It may be said in defense of Mason and company that they laid the foundation for our public-school music education. But another result of their zeal was that it would be a hundred years before the secular songs and hymns of our folk tradition would be accepted in the schools as anything but quaint and shocking oddities. In the 1860's, Louis Morcut Gottschalk's The Room and the songs of Stephen Foster achieved recognition of a kind. But for all practical purposes, it was not until the 1920's (Charles Ives, who had been composing steadily since 1897, was not discovered until then) that the foundations of a viable American art music were laid, by such composers as Aaron Copland, Roger Sessions, Roy Harris, Henry Cowell, Howard Hanson, John J. Becker, Carl Ruggles, and Virgil Thomson, working separately and in concert, knowingly and sometimes un-knowingly. Part of the motive power of this movement was simply a rebellious "modernism," but it was driven also by a new appreciation—and a consequent revulval—of the folk music of America, the Negro spirituals, the fiddle tunes, and scandalous jazz. Elizabethan and Jacobean ballads preserved in the Appalachian and the Southern folk hymns. Oddly enough, in many instances the last word on well-hymns of the New Englanders of the 1770-1820 period gets "underground" to crop up again in various guises in such compilations as The Sacred Harp (1844), The Missouri Harmony (1820), and The Southern Harmony (1835). For this rediscovery of the American folk heritage, and its exposure up to the point it became accepted at its true worth by the academic and cultural establishment, we have to thank Francis James Child, Cecil Sharp, John Powell, John Avery Lomax, Carl Sandberg, and George Pullen Jackson, among others.

In Folkways' "New England Harmony," the performances are artistically by the standards of, say, the Robert Shaw Chorale, but they are still authentic. The hymn-tune melody is retained in the tenor voice rather than being transferred to the soprano, and on occasion a small instrumental "galliard orchestra" of strings and winds is used—as was more than likely the case in rural New England churches, since few at that time could afford organs. The Washington disc, "American Harmony," is also authentic with respect to distribution of voices, and offers much more effective performances. However, only three of the pieces on the Folkways album—Read's Mortality and Shepherds and Ingalls' Northfield—are heard on the Washington recording.

The works of William Billings (1746-1800)—tanner, singing-school teacher, and friend of Paul Revere—are the most fascinating in the Folkways album for melodic interest and variety of treatment. Although there are numerous recorded versions of his patriotic hymn Chorus, in a variety of arrangements, the only other currently available version of his exquisite canon When Jesus Wept (1770) is that by the Syracuse Music Festival Chorus under Elaine Brown (Desto DST 102, DT 102), an album that also includes the only recorded version of Billings' anthem B. GLAD THE AMERICA (1784), and, "A Victoria Unspotted," is a charming folk-like Christ-
It's easy to be an authority on tape when you have a copy of HiFi/Stereo Review's 1965 TAPE RECORDER ANNUAL handy.

Look at the photo above. The special articles listed on the cover of this 132-page factbook are just a few of the 23 complete features! You get expert tips by the dozens, on equipment—making better tapes — editing — copying — sound — on everything you need to know about tape recording. Plus...

... a complete directory of stereo tape recorders!

Over 100 photos — complete data on 230 models from thirty-three different manufacturers! All the model numbers, specifications, dimensions and prices! All the important information you need to compare the latest tape recorders, and select the finest one in your price range.

Published for the first time (by the editors of HiFi/ Stereo Review), the 1965 TAPE RECORDER ANNUAL is an indispensable guide for everyone who wants better performance and greater versatility from his tape recorder. If you fit this description...

SEND JUST $1 NOW FOR YOUR COPY
of the 1965 TAPE RECORDER ANNUAL

--- FILL IN AND MAIL THIS COUPON TODAY! ---

Ziff-Davis Service Division • Dept. TR
589 Broadway • New York, N.Y. 10012

Please send me a copy of the 1965 TAPE RECORDER ANNUAL. My dollar (plus 15¢ for shipping and handling; 25¢ outside U.S.A.) is enclosed.

name please print HF 124
address

city state zip code
I have chosen to present the following Ives discography in chronological order of composition—as indicated in the John Kirkpatrick Catalogue of Ives Music.

(1914) Charlie Ratliff, Randolph Symonette (bars-harmonie); Lesly Harney (piano). Columbia F 1001 (out of print). Moments Music (piano). RCA ML 7825 (out of print). This is one of the very greatest and most immediately accessible of all the Ives songs, based on grounds from John Avery Lonx's collection of American Concert Songs and Ballads, and yet no up-to-date recording of it exists. Morton's interpretation on a 78-rpm disc is masterly, Symonette's a shade heavy, but still convincing. Here is one of at least a dozen major gaps in the Ives song repertoire that should be filled without delay.

(1915) General William Booth Enters into a Hesitant. Donald Gramm (baritone); Richard Cumming (piano). S/and SLP 411/12. Helen Bootwright (soprano); John Kirkpatrick (piano). Overture 7. Corinne Curry (soprano); Luise Vorgichian (piano). Cambridge CRS 1804, CRM 804. Radiati Pianor (soprano); Genevieve Pinott (piano). New MUSIC 78-rpm 1112 (out of print). Like Charlie Ratliff, the Ives setting of Vachel Lindsay's famous poem is a magnificent song for a male singer. Yet it has been recorded only once by a man. None of the three long-playing versions is wholly satisfactory. Helen Bootwright has the style but not the sheer strength to put the piece over. Corinne Curry is too careful, and Donald Gramm has the power but his style should be more rough-hewn. Still, his recording is the one to have for the present. Incidentally, it should be said that the 1934 Pianor 78-rpm disc still packs a surprising wallop, even with its distorted sound.

(1915) Three Protest or Varied Air with Variations, James Sykes (piano). Folkways FM 3348. Mr. Sykes has gone to the manuscripts in the Ives collection at Yale and edited and combined the materials noted above into a piece he has called Tha Varied Air with Protests. They form part of the projected twenty-seven piano studies, of which some Soundshell Pitching, Tha Anti-Aludinario Roni, and 22 are also part. The Three Protests, which form the final three variations of Sykes' edition, were published separately in 1947 in Henry Cowell's New Music subscription series. Ives speaks of the pantonal theme as 'the old stone wall,' and it is in fact an anticipation by some thirty-five years of the millenniumic skyline melody that Brazilian composer Hector Villa-Lobos concocted on the occasion of the 1939-1940 New York World's Fair. The music as a whole is part daintily polyphonic etude and part ironic gag—there is a furturismo conventional cadence at the end of Protest II with the notation 'Applause (non-protect). Solid playing and adequate recording characterize the Sykes effort here.

(1915) The Rainbow. Boston Chamber Ensemble. Harold Farberman cond. Cambridge CRS 1804, CRM 804. Radiati Pianor (soprano); Genevieve Pinott (piano). New MUSIC 78-rpm 1112 (out of print). Like Charlie Ratliff, the Ives setting of Vachel Lindsay's famous poem is a magnificent song for a male singer. Yet it has been recorded only once by a man. None of the three long-playing versions is wholly satisfactory. Helen Bootwright has the style but not the sheer strength to put the piece over. Corinne Curry is too careful, and Donald Gramm has the power but his style should be more rough-hewn. Still, his recording is the one to have for the present. Incidentally, it should be said that the 1934 Pianor 78-rpm disc still packs a surprising wallop, even with its distorted sound.

(1915) Three Protest or Varied Air with Variations, James Sykes (piano). Folkways FM 3348. Mr. Sykes has gone to the manuscripts in the Ives collection at Yale and edited and combined the materials noted above into a piece he has called Tha Varied Air with Protests. They form part of the projected twenty-seven piano studies, of which some Soundshell Pitching, Tha Anti-Aludinario Roni, and 22 are also part. The Three Protests, which form the final three variations of Sykes' edition, were published separately in 1947 in Henry Cowell's New Music subscription series. Ives speaks of the pantonal theme as 'the old stone wall,' and it is in fact an anticipation by some thirty-five years of the millenniumic skyline melody that Brazilian composer Hector Villa-Lobos concocted on the occasion of the 1939-1940 New York World's Fair. The music as a whole is part daintily polyphonic etude and part ironic gag—there is a furturismo conventional cadence at the end of Protest II with the notation 'Applause (non-protect). Solid playing and adequate recording characterize the Sykes effort here.

(1915) Three Protest or Varied Air with Variations, James Sykes (piano). Folkways FM 3348. Mr. Sykes has gone to the manuscripts in the Ives collection at Yale and edited and combined the materials noted above into a piece he has called Tha Varied Air with Protests. They form part of the projected twenty-seven piano studies, of which some Soundshell Pitching, Tha Anti-Aludinario Roni, and 22 are also part. The Three Protests, which form the final three variations of Sykes' edition, were published separately in 1947 in Henry Cowell's New Music subscription series. Ives speaks of the pantonal theme as 'the old stone wall,' and it is in fact an anticipation by some thirty-five years of the millenniumic skyline melody that Brazilian composer Hector Villa-Lobos concocted on the occasion of the 1939-1940 New York World's Fair. The music as a whole is part daintily polyphonic etude and part ironic gag—there is a furturismo conventional cadence at the end of Protest II with the notation 'Applause (non-protect). Solid playing and adequate recording characterize the Sykes effort here.
Now...a totally new sound...literally

NEW ALL-TRANSISTOR

Harman Kardon

Stratophonic Series

Audio (Oct. 1964) says it's "in a category all by itself"

Give yourself the thrilling new experience of Sound Unbound, yours only in the new STRATOPHONIC Series solid-state FM stereo receivers by Harman-Kardon. Never before have you heard such magnificent sound from a receiver. In full-power frequency response, FM sensitivity, freedom from distortion, and sheer listening pleasure, Stratophonic Sound is unsurpassed.

And this totally new sound quality is yours at prices equivalent to those of ordinary tube receivers.

Harman-Kardon has extended the frequency response of the new Stratophonic receivers to include those frequencies at the bottom and the top of the spectrum which, though supposedly inaudible, have a profound effect on the living timbres of all music. At full usable power, response of the new Stratophonics reaches its peak far below and maintains its utterly flat plateau far beyond the range of all other one-chassis receivers. What is more, not a single vacuum tube (not even a nuvistor) is used in any of the Stratophonic receivers.

Stratophonic prices: Model SR900 (illustrated), $469; Model SR600, $389; Model SR300, $279. At these prices, practically everyone can afford Stratophonic Sound.

Specifications, Model SR900
IHFM music power: 75 watts • Frequency response: 2 to 100,000 cps ±1 db at 1 watt (normal listening level); 5 to 60,000 cps ±1 db at full power • Distortion less than 0.2% • Usable FM sensitivity: 1.85 µV IHFM • All-transistor front-end FM circuit for optimum selectivity and sensitivity • Damping factor: 40:1.

Harman Kardon
Philadelphia, Pa. 19132
A subsidiary of
The Jerrold Corporation
CHRONICLES: A discography

it necessary to reverse the order of Haup- thorne and The Alcotts for its disc—and not to bad effect. Incidentally, Kirkpatrick's Hawthorne is the fastest of all—9' 15" against Kontarsky's 10' 30" and Pappastavrou's 12' 30". If Kontarsky's virtuosity combined with Time Records' recording beats down all competition in Emerson and Hawthorne, it is to Pappastavrou that one must turn, in the also generally excellent CRI recording, for proper realization of the poetic values inherent in The Alcotts and Theorae.

(1915) The Swimmers, Helen Boatwright (soprano); John Kirkpatrick (piano). OVERTONE 7. An extraordinarily vivid piece of word-painting to Louis Untermeyer's poem on the joy of physical strife with nature. Masterly interpretation by the Boatwright-Kirkpatrick team.

(1915) Thoreau. Devy Barnett (soprano); Mel Strauss (piano). STEREO AGE two-track tape C-3 (out of print). McChesney (tenor); Otto Herz (piano). CONCERT HALL 78-rpm C-7 (out of print). The final pages of the Concord Sonata are adapted here to wonderful effect, using Thoreau's own words from Walden. Both recorded versions are satisfying.

(1916) At the River. Helen Boatwright (soprano); John Kirkpatrick (piano). OVERTONE 7. Jacqueline Greisler (soprano); Josef Wolman (piano). SPA 9. Ernest McChesney (tenor); Otto Herz (piano). CONCERT HALL 78-rpm C-7 (out of print). This vocal adaptation, to Robert Lowry's text, of the Beautiful River theme from the last movement of the Fourth Violin Sonata has become one of the most frequently performed of the Ives songs. Boatwright and Kirkpatrick are the only recorded interpreters who bring suitable fervor to the music without lapsing into sentimentality.

(1917) Three: Songs of the War: In Flanders Fields; He is My Brother; Too Sails Away. Helen Boatwright (soprano); John Kirkpatrick (piano). OVERTONE 7. For Ives, with his passionate belief in the ultimate perfectibility of man and society, World War I came as a shattering blow. These songs reflect his mixed feeling as a deeply patriotic American engaged by Germany's acts of aggression and as a human being aware of the human loss that comes with war. In Flanders Fields and He is My Brother both make extensive use of patriotic airs—such as Over the Rhine, the Red, White, and Blue, and the Marschallaise—but not always to convincing effect. It must be said, however, that the cumulative kinetics of He is My Brother add up to a stirring whole. Most poignant of these three is Too Sails Away, in which Ives seems also to be saying farewell to the innocent America in which he himself grew up and prospered. The Boatwright-Kirkpatrick performances are topnotch.

(1919) Cradle Song. Ernest McChesney (tenor); Otto Herz (piano). CONCERT HALL 78-rpm C-7 (out of print). Simplicity, brevity, and tender feeling are the hallmarks of this affectingly sung lullaby.


(1921) Hymn. Unidentified artists, YADO 1.2 (out of print). Adapted from the Largo cantabile of 1904 recorded on Cambridge CRS 1804, CRM 804. This disc was not available for audition.

(1921) Remembrance. (see The Pond—1906).

(1921) So may it be! (see The Rainbow—1914).

(1921) An Election, or Nov. 2, 1920. Corinne Curry (soprano); Luise Vogerchian (piano). CAMBRIDGE CRS 1804, CRM 804. A slashing political tract reflecting Ives' bitterness over the defeat of Woodrow Wilson on U. S. membership in the League of Nations. In many respects, the philosophy of the text (Ives' own) is as apposite for our own times as it was in 1920. The performance problems are formidable, and though this piece is best sung by a man, Miss Curry does a fine job.

(1921) The Side Show. Ernest McChesney (tenor); Otto Herz (piano). CONCERT HALL 78-rpm C-7 (out of print). A charming vignette arranged from a Yale fraternity show number written in 1896. Excellent recorded performance.

(1921) 1, 2, 3, Helen Boatwright (soprano); John Kirkpatrick (piano). OVERTONE 7. Corinne Curry (soprano); Luise Vogerchian (piano). CAMBRIDGE CRS 1804, CRM 804. Ernest McChesney (tenor); Otto Herz (piano). CONCERT HALL 78-rpm C-7 (out of print). A study in offbeat rhythms to an Ives text that asks a pointed rhetorical question, Sharp ears will recognize the dramatic material of Over the Patience under the vocal line (the original form of the music dates back to 1906). The song would seem best suited to a man's voice, but the most incisive recorded performance is nonetheless by the Boatwright-Kirkpatrick team.

(1921) Aun Street. Helen Boatwright (soprano); John Kirkpatrick (piano). OVERTONE 7. Corinne Curry (soprano); Luise Vogerchian (piano). CAMBRIDGE CRS 1804, CRM 804. Mordecai Bauman (baritone); Albert Hirsh (piano). NEW MUSIC 78-rpm 1412 (out of print). A gem of a song in tribute to the downtown New York business district where Ives lived for so many years. A man's voice is preferred here, and Bauman's performance is the most stylish. Miss Boatwright's reading is the better of the available choices.

(1921) The Last Reader. Devy Barnett (soprano); Mel Strauss (piano). STEREO AGE two-track tape C-3 (out of print). Unidentified artists. YADO 1.2 (out of print). A most sensitive reading, free in metrics and key, of an Oliver Wendell Holmes poem on the aging of the creative artist. A man's voice would be more appropriate, but Miss Barnett handles the assignment creditably.

(Continued on page 96)
Can you recognize these three great stars?

The first two are obvious to movie goers: Rock Hudson and Doris Day starring in Universal's new comedy, "Send Me No Flowers." The third is ours and it's on the table. It's the Incomparable Concertone 800. This unique stereo tape recorder plays a vital role in this hilarious new movie. When the script called for a tape recorder, Universal Pictures wanted the finest, most modern machine available. That's why they selected the Concertone 800 to appear. It's as modern and sophisticated as the live stars of the movie. The Concertone 800 is the only stereo tape recorder with double Reverse-o-matic® and six heads—allowing you to record and play continuously without reel turnover. The 800 (portable or tape deck) is priced realistically and provides an exclusive combination of features. It starts as low as $379.95. Send for a free Concertone 800 brochure and the name of your nearest dealer. Write to Concertone, Box 3227, South El Monte, Calif.

ROCK HUDSON and DORIS DAY star in "SEND ME NO FLOWERS"
CHARLES IVES: a discography

(1921) At Sea. Jacqueline Greisle (soprano); Josef Wollman (piano), SPA 9. An aphoristic, philosophical text with enigmatic music derived from a chamber-orchestra Adagio sostenuto of 1912. Miss Greisle’s performance is not very illuminating.

(1921) West Loudon. Devy Barnett (soprano); Mel Strauss (piano). STEREO AGE two-track tape C-7 (out of print). An eloquent setting of a Matthew Arnold sonnet on London’s poor. Devy Barnett’s performance is the finest thing on her tape.

(1921) Vita. Ernest McChesney (tenor); Otto Herz (piano). CONCERT HALL 78-rpm C-7 (out of print). A six-measure musical aphorism to a Latin text by Manlius on the eternal round of birth and death. The original choral-orchestral version dates from 1911-1913. McChesney does the solo-voice arrangement creditably.

(1921) The Indians (see Largo: The Indians—1912).

(1921) Walt Whitman. Jacqueline Greisle (soprano); Josef Wollman (piano). SPA 9. A gnomic, virile, and finely dissuasive treatment of lines from Whitman’s Leaves of Grass, derived from a 1913 choral-orchestral setting. A man’s voice is wanted here—Miss Greisle does not measure up to the demands of the music.

(1921) Disclosure. Helen Boatwright (soprano); John Kirkpatrick (piano). OVERTONE 7. One of the finest of Ives’ ‘transcendental’ songs—a dozen bars long—to his own text in a superb performance.


(1921) Two Little Flowers (and dedicated to them). Helen Boatwright (soprano); John Kirkpatrick (piano). OVERTONE 7. Devy Barnett (soprano); Mel Strauss (piano). STEREO AGE two-track tape C-7 (out of print). Ernest McChesney (tenor); Otto Herz (piano). CONCERT HALL 78-rpm C-7 (out of print). Mordecai Bauman (baritone); Albert Hirsh (piano). NEW MUSIC 78-rpm 1412 (out of print). A delectable tribute to small daughter Edith and her playmate, and understandably a favorite among the Ives songs. Miss Boatwright provides just the right blend of tenderness and humor, avoiding the slightest trace of cuteness or sentimentality.

(1921) The Housatonic at Stockbridge (see Three Places in New England—1911).

(1921) Revolution. Mordecai Bauman (baritone); Albert Hirsh (piano). NEW MUSIC 78-rpm 1412 (out of print). Eight bars of Ivesian aphorism in a bracingly virile musical framework. Bauman’s superb performance still has impact, even through the foggy 1940-vintage recording.

(1921) The Greatest Man. Theodore Upman (baritone); Allen Rogers (piano). INTERNO’s 7001. Helen Boatwright (soprano); John Kirkpatrick (piano). OVERTONE 7. Devy Barnett (soprano); Mel Strauss (piano). STEREO AGE two-track tape C-3 (out of print). Mordecai Bauman (baritone); Albert Hirsh (piano). NEW MUSIC 78-rpm 1412 (out of print). In this hometown tribute of a boy to his dad, a man’s voice is preferable, but it should be used with less weight and more imagination than Upman manages here. Miss Boatwright’s is the version to own among those readily obtainable.

(1921) Evening. Helen Boatwright (soprano); John Kirkpatrick (piano). OVERTONE 7. Mordecai Bauman (baritone); Albert Hirsh (piano). NEW MUSIC 78-rpm 1412 (out of print). A beautiful piece of word-painting to lines from Milton’s Paradise Lost. First-rate performance by Miss Boatwright and her partner.
We don’t expect you’ll want to open up a Jensen PR-150 Speaker System, but if you did, you would find all new components designed especially to give this reproducer the outstanding performance we now offer in a shelf-size. For example, there is a new 12” low-resonance high-compliance woofer with full linear 1” excursion capability that puts out clean, full bass down to 25 cycles with ease. A husky L/C crossover network (with 2 pounds of copper in the inductors) separates the incoming signal power at 2,000 cycles, above which a new aspheric SONO-DOME® midrange/VHF unit carries the reproduction to 20,000 cycles with complete smoothness.

Words can’t describe the full measure of sonic excellence of the PR-150... *be sure to hear it.* Catalog 165-K gives complete specifications.

You may choose the PR-150 in oiled finish walnut veneers and solids or in unfinished hardwood enclosures. Both are trimmed in decor complementing grille fabric.

<table>
<thead>
<tr>
<th>Model</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR-150 Oiled</td>
<td>$119.50</td>
</tr>
<tr>
<td>PR-150U Unfinished</td>
<td>$99.50</td>
</tr>
</tbody>
</table>
"A Medallion... is a Medallion... is a Medallion... is a Medallion... is a Medallion"

1. Swedish Modern
2. Contemporary
3. Italian Provincial
4. Early American
5. French Provincial

They’re all Medallions—the only 3-way speaker system with “Select-A-Style” grilles that snap into place to match any decor—may be used vertically or horizontally, with or without base. In the Medallion, University achieves the ultimate performance possible from a 12” woofer, special 8” mid-range and Sphericon Super Tweeter. Undistorted bass (down to 25 cps), highs to beyond the limits of audibility (40,000 cps). If you demand superb cabinetry, freedom of decorative choice and reproduction beyond the capability of ordinary bookshelf speaker systems—then the University Medallion XII is for you. In mahogany, walnut, oiled walnut, fruitwood or unfinished. As low as $139.95. For free catalog and "Guide to Component Stereo High Fidelity", write Desk D-12, LTV University, 9500 West Reno, Oklahoma City, Oklahoma.
HIFI/STEREO REVIEW'S CHOICE OF THE LATEST RECORDINGS

Reviewed by JOE GOLDBERG • NAT HENTOFF

@ LOUIS ARMSTRONG: Satchmo: 1930-1954. Louis Armstrong (trumpet and vocals); various personnel. If I Could Be with You: You Know You; Jazz River: That's My Home; and eight others. Decca DL 74331 $4.98. DL 1541 $5.98.

Performance: Reflective Armstrong
Recording: Competent

This is a rather trickily packaged album. The cover simply states: "A Musical Autobiography of Louis Armstrong: 1930-1954." Only if you read the recording dates (in small type on the back) and the last paragraph of the liner notes do you discover that these are not the original 1930-1954 recordings, but rather recreations of them made by Armstrong and varying groups from 1955 to 1957. This album was originally part of the four-volume monophonic set "Satchmo" (Decca DXM 155), first released some years ago.

The performances themselves are attractive. Armstrong's singing is relaxed and infectious, and his trumpet playing is marked by economy and a superb sense of form. The accompaniment is adequate but never reaches Armstrong's creative level.

Armstrong's spoken reminiscences before each number sound rather stiff. (He was apparently reading from a script by Leonard Feathers and Milt Gabler.) The vintage 1936-1934 Armstrong recordings of these tunes are still the ones to have in a basic jazz library, but these recreations are welcome additional reflections on the material.

N.H.

@ COUNT BASIE: Basie Band. Count Basie (piano); orchestra, Big Brothers: I Don't Know What to Say; Yahya; and six others. Verve V 6099 $3.98. V 6195 $4.98.

Performance: Crisp but predictable
Recording: Full-bodied

For some years the Basie band has been an impressive machine, powered with maximum drive by the Count's own piano, the orchestra moves authoritatively if rather massively in its familiar groove. The floating pulsation of the 1936-1942 Basie band is gone, and its brilliant soloists are well, but still present is the fundamental Basie swing. Billy Byers wrote, and arranged all the tunes in this set, and each is tailor-made for Basie's predications—simple, sprightly melodic and uncomplicated harmonic structures that do not labor forward drive. There are several flavorful muted trumpet hits by Al Aaron, but otherwise the soloists are not exceptional—Basie himself always excepted.

N.H.

@ JOHN COLTRANE: Crescent. John Coltrane (tenor saxophone), McCoy Tyner (piano), Jimmy Garrison (bass), Elvin Jones (drums). Crescent: Title; Out; Bis - from excitement to introspection

Performance: Salem
Recording: Good

Since the late Fifties, John Coltrane has been one of the most consistently inventive and challenging of jazzmen. He is also one of the most pervasive influences on other saxophonists. His recent releases, however, have tended to veer away from the excitement that is one of his hallmarks, and he has become an almost solemn musician who sometimes gives his performances an oppressive weightiness.

The newest album by Coltrane's quartet is a tuneful, introspective set, marked by an increasing use of portentous rubato. On "Crescent," we hear the same short, angular little lines Coltrane is so fond of. "Bis" indicates that his new style may have cost him the superfluous blues solos he was once able to create. The finest track on the set is the haunting "Loved's Lament," which may have been named for Coltrane's composer friend Alice Levison, for it reflects the mood of Levison's superb "Slow Dance," which Coltrane has recorded. Toward the end of this track, Jimmy Garrison has an extended bass solo which does become fascinating, but only rather late in the track.

The star of the set is the incredible drummer Elvin Jones, who creates an almost impossible polyrhythmic base for the group.

J.C.

@ GIL EVANS: The Individualism of Gil Evans. Gil Evans (piano, conductor); various personnel. The Barbara Song; L'Elan; L'Enfant. Gil Evans: Gil Evans; Album; Gil Evans. Verve V 6855 $5.98. V 6855 $5.98.

Performance: Superb
Recording: Excellent

This is advertised as the first Gil Evans recording in three years, which it is, if on, excludes the recent "Quiet Nights," a collaboration with Miles Davis. It is also advertised as "a first hearing of the remarkable Gil Evans piano," which it is not, since Evans has played the piano on all his records except those made with Davis.

Thanks mostly to the proselytizing of Davis and critic André Hodeir, Evans has an enormous reputation, far out of proportion to the existing body of his work as an arranger. Enthusiasts call him a composer, a title for which he hardly qualifies. He certainly has unique talents, however. He is, after Duke Ellington, the arranger most responsible for breaking the orchestra into sections, and he has used unusual instruments with great effect. He probably knows more than any other jazz arranger about the instruments of the orchestra and what they will do. Evans' force is lush, exquisite combinations of sound, which he uses to create an almost mystical music, and this new disc is a good example of what he can do.

The longest track is also the most interesting: "Hotel Mu," which Evans and Davis wrote for The Time of the Bamburge, a Laurence Harvey vehicle which failed to reach Broadway. It is a blues march, as nearly funky as Evans is ever likely to get, and perhaps in an attempt to satisfy Harvey, it bears a certain resemblance to Elmer Bernstein's music for Walk on the Wild Side. It is structured in a manner similar to Coltrane's, with a long build to and descent from a brief climax. On this, as on the other tracks, drummer Elvin Jones is almost the only propulsive force acting against the...
High Fidelity Magazine on New Acoustech Solid State Kit:

"...MAGNIFICENT PERFORMANCE..."

"...'state of the art'... one of the truly 'perfectionist' units..."

Here are further comments from the November, 1964 report on the new Acoustech IV solid state stereo control center kit (reprinted with permission):

"...harmonic distortion was literally too low to be measured... IM at the 2-volt level was a mere 0.05%... These figures are among the best ever obtained... Frequency response was literally a flat line over the audio range... the 50 cps and 10 kc (square waves) were virtually replicas of the input test signals... superior, professional grade construction... listening quality... 'wide open', clean, utterly transparent and noise free. The Acoustech IV, in a word, does credit to its designers... and should serve admirably in the finest of music-reproducing systems."

For the complete report plus detailed specifications of the Acoustech IV ($149) and its companion power amplifier kit, the Acoustech III ($199), mail coupon below.

ACOUSTECH
ACOUSTECH, INC.
Dept R-12 139 Main Street
Cambridge, Mass. 02142
FREE

Please send free booklet 'Why Solid State Amplifiers Can Sound Better' and full information on Acoustech solid state kits to

Name_________________________
Address_______________________
City__________________________
Zone________ State_________

CIRCLE NO. 1 ON READER SERVICE CARD

RECORDING OF SPECIAL MERIT

""...state of the art..."
one of the truly 'perfectionist units..."

The musicians are fully equal to the challenge of the material. Art Farmer, who has switched from trumpet to flugelhorn because of the latter's greater warmth and depth, is one of the most personal and resourceful soloists in contemporary jazz. In the front line with Farmer is alto saxophonist Charles McPherson, and this album should serve to focus more attention on this rapidly maturing young musician, currently with Charles Mingus. McPherson's playing is very much in the Charlie Parker vein, but he is shaping his own style. His searing intensity sets off the more reflective sound of Farmer excellently, yet the two hornmen are alike in the clarity of their ideas and their rhythmic confidence.

The rhythm section is superb. Both of the alternating bassists, Steve Swallow and Ron Carter, demonstrate again the reason for the rising respect in which they are held by their colleagues. If Sceptor builds a whole jazz line as good as this first album, it could well become one of the most important jazz labels.

N. H.

RECORDING OF SPECIAL MERIT

"...state of the art..."
one of the truly 'perfectionist units..."

Terry Gibbs, once a vibist for whom speed and gusto were the primary ingredients of music, has matured. In this collection, Gibbs imporvises with a sense of dynamics and an ease of beat that make his work here considerably more worth rehearsing than was much of his earlier music. The one throwback to the gee-whiz Gibbs of yore is Gee, Dad, It's a Deal. Gibbs is well complemented by guitarist Kenny Burrell, a musician of grace and wit. The provocative success of their polyphonic interplay at the end of All the Things You Are makes it seem unfortunate that similar improvisation did not take place elsewhere in the set. The most striking factor in these performances is the collective swinging quality. Gibbs and Burrell ride on top of the superbly knit team of Sam Jones and Louis Hayes, who swing tirelessly throughout, and with special fluency on & Ltr. 10 Gzt.

Terry Gibbs
Collective swing with vibes

RECORDING OF SPECIAL MERIT

"...state of the art..."
one of the truly 'perfectionist units..."

This Capitol record, recorded in Brazil and originally released as "Brazil’s Brilliant João Gilberto," is described in the liner notes as “the album that started it all,” and that is pretty close to the truth. When a few jazzmen came back from Brazil, and such influential musicians as Miles Davis got their hands on this disc, the bossa nova craze was under way.

Together here are Gilberto and Antonio Carlos Jobim, respectively the major performer and major composer of bossa nova. The record is an easy delight. Gilberto has a soft, insinuating voice and a superb sense of rhythmic placement—he is something like a Brazilian Fred Astaire. Since many of the lyrics are about the samba itself, it is just as well that Gilberto sings in Portuguese, so that we may simply listen to the sound without knowing what the words mean.

(Continued on page 102)
“By all means listen to this $95 speaker... This is not ‘just another box.’”

HiFi/Stereo Review

THE ADC 303A BRENTWOOD

“After the lab measurements had been made, and I had a chance to analyze the data, I began to appreciate how unusual this speaker system really is.”


The measurements that evoked his enthusiastic comments revealed surprising qualities in a speaker so compact as the new ADC 303A. Here is how Julian Hirsch describes it:

“For one thing, my tests confirmed the manufacturer’s claimed frequency response of 35 to 20,000 cps ± 3 db measured in an average listening room.”

“. . . the Brentwood has a true, effective response down to at least 33 cps, with lower distortion than I have measured on many larger and more costly speaker systems, under similar conditions.”

“... the system’s resonance is 48 cps, and ADC states that it delivers true bass response to at least 38 cps. This it certainly does, with ease. The Model 303A is a very successful application of the acoustic-suspension principle, achieved without excessive loss of efficiency.”

What Mr. Hirsch found in his laboratory was impressive; what he heard in his listening room was equally so. This is the way he sums it up:

“As for sound, the ADC 303A is very live and open. It has presence, but without the peaked unnatural response usually associated with that term.”

“. . . this speaker brings the music right into your listening room . . . as contrasted to some in which the sound never seems to get out of the speaker enclosure.”

The ADC 303A was planned to produce optimum performance in your home, as well as Mr. Hirsch’s listening room.

Prices slightly higher West of Mississippi.
There is a languorous, nostalgic quality to most of this music. The quality is what the Brazilians call *saudade*. As such, bossa nova was superbly suited to the talents of Stan Getz, who is obviously emulated by the saxophonists on the record.

Gilberto and Jobim have here made one of the best popular vocal recordings of the last few years.

J. G.

JOHNNY HODGES: *Everybody Knows Johnny Hodges*. Johnny Hodges (alto saxophone); octet and orchestra. The *Jeep Is Jumpin*: Main Stem; Papa Knows: *I'll Never Smile Again*; and four others. IMPULSE AS 61 $5.98, A 61 $4.98.

Performance: Assured
Recording: Very good

On five of the nine tracks in this Johnny Hodges set, Duke Ellington's prominent alto saxophonist leads a big band composed mainly of his Ellington colleagues. The major substitution is Jimmy Jones for Ellington on piano. The other four tracks are by an octet formed from the larger unit. The session is one of Hodges' most satisfying in recent years. His own work is, as ever, effortlessly lyrical, and his tone remains the most sensuous in jazz. The sidemen are excellent. Trumpeter Ray Nance, long underestimated, is heard in a number of tangy solos. Cat Anderson, usually used by Ellington as a high-note acrobat, indicates here that he is capable of restraint and taste. Paul Gonsalves solos with his usual warmth and more discipline than is often apparent in his work. Trombonist Lawrence Brown gets more and more eloquent with age.

The material consists of Ellington and Strayhorn pieces, one by Cat Anderson, and three by Hodges. Although Ellington is not present, this album is part of the Ellington canon, so deeply has he stamped his musical personality on these longtime associates.

N. H.

BILLIE HOLIDAY: *A Rare “Live” Recording of Billie Holiday*. Billie Holiday (vocals); unidentified accompanists. *Lover Man: All of Me: Strange Fruit: Detroit Airhead: Crazy He Calls Me: and nine others*. RIC M2001 $4.98.

Performance: Billie's best
Recording: In-performance

Toward the end of her life, Billie Holiday's voice, no longer quite as flexible as it had been, became a conduit for ever more direct emotion. This new recording, assembled from tapes made during a club date at Boston's Storyville, is a deeply moving testament to that fact. It has been reported that most of this disc was recorded in 1951, that the pianist on most of the tracks is Storyville's owner George Wein, and that the Young-like tenor saxophonist, briefly heard, is Stan Getz.

The repertoire is made up of the songs most closely associated with Billie Holiday: *Lover Man, Them There Eyes, Strange Fruit, Miss Brown to You*, and others that she marked indelibly with her personality. Perhaps because of the freedom of the night-club atmosphere, some of the performances here are even more striking than their studio-made counterparts.

(Continued on page 104)
“What would you recommend in a high quality console stereo?”

“High quality components.”

Like those in the Maestro by Sylvania.

200-WATT EIA AMPLIFIER
Solid-state circuitry
Continuous R.M.S. power—65 watts with one channel just below clipping, 55 watts with both channels just below clipping.
Frequency response: 20 to 20,000 cps ± 1db
Power bandwidth: 22 to 60,000 cps ± 3db (half power point)
Harmonic distortion: less than .3% for 50 watts each channel at 1 KC
Intermodulation distortion: less than .4% for 50 watts each channel at 1 KC

DUAL 1089 AUTOMATIC TURNTABLE
Pickering V-15 magnetic cartridge
Diamond stylus
Manual play setting
Included as standard equipment with this world renowned automatic turntable: single-play studio-type spindle and 45 rpm adapter.

AIR-SUSPENSION SPEAKER SYSTEM
Developed to Sylvania's own specifications.
Each independent sealed speaker chamber is specially dampened.

Each employs: 12" Bass woofer
6" Matched mid-range speaker
Wide-dispersion Jensen high-frequency exponential horn.
Speaker cones are stable, of a highly complex special composition—coupled with a moulded ring of flexible, impregnated cloth which suspends the cone.
The system is precisely matched; the overall response profile is carefully balanced.
Overall useful response: 30 cps to 18,000 cps.
Cross-over (woofer to mid-range): 1500 cps.
Cross-over (mid-range to tweeter): 7500 cps.

STEREO FM, FM/AM TUNER
Solid-state circuitry
FM quieting sensitivity: 1.5µv
FM sensitivity (IHF): 2.5µv
Capture ratio: 6db
Signal to Noise ratio: 60db
Full limiting: 4µv
Tuned R.F. AM and FM stages
FM Stereo Separation: 35db at 1 KC
FM-IF Stages: 4
Separate FM and AM tuning with heavy individual flywheels

CONTROL CENTER
10 Push-button functions: AM, FM, FM Stereo.
Monaural phonograph. Stereo phonograph.
Tape recorder and Television input.
Stereo reverse. Noise filter. AFC
8 Velvet-Touch controls:
Flywheel tuning (separate FM and AM)
Dual element Loudness control (dual tap compensation)
Dual element Boost-Cut Bass control
Dual element Boost-Cut Treble control
Dual element Balance control
Custom Sound-Level control (concentric with Loudness control)
Push-Pull manual AC Power control
(at Treble control)
FM/AM Tuning Meter
Stereo FM Indicator Light
Pilot Light

SOLID-STATE ELEMENTS
Transistor: 39, Diodes: 15
Maestro Series model shown—SC818. For new booklet, “An Introduction To Sylvania Stereo,” send 25¢ in coin to: Sylvania, Dept. HS, P.O. Box 7, Station C, Buffalo, N. Y.
Aside from the aching emotion so beautifully communicated, Miss Holiday was at her best as she transformed the melody lines of pop tunes into something rich and new. The opening phrase of "Lover Man" will do as an example, or the whole of the brilliant "Lover Come Back to Me." Though many of her partisans held out for those few tunes closest to jazz that Lady Day sang—such as Billie's Blues and Ain't Nobody's Business If I Do—I have always been partial to two others, which seem to me perhaps closest in feeling to Billie's life. They are My Man and I Loves You Porgy, both heard here in heartbreaking renditions.

Billie Holiday was probably the best jazz singer (whatever that is) we have ever had, and this new album is one of her best and most welcome.

J. G.

© © CHARLIE MINGUS: Mingus Plays Piano. Charlie Mingus (piano). Old Portrait; I Can't Get Started; Meditations for Mutes; Body and Soul; and seven others. IMPULSE AS 60 $5.97, A 60 8$4.98.

Performance: Rich and passionate Recording: Good

Charles Mingus, one of the best jazz bassetts in the world, has played piano before on records, but on this new album he exposes this aspect of his performing self completely with a set of unaccompanied piano solos.

It would be well to dispense at the outset with the novelty aspect of this record. Barring occasional lapses of technique that sometimes keep him from doing what he wants, Mingus needs no excuses or rationalizations for any of his music-making.

In its subtitle ("Spontaneous Compositions and Improvisations"), an insistence on the unpremeditated nature of the music, the album bears some resemblance to a John Lewis effort of some years ago, "Improvised Meditations and Excursions." And it is also reminiscent of Lewis in the pretentious nature of some of the titles: Myself When I Am Red and Compositional Theme Story: Medleys, Anthems, and Folklore.

But all resemblance stops there. Where Lewis is precise and controlled, Mingus is sprawling and passionate. He owes a major stylistic debt (somewhat surprisingly) to Art Tatum. It is hinted at in the hymn-like chords played so deliberately during the bridge of "Body and Soul," but is quite obvious everywhere else in the left-hand figuration. There are also Monk hesitations, Ellington filigrees, and Cecil Taylor dissonances, as well as a Ravel-Debussy romanticism. And at times Mingus even sounds like an old silent-movie accompaniment. Most of the time, however, he knows exactly what he is doing. I have minor quarrels with the disc—the folk-music quotes on "Theme Story" seem a little too deliberate, and I could have done without the cozy verbal vignette before Memories of You. But Mingus has created a rich, fascinating solo piano record, meaningful enough to make one think he would be an important jazzman even if he had never seen a bass.

J. G.

© © IKE QUEBEC: It Might as Well Be Spring. Ike Quebec (tenor saxophone), Freddie Roach (organ), Milt Hinton (bass). At Harlem (drums). IT Might as Well Be Spring; A Light Retrerie: Easy—Don't Hurt; Lover Man; Ol' Man River: Willow

WEEP FOR ME, BLUES NOTE ST 84105 $5.98, 4105 8$4.98.

Performance: Passionate Recording: Good

The late Ike Quebec was generally in the Gene Ammons category in tenor-saxophone style—a full, round tone that was intended to make an immediate emotional impact. He was also somewhat reminiscent of Arnett Cobb. His was the sort of tenor one usually hears in the company of an organ. But his solos displayed a control and organization generally lacking in those stylistically closest to him.

This recording was made with Freddie Roach, an organist with a concise, swinging style beyond the reach of most of his sprawling co-instrumentalists. The major part of the set is made up of ballads, which Quebec played in a warm, romantic way, liberally sprinkled with both-era quotes. Anyone who likes organ-tenor music will find this disc a superior example.

CLARK TERRY
His arranger let him down
The finest track is Easy—Don't Hurt, a blues played over an Ellingtonian bass and tom-tom figure. Quebec shows himself to be a powerful, direct blues soloist until the organist comes in and dissipates the mood—then Quebec himself becomes disappointingly predictable.

J. G.

RECORDING OF SPECIAL MERIT

SONNY ROLLINS: Now's the Time! Sonny Rollins (tenor saxophone), Herbie Hancock (piano), Roy McCurdy (drums), Ron Carter and Bob Cranshaw (bass), Thad Jones (trumpet). Fifty-Second Street Theme: I Remember Clifford; St. Thomas; Round Midnight; Afternoon in Paris; and three others. RCA Victor LSP 2927 $4.98, LPM 2927 $3.98.

Performance: Continuously exciting
Recording: Excellent

This newest Sonny Rollins project is built on major modern jazz standards by Thelonious Monk, Miles Davis, Dizzy Gillespie, Charlie Parker, John Lewis, and Rollins himself. In the context of this assignment, Rollins has curbed his avant-garde daring of the past couple of years, and sounds very much like the Rollins of five or six years ago. On the medium- and up-tempo tracks, he plays with bursting fire and a structural cohesion that makes his performances fascinating to analyze. On the slow numbers, I Remember Clifford and Round Midnight, he shows how imaginatively he can transmute ballad themes into new dimensions, emotional and melodic. The rhythm section is appropriately crisp and driving, and Thad Jones' single appearance, on Fifty-Second Street Theme, is welcome. This is surely one of Rollins' finest albums.

CLARK TERRY: The Happy Horns of Clark Terry. Clark Terry (trumpet, flugelhorn), Phil Woods (alto saxophone, clarinet), Ben Webster (tenor saxophone), Roger Kellaway (piano), Milt Hinton (bass), Walter Perkins (drums). Rockin' in Rhythm: Return to Swaddl: Jazz Conversation; High Towner; and four others. Impulse AS 64 $5.98, A 64 $4.98.

Performance: Disappointing
Recording: Excellent

On paper this should have been a standout album. Clark Terry is a trumpeter who refuses to settle into a predictable groove and continues to challenge himself. His sidemen in this session are of a high order of jazz individuality, and there is a greater variety of material here than is usual on most jazz recordings. Yet most of the tracks fail to be entirely persuasive.

The solos are often impressive, particularly those by Terry, Ben Webster, and Phil Woods on both alto saxophone and clarinet, and the rhythm section is firm and flexible. It is the writing that is primarily responsible for the album's weaknesses. Too much of it is self-consciously colorful, and there is not enough organic relationship between the solos and the ensemble scoring. There are, however, several memorable passages and one nearly total success—Bob Hammer's thoughtful arrangement of In a Mist. It is because Terry and his colleagues are capable of so much more that this album is something of a disappointment.

N. H.

(Continued overleaf)
Don’t assemble a high fidelity system until you have read Allison’s HIGH FIDELITY SYSTEMS — A USER’S GUIDE.

Everyone can benefit from it, but if you think you’re too advanced for “the best basic book now available on high fidelity” (the quote is from Electronics Illustrated), read Villchur’s more technical Reproduction of Sound in addition. This is the book that was reviewed in Esquire as “far and away the best introduction to the subject ever written.”

ACOUSTIC RESEARCH, INC.
24 Throndike Street, Cambridge, Mass. 02141

Please send me the AR needle force gauge (the same one supplied with AR turntables) for $1.00.

Please send me Villchur’s Reproduction of Sound for $2.00.

Please send me the AR needle force gauge (the same one supplied with AR turntables) for $1.00.

I enclose $________ in cash or check only.

NAME

ADDRESS

-------------------------------

CIRCLE NO. 67 ON READER SERVICE CARD

LAST CHANCE to get your

SHURE LAVALIER MICROPHONE for only

$5.00

with the purchase of a
Shure Fixed Position Microphone


Shure is making this special limited offer to prove to you that you really need 2 types of microphones: a fixed-position microphone, AND a movable lavalier microphone for maximum effectiveness and flexibility in microphone applications.

OFFER EXPIRES DECEMBER 31, 1964

SEE YOUR SHURE DEALER TODAY ... OR WRITE

SHURE BROTHERS, INC.
222 HARTLEY AVE., EVANSTON, ILL.

CIRCLE NO. 72 ON READER SERVICE CARD

GLOBAL:


Performance, Varied and interesting. Recording: First-rate

Bob Thiele, the recording director of Impulse, has assembled ten previously unreleased tracks from sessions done for the company. Outstanding are a Duke Ellington-Colman Hawkins collaboration on Solitude. Ben Webster's beautifully controlled performance of Ellington's Single Petal of a Rose, and a surging Charles Mingus perfor-
LIFETIME RECHARGEABLE

7-Transistor RADIO

NEVER NEEDS BATTERIES!
24 hours of continuous operation on one full charge. Radio may be played while recharging.

★ Extra powerful distortionfree reception—especially in fringe areas—never fades.
★ Compact shirt pocket size.
★ Station selector is vernier operated for fine tuning.

The Gift for a Lifetime... ONLY

$29.95
Inclues carrying case and earphone at no extra charge.

Now, at last, you never need to buy batteries for your transistor radio. The EVER PLAY will play for 24 hours on a full charge . . . then you simply plug it into any 110 volt AC outlet and it automatically recharges. NEVER AGAIN BUY BATTERIES! PAYS FOR ITSELF IN AN AMAZINGLY SHORT TIME.

CONSUMER SERVICE COMPANY
160 Mercer Street, New York, N. Y. 10012
Enclosed is $_________ for 7 transistor radio at $29.95 ea. Postpaid.
Enclosed is $_________ for 6 transistor radio at $25.95 ea. Postpaid.
Enclosed is $_________ for 8 transistor radio at $39.95 ea. Postpaid.
(New York City residents please add 4% sales tax)

Name: ____________________________  (PLEASE PRINT)
Address: __________________________
City: __________________ State: __________ Zip Code: __________

Sorry—No charges or C.O.D. orders.
HOW DID SANSUI PUT EVERYTHING INTO ONE COMPACT PACKAGE?

They killed the tubes. Used transistors instead. That left room for an FM tuner, pre-amps, main amps and multiplex all in one slim high-powered unit.

No tubes means no heat, no hum, no microphonics, no warm-up time. Most important, there in no deterioration. Transistors never wear out. Tell your repairman to forget it. The only way he'll ever see a Sansui TR-707 is if you invite him over to the house (or if he buys one himself and he probably will).

Some specs: 24 watts each channel, 3-gang variable capacitor, FM tuner 88-108 Mc, transformers? (they went the way of the tubes and with them went the power loss, which normally occurs at low frequencies), inputs for tuner, phono, tape, microphone and auxiliary, and everything else you would expect to find in a tuner/amplifier that's years ahead.

TR-707 is a product of Sansui Electric Co., Japan's foremost amplifier manufacturer. It will be available very soon at your local dealer's. If you're tired of stereo systems that take up half a room, hot sets and repair bills, take a big step into the future. Sansui TR-707.

It's worth waiting for. In the meantime, you can write Sansui for complete details.
HIFI/STEREO REVIEW'S CHOICE OF THE LATEST RECORDINGS
ENTERTAINMENT
POPS • HUMOR • FILMS • THEATER • FOLK • SPOKEN WORD

Reviewed by JOE GOLDBERG • NAT HENTOFF • PAUL KRESH • GENE LEFS

@ @ VIC DAMONE: On the Street Where You Live. Vic Damone (vocals); orchestra, Pete King cond. ALM: I Could Write a Book: Lost in the Stars: Six Loves: Ah; and six others. CAPITOL ST 2153 $4.98, T 2138 $3.98.

Performance: Beautiful
Recording: Gorgeous

Most singers agree that Vic Damone has one of the finest voices ever produced by and for American pop music. Not all think that he is the best singer, but only that the instrument he owns is unmatched by any other in the business. The resonance, the consistency through all its registers, the meticulous enunciation, the impeccable intonation, and the utter ease with which he can execute whatever he thinks, add up to something truly magnificent.

The trouble is that Damone thinks too much. Musicians who have worked with him say he is a tireless perfectionist who gets bugged at anything less than his own best work. Unfortunately, all his premeditation makes his singing sound exactly that: premeditated. This doesn't make his singing cold—the voice itself is too warm for that—but the emotion seems a little mechanical. What's more, Damone doesn't swing. I suspect he could, if he would relax. But on uptempo tunes he seems to be listening attentively to the rhythm section, putting the notes where they're supposed to go, not where he feels they should be.

Though Damone's faults are evident in this album, which covers a broad spectrum of songs from Broadway musicals, his virtues far outweigh them. In fact, I find that my ear deliberately filters out the shortcomings in order to surrender itself to the merits. Damone is spectacularly good on some tracks. Regularly popular music just doesn't get this perfection of craft applied to it. Kurt Weill's Lost in the Stars is breathtaking; Cole Porter's witty I Am in Love is delightfully bright. Pete King contributes one of the freshest set of big-orchestra arrangements this season, and the recorded sound is about the best I have heard in a pops vocal album in this or any other season.

Someday I hope to hear Damone sing a phrase simply because at that instant he feels like singing it that way, rather than because he has thought it out and worked it out that way. Until then, I'll hang onto this album as the best example of his work to date.

G. L.

THE DILLARDS: The Dillards Lie!!!
Almost (see Best of Month, page 6*)

@ @ ELLA FITZGERALD: Sings the Jerome Kern Song Book. Ella Fitzgerald (vocals); orchestra, Nelson Riddle cond. Ltr's: I'll Be you; Yesterday; Remember Me; I'm Old Fashioned: A Fine Romance: and seven others. Verve V 64060 $5.98, V 64069 $4.98.

Performance: As usual
Record ng: Good

The newest addition to Ella Fitzgerald's 'Song Book' series takes up the work of Jerome Kern, and once again the arranger is Nelson Riddle. One can always quarrel in such projects, with the inclusion or exclusion of specific songs, but this seems pointless. Some of the best known are here, and also some that have been nearly forgotten. And I have called attention before to Miss Fitzgerald's resolute sweetness and light approach to even the most despairing lyric, but that is probably the way it is always going to be with her.

Lyrics aside, Kern is a perfect composer for Miss Fitzgerald to sing. As Benny Green points out in his liner notes, Kern is one of the most harmonically sophisticated of composers, and Miss Fitzgerald, as always, negotiates even the most complex series of modulations with ease. Both she and Nelson Riddle seem to have become a bit pretentious in their work, and Miss Fitzgerald has a bit of trouble with some of the low notes. Otherwise, it is the same mixture of credits and debits as before.

J. G.

@ @ SERGIO FRANCHI: The Exciting Voice of Sergio Franchi. Sergio Franchi (vocals); orchestra, Stan Applebaum cond. Tuesday: And This Is My Beloved: Stan

Vic Damone: tireless perfectionist with a matchless voice.

Explanation of symbols:
@ = stereophonic recording
@ = monophonic recording
* = mono or stereo version not received for review.
THE 1965 PHOTOGRAPHY ANNUAL

$1.25

24 BIG FULL COLOR PAGES

Enjoy the 1965 PHOTOGRAPHY ANNUAL—a superb showcase of color and black-and-white photos by outstanding photographers the world over! Enjoy, too, the convenience of having this year’s edition delivered to your home—immediately! But you’ll have to send for your copy right now—the supply is going fast!

Fill in and mail the special order form below—TODAY! (Note: Payment must be enclosed at this low price.)

PARTIAL CONTENTS include these Portfolios:

★ War Pictures by the late renowned photographer, Robert Capa.
★ Abstract color by Wynn Bullock.
★ DALL—the surrealist as Philippe Halsman sees him.
★ Unusual Nudes by Masaya Nakamura.
★ The Wonderful World of Children by Michael Pierce.

PLUS Int’l. Portfolio, more color pages, etc.

GET THE DELUXE GOLD-EMBOSSED LEATHERFLEX EDITION—only $2.50 prepaid.

FILL IN, DETACH & MAIL THIS ORDER FORM TODAY!

1. ZIFF-DAVIS SERVICE DIVISION - Dept. PA
   589 Broadway - New York, N.Y. 10012

   Please send me my copy of the 1965 PHOTOGRAPHY ANNUAL as I’ve indicated below:

   □ Send me the regular edition. My $1.25, plus $1.50 for shipping and handling (50c outside U.S.) is enclosed.
   □ Send me the Deluxe Leatherflex-Bound edition, postpaid. My $2.50 is enclosed. (Add 50c outside U.S.) Allow two extra weeks for delivery.

   NAME

   ADDRESS

   CITY STATE ZIP CODE

   (PAYMENT MUST BE ENCLOSED WITH ORDER.)

Dust; and nine others. RCA Victor 2943* $4.98, LPM 2943 $3.98.
Performance: Stiff Recording: Distant

Like most “legit” trained singers who essay pop music, Sergio Franchi inspires in me an intense feeling of So What? Sure, he can sing loud and high—but since most pop tunes have a narrow range, seldom more than a tenth, what good is this? In order to show off, he (and his ilk) shoots melody, note up an octave, ends songs on high falsettos, and all that sort of nonsense. They sound like they’re trying to turn the tunes into “good” music. This implicit condescension is annoying, for such singers lack the one skill much pop music does require: the capacity to communicate quietly.

It’s hard to say whether Franchi has even less respect for the American song than other singers of his stripe, or whether Dynagroove is responsible for the impression of indifference. Whatever the cause, the whole disc has the quality of slightly wilted plastic. G.L.

Performance: Uneven Recording: Good

On this disc, Benny Goodman again tries to impose his unique brand of fuddy-dudiness upon a group of younger musicians far more skilled than he now is. His clarinet in this set is current and good pop tunes is weak—the phrasing is stilted, the tone thin; his imagination, too, seems to have faded: for a solo on The Lamp Is Low, he plays two choruses of melody with minor embellishments.

The saving grace of this album is the writing of Tommy Newsom, who did four of the ten chart. (There are also three by the late Fletcher Henderson and one each by Gerald Wilson, Joe Lippman, and Bill Holman.) Newsom, who plays tenor sax in TV’s Tonight show band, turns in some of the freshest arrangements I have heard in some time. His style is clean-lined and surprisingly individual: for example, his lovely treatment of The Girl from Ipanema is based on an odd, soft voicing of four saxes. Unless the whole industry has gone deaf, Newsom should have a lot more writing assignments after this album. G.L.

Performance: Polished and light-hearted Recording: Very live

This is the third fusion of the exuberant Al Hirt trumpet with the “Nashville sound.” As usual with most products of the Tennessee studios, the arrangements are loose, brightly colored, and carefully calculated for maximum disc-jockey and juke-box play. Hirt is a highly skilled trumpeter with minor powers of invention, the Anita Kerr Singers are slick but quite pleasant, and the assisting instrumentalists are buoyant. But as music, this album offers very little of substance. The single most irritating element in the set is the mechanically repetitive, quasi-rock-and-roll rhythmic vise in which all concerned are held for six numbers. N.H.

© ☑ ROBERT HORTON: The Very Thought of You; Robert Horton (vocals); orchestra, Marty Manning cond. The Very Thought of You; Summer Green: Love is Here: Call Me Irresponsible; and eight others. COLUMBIA CS 5902 $4.98, CL 2202 $3.98.
Performance: Amateurish Recording: Good

Singers have often become good actors, but I know of no actor who ever became a good singer, Robert Horton, who plays Flint McCallough on the television series Wagon Train, is no exception; here he wanders with a cafly-attitude through some standards, his pea-soup baritone loaded

with sincerity, pathos, emotion, music lessons, vibato, and bad intonation. Who needs it, I ask? Because TV made this cat famous, is that any reason to rush him into the recording studio? Yes, comes the answer—because somebody can make a buck on it. But when I think of the excellent singers around New York City who can’t even get enough night-club work to live decently, much less a contract with a major recording label, it makes me want to punch Robert Horton right in the mouth. G.L.

RECORDING OF SPECIAL MERIT

© ☑ JACK JONES: Where Have Love Gone. Jack Jones (vocals); orchestra, Harry Betts and Pete King cond. Where Have Love Gone: People: What’s New; and nine others. KAPP KS 3396 $4.95, K 3396 $3.95.
Performance: Stunning Recording: Very good

When it become known that Allen Jones, the musical-comedy singer of the 1930’s, had a son who was making his first record as a singer, some of us started squirming in advance. The squirming ceased suddenly when the record came out, and now, several discs later, Jack Jones is recognized in the music (Continued on page 116)
"Believe it or not, I make over 90% of my broadcast tapes on the same Norelco model designed for your home," says Skip Weshner.

"My tapes have to meet the broadcast standards of the leading FM stations around the country, whose other taped programs are normally recorded and played back on professional broadcast-console equipment. My Norelco '401' gives me professional quality tapes that not only meet or exceed these standards, but on playback on the '401' I defy any listener to tell the difference between my live broadcasts and my taped ones!

"As to reliability, my Norelco has been on the firing line five nights a week, year after year, and has required less maintenance than any other recorder I've ever used. It handles tape more gently, too: it doesn't break tape, it doesn't spill tape, it doesn't stretch tape—not even the half-mil stuff I'm forced to use to get an hour's broadcast on a 7" reel.

"Although the '401' was designed for the operating convenience and for the pocketbook of the home user, in my book it has proved itself as a thoroughly professional instrument."

The Norelco Continental '401' 100% transistorized • 4-speed • 4-track stereo/mono, record/playback • completely self-contained with dual preamps, dual amplifiers, two wide-range stereo-matched speakers and a stereo dynamic microphone. (Two broadcast quality microphones can be used with simple adapter.) . . . At your hi-fi dealer's—or write to Dept.N-12, North American Philips Company, Inc., High Fidelity Products Division, 100 East 42nd Street, New York, New York 10017.
When your 1965 STEREO/HI-FI DIRECTORY arrives, and you see how valuable it is—even your best friend won’t be able to wrest it away! In 180 all-inclusive pages, you have authoritative prices and performance data—plus actual photos—of over 2,000 hi-fi components, from 170 different manufacturers!

The most comprehensive Buyer’s Guide to date, this all-new Directory gives you all the vital statistics on speakers, tuners, receivers, changers, turntables, cartridges, tape recorders—on every hi-fi component manufactured today! Use this handy shop-at-home directory to compare similar items, dollar-for-dollar, feature-for-feature before you buy, and avoid excessive prices, disappointment, costly mistakes!

Would you like to have an up-to-the-minute listing of every hi-fi dealer in the country? And a complete rundown of all the FM stereo multiplex stations operating in the U.S. and Canada? You get both in the 1965 STEREO/HI-FI DIRECTORY!

But most important—if you want to get top value on every hi-fi component you buy during the next twelve months, then...

SEND JUST $1 NOW FOR YOUR COPY OF THE 1965 STEREO/HI-FI DIRECTORY ...and we’ll rush this indispensable “Buyer’s Guide” to your home—at once! (Tip! If you want to keep your copy, find a good hiding place, or learn these magic words: “Get your own copy! It’s only $1…”)

---FILL IN AND MAIL THIS COUPON RIGHT NOW!---

Ziff-Davis Service Division, Dept. SD
589 Broadway, New York, N.Y. 10012

Please send me a copy of the 1965 STEREO/HI-FI DIRECTORY. My dollar, plus 15¢ for shipping and handling, (25¢ outside U.S.) is enclosed.

Name please print

address

city state zip code

HIFI/STEREO REVIEW
DATA

** DILLARD CHANDLER / LEE WALLIN / OTHERS: Old Love Songs and Ballads. Dillard Chandler, Lee Wallin, Bezrilla Wallin, Cas Wallin, Elisha Shelton (vocals); Neighbor Girl; Don't You Remember?; Awake, Arode: and ten others. FOLKWAYS FA 2309 $5.95.

** ROBINSON JEFFERS: Tower Beyond Tragedy and Other Poems. Marian Seldes (reader). FOLKWAYS FL 9767 $5.95.

** MORGANA KING: With a Taste of Honey. Morgana King (vocals); orchestra. Tutti Zim cond. Contents: I Love Paris; Easy to Love; Prelude to a Kiss; and six others. MAINSTREAM S 6015 $4.98. 50015 $4.98.

** ALEX LUKEMAN: What's On My Mind. Alex Lukeman (vocals and guitar); Black Girl; Jesse James; Slip Knott; Wild Colonial Boy; and nine others. RARVEL AB 1007 $4.98.

** LYRICS FROM THE OLD ENGLISH. Burton Raffel and Robert P. Creed (readers). FOLKWAYS FL 9858 $5.95.

** NEW ORLEANS JAZZ: THE TWENTIES. Various New Orleans jazz bands. Black Rag; Dirty Rag; Shoot Dress Gal; Picadilly: and twenty-four others. RHB 203 two 12-inch discs $9.96.

** JOE WILLIAMS: Me and the Blues. Joe Williams (vocals); various personnel. Every Night: Rocks in My Bed; Come On Blues; and nine others. RCA VICTOR LSP 2879 $4.98. LPM 2879* $3.98.

COMMENTARY

This excellent field document recording was made by Peter Gott and John Cohen in North Carolina's Laurel River region, where a rich heritage of Anglo-American ballad singing still exists. The singers, you do not have the power of youth, but there is no lack of intensity of feeling.

This album offers four of Jef- fers' short poems, a speech from The Green Women, and Cas- sandra's speech and the dialog between Orestes and Electra from Tower Beyond Tragedy. For the last passage, two voices are needed, but in the other Miss Seldes' reading is intelli- gent, though it lacks dramatic fire.

Miss King's style is made up of lustless crooning, panting, a great deal of anguish, and many self-satisfied swoops. It is a shame that good songs like the ones on this disc should attract singers like Miss King. She is backed by a large orchestra.

It is probably through prejudice that I cannot feel more enthu- siasm for Alex Lukeman's singing—he sounds too polished for my taste. But he does play the guitar superbly, in the folk tra- dition of creating intricate ac- companiment patterns behind his singing. The recorded sound is good.

Listening to this collection of twelve lyrics and a chapter of Genesis in Old English is fas- cinating at first but numbing in the long haul. Creed, who col- lected the poems, chants them musically in the original, and Raffel repeats them in modern English. Both read well, texts and translations.

Despite the participation of such legendary figures as Punch Miller, Fate Marable, and Papa Celestin, these twenty-eight tracks are for the most part agonizingly dull. The set may have value for researchers, but for listening pleasure, one must look elsewhere.

Notwithstanding Williams' rep- utation, I find his blues inter- pretations lacking in any emo- tion except the pleasure he takes in showing off his great big voice. The band here, made up of such excellent musicians as Clark Terry and Ben Webster, sounds under-rehearsed.

** ROYAL OAKS: WHITE FISH: BLACK BEANS. Various personnel. contents: I Love You and I Hate You; Don't Be Cruel; Never Let Me Go; and seven others. RFD 2002 two 12-inch discs $9.96.

** ROYAL OAKS: THE REAL STORY. Various personnel. Contents: You Can't Run Away; I'm Gonna Miss You; Shadow; and nine others. RFD 3001 two 12-inch discs $9.96.

** ROYAL OAKS: WHAT'S COMING. Various personnel. Contents: It's Just Like Religion; I'm Gonna Be Alright; and nine others. RFD 2007 two 12-inch discs $9.96.

** ROYAL OAKS: WHERE HAVE YOU BEEN. Various personnel. Contents: I'm Sittin' Here; If I Only Had You; Baby Girl; and nine others. RFD 3002 two 12-inch discs $9.96.

** ROYAL OAKS: WHERE HAVE YOU BEEN. Various personnel. Contents: I'm Sittin' Here; If I Only Had You; Baby Girl; and nine others. RFD 3002 two 12-inch discs $9.96.

** ROYAL OAKS: WHERE HAVE YOU BEEN. Various personnel. Contents: I'm Sittin' Here; If I Only Had You; Baby Girl; and nine others. RFD 3002 two 12-inch discs $9.96.

** ROYAL OAKS: WHERE HAVE YOU BEEN. Various personnel. Contents: I'm Sittin' Here; If I Only Had You; Baby Girl; and nine others. RFD 3002 two 12-inch discs $9.96.
business as the best male pop singer to come down the pike in many, many years.

And he isn't only the best young singer; he is one of the best of whatever age. In communicating a lyric, he has an incredible maturity. He has a great voice and superb control, and he is the only singer I've heard who can take Sinatra material, sing for the meaning of the words as Sinatra does, and end up sounding not even remotely like Sinatra.

Jones has a bad habit of closing down vocals in the middle of the song. For example, Sometimes he overcalculates his phrasing and ends up sounding a little synthetic. But time will cure these faults—and they are the only ones I can find.

Ordinarily, I would not strongly recommend an album built on tunes we have all heard hundreds of times—'Will You Stop for Me, It Never Entered My Mind, and Guess I'll Hang My Tears Out to Dry—but ideas were delightfully free of musical clichés." Sample Raskin lyric:

Moonlove, you held my heart suspended. Too soon, love, our interlude was ended.

And Kenton thinks that isn't trite? Raskin's lyrics have craft—he can rhyme 'laughter' with 'after' right up there with the best of them. But they show almost no evidence of originality of thought. The once-powerful and charming Edgar Reiter is hobbled by such dead weight as: "When there's a moon that's right for romance, and there's a girl who throws you a glance, you'll get the girl if you're not an eager beaver."

The over-all effect of this album is like that of square Lambert-Hendricks-Ross work, and Lambert-Hendricks-Ross always struck me as being more of a one-hit act to start with.

And the last track on the album is "A Different Washington." The result is a thoroughly inappropriate application of style to material. The Gospelsingers go for certain predictable intervals that strip each song of its identifying contours. This is true whether the singer is Miss Lester, Nancy Wilson, or the late Miss Washington. Not only is this approach inappropriate to the material here, it is more importantly, inappropriate to Miss Lester. She is obviously able and sensitive, a singer with a good sound who is capable of greater scope than these churchy trimmings permit. The disc comprises standards and some new tunes, but for the aforementioned reasons, one track sounds rather like the next Jack Pleis's arrangements aren't much. G.L.

JOHN MC CORMACK: Songs of Sentiment (See Best of Month, page 65)


Performance: Trachy

Recording: Excellent

Most of this album is country-and-western garage. There is one track, however, that everybody in the music business should dig—Long Black Veil, a ballad (in the original sense of the word) about a man executed for murder. Since he was "in the arms of my best friend's wife" on the night of the killing, he could not come up with an alibi. He tells the story from the grave. It's a weird tune, but more to the point, it's realistic. If quality pop music had a little of the feeling of reality that not infrequently crops up in country-and-western music, the public might not be so hung up on junk. (Long Black Veil, incidentally, was written by Marijohn Wilkin and Danny Dill. It occurs to me that somebody ought to set those lyrics to music.)

Johnny Rivers is big in the business these days. I think he's terrible. G.L.

RECORDING OF SPECIAL MERIT

@ JUAN SERRANO: Bravo Serrano. Juan Serrano (guitar). Portis Otieno: Memories de Carmen Amaya: Modern Rhythm; and eight others. ELEKTRA EKS 2725 $5.95, EKL 275 $4.98.

Performance: Electrifying

Recording: Superb

Juan Serrano is not a "warm" guitarist. Rather, he is icy. He attacks as with an acetylene torch—you get the feeling he could cut through sheet metal with his intense sweeping runs.

This third disc for Elektra, is much like its predecessors, a fact I consider to be in its favor. Traditional flamenco forms make up most of the tracks, but they are given a highly personalized interpretation. The most interesting piece to my mind, is an almost classical composition of Serrano's, titled Etude No. 2. But whatever the material, the playing is ruthlessly unemotional.

Serrano sets up weirdly contradictory moods in this listener, perhaps because of the coupling of primitive emotion and equally primitive harmonic materials with so highly developed a technique. He is a phenomenal guitarist nonetheless, and Elektra has brilliantly captured the raw, almost nasal sound of his playing. G.L.


Performance: Synthetic

Recording: Ditto

This is the least ugly recording Barbra Streisand has yet made. Her intonation has improved since "The Barbra Streisand Album" and "The Second Barbra Streisand Album," and she achieves some nice things. Of course, some of her worst qualities are still in evidence—the adenoidal high notes, the deep breathing into the mike, and the grab-bag of cheap histrionic tricks. But I'm beginning to wonder whether this is the fault of Miss Streisand or of her recording director.

The sound quality is nutty. The high highs have been boosted, which produces an excess of sibilants and exaggerates Miss Streisand's breathing. At the same time, reverberation has been reduced. She ends up sounding simultaneously close and far away—and altogether inhuman. Finally, either she moves away from the mike at dramatic peaks, or else the engineers (Continued on page 118)
For The Stereophile With An Eye...

As Appreciative As His Ear...

New Heathkit Deluxe Transistor Stereo!

Luxurious New Walnut Cabinet Styling!
Do you consider appearance as carefully as performance when choosing stereo components?
If you do, then you'll delight in the new look of Heathkit Deluxe Transistor Stereo! Sleek, richly warm walnut cabinets. Clean, uncluttered charcoal gray upper front panels. Soft, refracted panel lighting. Hinged, lower front walnut panels to neatly conceal all secondary controls and avoid accidental system setting changes. Beautiful enough to capture the spotlight in any room!

And The Sound?
As modern and beautiful as the new styling, Transistor sound with its broad, clean, unmodified response... no compromising! Add cool, instant operation, simplicity of assembly and the low Heath prices... and you have the best value in transistor stereo today — bar none!

Under These Beautiful Cabinets...
you'll find the most advanced solid-state circuitry. The magnificent Heathkit AJ-43 Stereo Tuner features 25 transistors and 9 diodes... wide-band AM, FM & FM Stereo to satisfy any listening with... automatic switching to stereo plus an automatic stereo indicator light that signals when stereo is received... filtered left & right channel outputs for direct, beat-free stereo recording... separate AM & FM tuning meters... automatic frequency control to lock in desired station for rock-steady, drift-free reception... automatic gain control that eliminates "blasting" or "feeding" of incoming signals, keeps volume constant... adjustable FM squelch to let you tune across the dial without annoying between-station noise... stereo phase control for maximum separation, minimum distortion... and a factory-built & aligned FM "front-end" tuner and 3-stage FM I.F. circuit board for quick, easy assembly!

Matching Heathkit AA-21 Stereo Amplifier!
This superb unit boasts a 26 transistor, 10 diode circuit that produces 70 watts continuous, 100 watts I.F. music power at 1 dB from 13 to 25,000 cps. And you enjoy complete freedom from microphonics, effortless transient response, and cool instant operation... characteristics unobtainable in tube-types.

In addition, there are complete controls, plus all inputs and outputs to handle any program source & most speaker impedances. Circuit safety is assured with 5 fast-acting, bi-metal circuit breakers... no fuses to replace ever! Transformerless output circuit and multiple feedback loops provide fine fidelity and low distortion levels.

With its encapsulated, epoxy-covered circuit modules and five stable circuit boards, the AA-21's assembly is fast, simple and fun... requires no special skills or knowledge!

Please Your Ear, Your Eye & Your Sense Of Value!
Choose this matched Heathkit Transistor Stereo pair now for better performance and appearance at lower cost!
Kit AJ-43C, tuner, 19 lbs. $129.95
Kit AA-21C, amplifier, 29 lbs. $149.95

FREE 1965 HEATHKIT CATALOG
See these and over 250 other exciting Heathkits available in easy-to-build kit form. Save 50% or more by doing the easy assembly yourself! Send for your free catalog today!

HEATHKIT COMPANY, Dept. 40-12-1
Benton Harbor, Michigan 49022
In Canada: Daystrom, Ltd., Cooksville, Ontario

□ Enclosed is $.................. plus shipping.
□ Please send Kit.
□ Please send FREE 1965 Heathkit Catalog.

Name
Address
City State Zip

Price & specifications subject to change without notice. HF-322
have applied extreme volume compression. You can tell that she's singing loud, but the volume stays the same, or actually even becomes softer. Maybe Columbia is imitating RCA Victor's Dynagroove, from which God save us all.

One is tempted to dump these faults on the head of Robert Mersey, who produced the record. On the other hand, artists usually sit in on the editing of their discs, so Miss Streisand almost certainly approved of what was done.

The orchestrations are good. Columbia has a stable of arrangers who generally produce a kind of homogenized colorlessness that is instantly recognizable. Of the Columbia stable, Peter Matz strikes me as the most imaginative. He wrote six of the charts for this disc, and Ray Ellis did the other six. The Ellis charts are also good.

Some day, if the business boys don't goof her up, Miss Streisand may become a great artist. But the day is not yet.

G.L.

RECORDING OF SPECIAL MERIT

CAL TJADER: Warm Wave. Cal Tjader (vibraharp); orchestra, Claus Ogerman cond. Where or When; Violets for Your Furs; Just Friends; and eight others. VERVE V 68585 $4.98, V 8585 $3.98. Performance: Toastful Recording: Excellent

Here is another recording by the British jazz critics will delight in tearing to pieces. In high dudgeon, they will cry that another jazz musician has "sold out." (The most dim-witted jazz criticism in the world is written in England.) What we have here is in fact not a jazz album at all, but one of the freshest and most tasteful pop albums of the year. It is, in fact, an indirect follow-up to Antonio Carlos Jobim's Verve album, scored by the same arranger, Claus Ogerman.

But by abjuring too close an approximation of the Jobim album—Jobim played his own tunes, Tjader plays standards—Ogerman has made the project come off.

I have said harsh things in the past about Ogerman's work, based on such examples as his arrangement of More for Kai Winding, and that dreadful album for Bill Evans, "The VIP's." Musicians and others have for some time been telling me that Ogerman is a gifted writer. It was hard to tell from the Jobim album whether this was so, since Ogerman seemed to be executing Jobin's thoughts. But in this set, the writing—for strings, rhythm section, and, on some tracks, woodwinds as well—is clearly his, and it is exquisite. He is indeed a gifted arranger, and it is to be hoped that the economics of the music business will not force him to turn out much more tripe.

Cal Tjader is one of the music business' quiet wits (the much-quoted crack, "I sold my soul for a single," is his). Cal, who has never had anything good to say about any of his discs, refers to this one as "my shiny album." Its mood is quiet, the string writing subtle, and Cal's own playing is restrained, melodic, and simple. There are no fireworks. That is exactly what gives the album its charm: its consistent understatement. Yet it is not a mood-music disc. Ogerman's writing is too inventive, Tjader's playing too personal.

In our age of vocals, we get very, very few good instrumental pop albums. This is one of the best to come out this year. Give it a try. I think you'll play it often.

SHIRLEY VERRETT: How Great Thou Art, Precious Lord. Shirley Verrett (vocals), Peter Daniels (piano), Robert Maxwell (harp), Sy Mann (organ). One God, One Little Candle; I Heard a Forest Praying; The Pearly White City; and six others. KAPP 3394 $4.98, 1394 $3.98.

Performance: Ardent and accomplished Recording: Very good

Mezzo-soprano Shirley Verrett, whose reputation as a concert and opera singer is growing.

(Cont'd on next page)
"E" is the Heathkit AR-13A All-Transistor, All-Mode Stereo Receiver. It's the first all-transistor stereo receiver kit. It costs from $75 to $425 less than the finest stereo receivers on the market today. This alone makes the AR-13A unique. But dollar savings are only one reason why it's your best value.

Even if you can afford to buy the costliest model, you can't buy better performance. Start with the AR-13A's 43-transistor, 18-diode circuit. It's your assurance of cool, instant, "hum-free" operation; long, trouble-free life; and the quick, clean, unmodified response of "transistor sound"... characteristics unobtainable in tube types.

Next, there's wide-band AM, FM, FM Stereo tuning for distortion-free reception to delight the most critical ear. It has two preamps. And its two power amplifiers provide 66 watts of IHF Music Power, 40 watts of continuous sine-wave power. And it's all housed inside one luxurious, compact walnut cabinet... just add two speakers for a complete stereo system.

There are plenty of operating conveniences, too. Like automatic switching to stereo; automatic stereo indicator; filtered tape recorder outputs for direct "beat-free" stereo recording; dual-tandem controls for simultaneous adjustment of volume, bass, and treble of both channels; 3 stereo inputs; and a separate control for balancing both channels. The AM tuner features a high-gain RF stage and a high Q rod antenna. The FM tuner has a built-in line cord antenna plus external antenna connectors.

In addition, there's a local-distance switch to prevent overloading in strong signal areas; a squelch control; AFC for drift-free reception; plus fly-wheel tuning, tuning meter, and lighted AM & FM slide-rule dials for fast, easy station selection. The secondary controls are concealed under the hinged lower front gold aluminum panel to prevent accidental system setting changes. Both of the AM and FM "front-ends" and the AM-FM I.F. strip are pre-assembled and prealigned to simplify construction.

Compare its impressive specifications. Then go direct to the coupon, and order the AR-13A. Now sit back and relax... you've just saved $75 to $425 without compromising!

Kit AR-13A, 34 lbs. ... ... ... ... $195.00

SPECIFICATIONS - AMPLIFIER: Power output per channel (Heath Rating): 20 watts @ 8 ohms load. IHF Music Power: 32 watts. Output: 3.5 watts @ 8 ohms load. Power response: 1 watt from 10 cps to 30 kc @ 0 db output. Harmonic distortion: (at rate output) less than 1% @ 20 cps; less than 0.3% @ 1 kHz; less than 0.5% @ 15 khz; Intermodulation distortion: (at rate output) less than 1% at 10 kHz, 6000 cps. Signal-to-noise ratio: 55 db below rated output. Audio drift: 0.1% M/F. Volume control: 0 db to 20 db; 0.5 db per division. Channel separation: 40 db. Input sensitivity: Max. phone, 6 MV. Outputs: 1, 8, & 16 ohm and low-impedance line cord outputs. Controls: S. and L., Volume, M. 

IF YOU CHOOSE E GO DIRECT TO THE COUPON & COLLECT $75 TO $425 SAVINGS!
NOW!

A medium-priced Honeywell Pentax camera

the H3v with Super-Takumar 55mm f/2 lens!

If you want a fine 35mm single-lens reflex camera but have set a $200 limit for yourself, here’s the camera for you—the new Honeywell Pentax H3v with Super-Takumar 55mm f/2 lens!

Identical to the standard H3v in all respects except maximum lens aperture (the standard H3v has a Super-Takumar 55mm f/1.8 lens), this latest addition to the Honeywell Pentax family features a fully-automatic diaphragm; shutter speeds to 1/1000 sec.; an integral self-timer; an exposure counter which automatically resets itself; a manual depth-of-field preview control, and many other features which assure good pictures under all conditions.

To these features, add the compact, classic design and superb workmanship which have made the Honeywell Pentax one of the world’s most respected cameras and you’ve got an outstanding value at just $199.50!

The new Honeywell Pentax H3v with f/2 lens is waiting for you at your Authorized Dealer’s. He’ll also show you the Honeywell Pentax H1a (no self-timer; shutter speeds to 1/500 sec.; Super-Takumar 55mm f/2 lens; $169.50) and the standard H3v ($229.50). See him soon.

For full-color literature, write to: John Thornton, Mail Station 209, Honeywell, Denver, Colorado 80217.

Honeywell PHOTOGRAPHIC PRODUCTS

CIRCLE NO. 32 ON READER SERVICE CARD
Regardless Of What You Pay For Other Color TV

It Can't Perform As Well As This One...

And Yet A Heathkit® Set Costs As Little As $399!

Exclusive Heath Features For Unquestioned Performance! That's right. No matter how many of your hard-earned dollars you pay for another brand of color TV, none can equal the performance of the Heathkit All-Channel, High Fidelity 21" Color TV! Why? All color sets require minor periodic adjustments to maintain peak picture performance. The Heathkit GR-53A is the only set with a "built-in service center" that provides the facilities for perfect picture adjustments. Heath's simple-to-follow instructions & detailed color photos show you exactly what to look for and how to achieve it...quickly, easily! You become the expert! Result? Beautiful, true-to-life color pictures day in and day out...and no costly color TV service calls for simple picture alignment!

And since you service & maintain the set yourself, a costly service contract isn't required! Heath warrants the picture tube for 1 year, all other parts for 90 days.

No Trade-in Required!
Keep your present set as a handy "second" set for the den, bedroom, children's room, etc.

Quick & Easy To Assemble!
No special skills or knowledge required. All critical assemblies are factory-built and tested. Simple step-by-step instructions take you from parts to picture in just 25 hours!

Convenient Time-Pay Plan!
Only 10¢ a day, and the rest in easy monthly installments. Get free catalog for full details.

Finest Components, Most-Advanced Circuitry
With the Heathkit GR-53A you're assured of the finest parts and most advanced color TV circuitry that money can buy...at up to $300 savings. You enjoy rock-steady pictures with no overlap or color fringing.

But Don't Take Our Word For It!
See the special articles on the Heathkit GR-53A in the May issue of Popular Electronics, June issue of Radio-TV Experimentor, February issue of Popular Mechanics, April issue of Science & Mechanics, and the August issue of Radio-Electronics!

Now Compare The Features...And The Price!
In addition to the ones already mentioned, there's the high definition 70° 21" color tube with anti-glare bonded safety glass; 24,000 volt regulated picture power; 27 tube, 8 diode circuit; deluxe Standard-Kollsman VHF tuner with push-to-tune fine tuning for individual channels and transistorized UHF tuner for all-channel (2-83) reception; automatic color control and gated AGC for peak performance; line thermistor for longer tube life; two hi-fi outputs plus tone control; transformer operation; chassis & tube mounting on sturdy one-piece metal support for easy set-up and servicing; plus a low price of only $399.

Use The Coupon & Order Yours Now!
And be sure to check the appropriate box to get your Free new 1965 Heathkit Catalog with complete descriptions & specifications of the GR-53A as well as over 250 easy-to-build kits!

Kit GR-53A, chassis, tubes, mask, UHF & VHF tuners, mounting kit, and special 6" x 9" speaker, 127 lbs. .......... $399.00

The Only Color TV You Can Install 3 Ways!
1. In New Heathkit Deluxe Walnut Cabinet (Illust. above), model GRA-53-7, 85 lbs. .......... $115.00
2. In Heathkit walnut-finished hardboard cabinet (Illust. below), model GRA-53-6, 52 lbs. .......... $49.00
3. In a wall, bookshelf, or custom cabinet!!

FREE! 1965 Heathkit Catalog!

HEATHKIT

HEATH COMPANY, Dept. 40-12-3
Benton Harbor, Michigan 49012

Prices & specifications subject to change without notice.

CIRCLE NO. 30 ON READER SERVICE CARD
Following the international success of the WAR REQUIEM... three superb new recordings by

Benjamin Britten

* ALBERT HERRING
  Recorded at Aldeburgh starring Peter Pears and Sylvia Fisher
  and conducted by the composer
  Stereo OSA-1378
  Mono A-4378

* SYMPHONY FOR CELLO AND ORCHESTRA (and Haydn Cello Concerto)
  Mstislav Rostropovich—The English Chamber Orchestra—
  Benjamin Britten
  Stereo CS-6419
  Mono CM-9419

THE YOUNG PERSON'S GUIDE TO THE ORCHESTRA SERENADE FOR TENOR, HORN AND STRINGS
  Peter Pears; Barry Tuckwell—The London Symphony Orchestra
  Stereo CS-6398
  Mono CM-9398

Send HiFi/Stereo Review Every Month

HiFi/Stereo Review

Check one: [ ] 3 years for $12
[ ] 2 years for $9 [ ] 1 year for $5
[ ] IN THE BOX AND POSTAGE-PAID
[ ] Payment Enclosed [ ] Bill Me

Foreign rates: Canada and Pan American Union room rates, and 50c per year; all other foreign countries
$1.00 per year.

name

address

city state

Mall to:

HiFi/Stereo Review

1255 Portland Place Boulder, Colorado 80301

FOLK

JUDY COLLINS: The Judy Collins Concert. Judy Collins (vocalist, guitarist), Chuck Israel (bass, cello), Steve Mandell (second guitar, banjo). Winter Skies: Coal Tattoo, Cruel Mother, Bottle of Wine, and ten others. ELEKTRA EKS 7280 $5.95, EKL 280 $4.98.

Send HiFi/Stereo Review

Every Month

HiFi/Stereo Review

Check one: [ ] 3 years for $12
[ ] 2 years for $9 [ ] 1 year for $5
[ ] IN THE BOX AND POSTAGE-PAID
[ ] Payment Enclosed [ ] Bill Me

Foreign rates: Canada and Pan American Union room rates, and 50c per year; all other foreign countries
$1.00 per year.

name

address

city state

Mall to:

HiFi/Stereo Review

1255 Portland Place Boulder, Colorado 80301

FOLK

JUDY COLLINS: The Judy Collins Concert. Judy Collins (vocalist, guitarist), Chuck Israel (bass, cello), Steve Mandell (second guitar, banjo). Winter Skies: Coal Tattoo, Cruel Mother, Bottle of Wine, and ten others. ELEKTRA EKS 7280 $5.95, EKL 280 $4.98.

Performance: Appropriate

Recording: Very good

Judy Collins is one of the young female folk singers who has come to prominence in the wake of Joan Baez. She has a strong, lovely voice, similar to Miss Baez' both in song and speech. But there is a difference between the two. Miss Baez—with a few notable exceptions, such as the work of Bob Dylan—sings traditional songs. Miss Collins' repertoire, as evidenced by this March 21, 1964, Town Hall concert, is laden with the work of contemporary writers. The songs, therefore, deal with social injustice. (Unless you want to count Jimmie Davis, former governor of Louisiana, there has probably never been a "conservative" folksinger.)

Of these songs, three are by Billy Edd Wheeler, who writes about the coal mines, and three are by Tom Paxton, who has particularly in My Ramblin' Boy, a felicitous gift for charming, easily remembered melody. Miss Collins presents, rather than sings, one of Bob Dylan's less happy inspirations, Hattie Carroll, John Phillips' Me and My Life is a fine re-creation, one that gives Miss Collins a chance to show another side of her personality. And there is the Silver-
This New Heathkit® FM Stereo Tuner At $49.95...

Plus...This Heathkit® 16-Watt Stereo Amp At $39.95...

Equals Complete Stereo Electronics For $89.90!

Now, from the manufacturer who has proven time & time again that quality need not be expensive, comes the complete stereo electronics for a full-size system at compact cost... only $89.90! Just add 2 speakers and enjoy!

With the new Heathkit AJ-13 FM Stereo Tuner at $49.95, and the famous Heathkit AA-32 16-Watt Stereo Amplifier at $39.95, you have a matched pair that offers operating conveniences found only on much more expensive units... a refreshing new decorator styling of mocha brown, beige & black trim accents that enhances any decor... a minimum of controls for simple fingertips adjustments... plus a full richness & realism of performance that will please the most discriminating car!

Start with the new Heathkit AJ-13 Stereo Tuner! First you'll like the ease with which it operates... just three controls—On/Off FM-Stereo Selector... a Tuning Control... and AFC On-Off switch. What could be simpler?

And yet, you enjoy a host of maximum performance features like the automatic frequency control that locks-in all stations for beautifully quiet, drift-free reception... a stereo indicator light that silently signals when stereo is being broadcast... large edge-lighted slide-rule dial for easy station reading... easy flywheel tuning... external antenna terminals... plus point-to-point wiring and a preassembled, prealigned "front-end" for fast, simple assembly! Goes together in a couple of evenings!

You'll like the modern color styling, too!... mocha brown & beige steel cabinet with midnight black trim accents—blends beautifully with any decor!

Now, add the Heathkit AA-32 16-Watt Stereo Amplifier with its 4 stereo inputs... mag, phono, ceramic phono, tuner, & auxilary. Its clean, pure power response of ± 1 db from 30 to 30,000 cps at 8 watts per channel! Its full complement of controls... mono/stereo switch; a dual-concentric volume control for adjusting both channels simultaneously or individually; full-range tandem-type tone controls for simultaneous adjustment of bass or treble; its 7-tube amplifying circuit with 2 four-stage preamps, and 2 push-pull power output stages. Its complete transformer operated full-wave silicon-diode circuit. Its simple fast point-to-point wiring... beginning finish in just a few hours! Its attractive styling... matches the AJ-13 Tuner. It's low, low price... $39.95!

Now settle back & listen! The sound's superb... the operation simple... the styling handsome... the savings beyond belief! Discover why more people rely on Heath to take the high cost out of quality. Use the handy coupon & choose both units now!

Kit AJ-13, FM Stereo Tuner, 13 lbs. $49.95
Kit AA-32, 16-Watt Stereo Amp, 15 lbs. $39.95

FREE HEATHKIT CATALOG
See these and over 250 other exciting Heathkits available in easy-to-build kit form. Save 50% or more by doing the easy assembly yourself! Send for your free catalog today!
stein-Friedman H.T. Nelly, Nelly, a textbook example of what can happen when one miscalculates in "folk-song" writing.

This is an illuminating compendium of what some of the major writers of the current folk revival are up to, that all this missing is a disarmament song. Miss Collins sings everything with charm and conviction. J. G.

**RECORDING OF SPECIAL MERIT**

- LEADBELLY: *Good Night, Irene*.
- Leadbely, Josh White (vocals, guitar), harmonica. Roberta: John Hardy: *How Long, Good Morning Blues*; Bill Brady; and seven others. ALLEGRO LEG 9025 $1.98.

Performance: Superior
Recording: Good

These recordings, done for Musicastrt in 1939, are among the first ever made by Huddie Ledbetter, better known as Leadbelly. But they are far less "primitive" than much of Leadbelly's later work. He articulates more clearly, and so is easier to understand. And the sound, as remastered, is very good, considering the date of the originals. I prefer this disc to many other Leadbelly collections.

Leadbely sings some of the songs most closely associated with him: *Where Did You Sleep Last Night?* (Most often dubbed *Black Girl*), *Yellow Cat* (unlisted on the jacket), and *Good Night, Irene*. There are also two takes of *Pretty Flower*, one with the assistance of Jeth White, his only appearance on the album, and a song called *Judy Collins*.

**WHERE CAN YOU BUY 40 SOUND QUALITY FEATURES?**


For professional sound, design simplicity, moderate price, engineered performance and quality throughout — BUY the most versatile of them all...

**MAGNECord 1024**

**ONLY** $595

for further information write
MAGNECord SALES DEPARTMENT
MIDWESTERN INSTRUMENTS, INC.
P. O. BOX 7509 • TULSA 35, OKLAHOMA
World’s Best Buy In Electronic Organs!

GO-983
$849.00
(including bench)
$125.00, as low as $27.00.

Full Features...
No Extras To Buy...
Saves Hundreds of Dollars
New Heathkit®/Thomas
"Coronado" Transistor Organ!

Every Organ Feature You’ve Ever Dreamed Of! Just look what you can create on this beautiful instrument! 17 True Organ Voices ... Diapason 16’ & 8’, Bass Clarinet 16’, Trumpet 16’, English Horn 8’, Violin 8’, Oboe 8’, Bourdon 16’, Flute 8’, Flute D’Amour 4’, Quint 5-1/3’, Saxophone 8’, French Horn 8’, Cello 8’, and Chimes—all at the simple touch of a tab! 2 Separate Speaker Systems ... a built-in 2-speed rotating Leslie plus two 12” Main speakers. With the Leslie system you create the beauty of full “theatre” organ, or a randomness of sound adaptable for religious music. And by playing through both systems at once, you produce an exciting “stereo” effect. 28 Notes Of Chimes ... worth $500 to $2,000 as an “extra” on other organs. Creates hundreds of chime variations. Color-Tone Attack, Repeat & Sustain Percussion ... the only organ to give you all 3 to create an infinite number of beautiful musical effects. You can vary the rate of repeat percussion & you can select short or medium Sustain. 2 Full 44-Note Keyboards. Manual Balance ... to adjust relative volume & to accentuate either manual. 13 Note Heel & Toe Pedalboard. Pedal Sustain ... for special rhythm effects. Pedal Volume Control, Vibrato Switch ... for warmth & beauty, Expression Pedal ... to adjust volume from softest whisper to full majesty. Reverb ... to add concert-hall realism. Treble Accent Tab ... adds new clarity & brightness to solo work. Headphone Outlet ... play any time without disturbing others. All-Transistor 75-Watt LIA Peak Music Power Amplifier, Pre-Tuned Tone Generator ... to help you easily tune the organ, no special “musical” car needed! Transistor Tone Generator Boards ... warranted for 3 years! Luxurious Hardwood Cabinets & Bench handcrafted with walnut finish!

No Extras, Nothing More To Buy! Everything you need for complete playing versatility is included. There are no speakers, amplifiers or other “hidden necessities” to add as with other organ kits. It’s all there at one price ... even the bench!

Saves Hundreds Of Dollars! Save more than $400 over the factory assembled version. And you could pay as much as $1,000 more for other brands and still not enjoy as many features!

It’s Truly A Professional Organist’s Dream With A Beginner’s Simplicity! And yet you don’t have to be an electronics wizard to build it, nor a professional organist to play it. Famous Heathkit® “Engi-nuity” has reduced assembly to simple steps that require no special talents, tools or knowledge. And the famous Thomas “Musical Fun Book” is included to start you playing many favorites fast! A special, recorded 48lesson course is also available that lets you learn at your leisure! Regular $50.00 value ... only $19.95!

Play As You Play! Only $125.00, as little as $27 a month. Get free catalog for full details — now!

Kit GO-983, organ & matching bench, 290 lbs., $125.00, as low as $27.00, $849.00

World’s Lowest Cost
2 Manual Organ
Heathkit/Thomas
"Largo"

* 10 true organ voices * Variable Repeat Percussion for additional effects * Two 37-note keyboards * 13-note heel & toe bass pedals * 20-watt peak power amplifier * Walnut cabinet * Transistorized plug-in tone generators ... warranted for five full years * Expression pedal.

Kit GO-232A, organ only, 158 lbs.
$349.95

CIRCLE NO. 30 ON READER SERVICE CARD
Andros, the Bahamas, and is a carpenter as well as a musician. He was previously featured in "Music from the Bahamas" (Folkways FS 3844), and that album led Fritz Richmond of the Kweskin Jug Band to set up this date. Spence sings with rough-edged exuberance. On How I Love Jesus, he sounds somewhat like a Bohemian counterpart to Reverend Gary Davis, communicating his faith with visceral intensity.

Spence's guitar work is most impressive for its rhythmic thrust, and his contrapuntal approach to melodic lines is occasionally rather intriguing, but since he does not have much breadth of skill or mood, interest in this album flags. Spence's music is for special tastes, and to this listener, the album is a reminder of how useful the now-obsolete 10-inch LP used to be for certain kinds of recitals. N. H.

**SPOKEN WORD**

**© BILL DANA:** *In Las Vegas.* Bill Dana and Andrew Duncan (performers); orchestra, Louis Basil cond. KAPP KL 1402 $3.98.

Performance: Hilarious

Recording: Solid

The title and an album-cover photograph in color showing Mr. Dana in five different poses at a roulette table promise little, but the record inside is a pleasant surprise. On the first side, Dana is José Jiménez, a popular Puerto Rican television character who confuses such words as "rostrum" and "restroom" while analyzing the state of today's world. José appears in the guise of a politician, a jazz musician, a judo instructor, and a private eye in a series of interviews with Andrew Duncan, who is a perfect parodist of the intense reporter from the TV news department. The skin diver's school is located in Phoenix, and the lion tamer calls a pair of track shoes his most important piece of equipment.

In Dana's hands, all this far from subtle material becomes immensely funny. As himself on the second side, Dana is even funnier. For example, he outlines TV westerns, one of them featuring Mr. Riffeman, the Jewish cowboy, and another starring Briony Brucie, the frontier decorator. For good measure, Dana engages in a dial phone with himself and even accompanies himself in a touching "duet." P. K.

**© DAVE GARDNER:** *It's All in How You Look At It.* Capitol ST 2055 S4.98. T 2055 $3.98.

Performance: Ear-opening

Recording: Good

Mr. Gardner, among whose "dearly beloved" admirers I assuredly am not to be numbered, has a sly, insinuating way of ingratiating himself with a Southern audience that is more reminiscent of a political demagogue than a stand-up comedian. As he skitters over such topics as government spending, Billy Graham, Ralph McGill of the Atlanta Constitution, and the President's anti-poverty campaign, his listeners seem able to divine exactly where his heart lies on these topics without his ever having to commit himself about anything. The climax of his latest act, recorded at the Copa in Atlanta, comes when he introduces Alabama's Governor Wallace, who happened to be present, bringing an already impassioned crowd of adoring listeners to a state bordering on frenzy. P. K.

© FRANK D. GILROY: *The Subject Was Roses.* Jack Albertson, Irene Dailey, Martin Sheen (players). Ulu Grosbard, director. COLUMBIA DOS 708 three 12-inch discs $17.00, DOL 308 $15.00.

Performance: Careful

Recording: Lopsided

Columbia's theater series, which has made a fair bid for immortality with superior productions of Hamlet, Strange Interlude, and Who's Afraid of Virginia Woolf?, descends to mediocrity with this dreary domestic comedy from Broadway. Producer Goddard Lieberson compares playwright Gilroy's talent to the devastating irony of Jonathan Swift, but listening to *The Subject Was Roses* is rather like being trapped in a thin-walled apartment and being forced to listen to the jabberings of some singularly bad-tempered and ill-mannered neighbors. John Cleary, an irritable Irishman, and his long-suffering wife, Nettie, start the day in their Bronx apartment hanging the coffee cups, bickering about money, and debating the merits of their son, an alleged university candidate just back from the Army at the end of World War II. Record side after side of agony follows.

They wrangle over who is the better parent and go out for an evening of heavy drinking that winds up in more recriminations. Following some trumped-up suspense during which Mrs. Cleary leaves home overnight, they finally drive the apple of their eye to the understandable expedient of moving out. All this unfolds in a prose as colorless and humorless as it is commonplace.

Jack Albertson as Mr. Cleary and Irene Dailey as the doting mother breathe life into Mr. Gilroy's stencils through a care and attention to nuances of feeling almost totally lacking in the lines. Yet their thoughtful performances seem always at odds with the ready-made roles Mr. Gilroy has set down so faithfully. Martin Sheen turns their son (Coastline on page 130).
“Until just recently, I have been somewhat skeptical about low priced transistor amplifiers. However, after testing and listening to the Heath AA-22, I feel it is time to revise my opinion. This remarkable amplifier can easily hold its own against any amplifier—tube or transistor—anywhere near its price range.”

JULIAN D. HIRSCH, Hi Fi/Stereo Review, Nov. ’64

Heathkit® 40-Watt Transistor Stereo Amplifier ....... $99.95!

Mr. Hirsch Went On To Say: “It is the embodiment of the so-called ‘transistor sound’— clean, sharply defined and transparent. It has the unstrained effortless quality that is sometimes found in very powerful tube amplifiers, or in certain expensive transistor amplifiers.” “The AA-22 is almost unique among amplifiers at or near its price, since it delivers more than its rated power over the entire range from 20 to 20,000 cps.” “The power response curve of this amplifier is one of the flattest I have ever measured.” “Its RIAA phono equalization was one of the most precise I have ever measured.” “Intermodulation distortion was about 0.5%, up to 10 watts, and only 1% at 38 watts per channel, with both channels driven.” “The hum and noise of the amplifier were inaudible.” “Hi Fi/Stereo Review’s kit builder reports that the AA-22 kit was above average in ‘buildability’.” “In testing the AA-22, I must appreciate not having to handle it with kid gloves. I operated it at full power for long periods, and frequently overdrive it mercilessly, without damage to the transistors, and with no change in its performance measurements.” “One of the best things about the Heath AA-22 is its price, $99.95 in kit form, complete with cabinet.”

Let’s Look Closer! The AA-22 provides 40 watts continuous, 66 watts IHF music power at ± 1 db from 15 to 30,000 cps. Features 5 stereo inputs to handle mag, phono, stereo-mono tuners, tape recorders, & 2 auxiliary sources. There are 4, 8 & 16 ohm speaker outputs plus tape recorder outputs; a 5-position selector switch; 3 position mode switch; dual-tandem control; bass & treble controls.

Get Full Details Free! Simply use coupon below. Or better yet, order both the AA-22 Amplifier & its matching AJ-33 tuner now! Kit AA-22, Amplifier, 23 lbs. ............ $99.95

“WILL GET ANY STATION THAT CAN POSSIBLY BE PULLED IN”

Matching AM/FM/FM Stereo Tuner

The above quote comes from July ’64 issue of Radio-Electronics. The matching AJ-33 tuner features a built-in stereo demodulator; AGC for steady volume; AIFC for drift-free reception; stereo indicator light; stereo phase control for maximum separation, minimum distortion; filtered stereo outputs; tuning meter; flywheel tuning; voltage regulated power supply; illuminated slide-rule dial; and pre-built, prealigned FM “front-end” tuner and AM-FM I.F. circuit board for fast, easy assembly. Kit AJ-33A, Tuner, 17 lbs. ............ $99.95

FREE 1965 CATALOG!

See these and over 250 other exciting Heathkits available in easy-to-build kit form. Save 50% or more by doing the easy assembly yourself! Send for your free catalog today!

HEATH COMPANY, Dept. 40-17-6
Benton Harbor, Michigan 49022
In Canada: Daysstrom, Ltd., Cooksville, Ontario

[Box for coupon] Enclosed is $, plus shipping. Please send kit(s).
[Box for coupon] Please send Free 1965 Heathkit Catalog.

Name (Please Print)

Address

City State Zip

Prices & specifications subject to change without notice. 127

DECEMBER 1964

CIRCLE NO. 30 ON READER SERVICE CARD
Capture the happy

(preserve them permanently)

There will be only one Christmas 1964. Only one exciting occasion when presents are opened, when sounds of happy surprise fill the air. You can save this priceless moment and relive it for years to come by recording it as it happens.

Here's how many families do it: Set up the recorder in advance, with a full reel of tape; start the machine before the children enter the room to be sure not to miss anything; identify each gift as it is opened, asking the recipient to tell who sent it. Don't try to force any comments; natural reactions are best.

One very important point:

Make sure you use a quality brand-name tape on a base of MYLAR®.
sounds of Christmas

on recording tapes of Mylar®

Why MYLAR? Several reasons. Tapes of MYLAR can't dry out or become brittle with age...will preserve your precious recordings, no matter how long you keep them. Heat and humidity can't affect them either, so storage is no problem.

In addition, MYLAR is extra-thin and extra-strong. It gives you up to 50% extra playing time per reel, yet can't break or stretch under normal use.

So don't take chances. Prepare for the holiday season by asking your dealer for your favorite brand of recording tape or pre-recorded tape on a base of strong, durable MYLAR.
ANNOUNCING

A NEW, BASICALLY NEW, SPEAKER SYSTEM—

THE VEROE

Vertical Speaker System.

The Veroe, a remarkable new approach to high quality speaker system design, is now available to you. This beautiful sound instrument fills a living room with sound more fully and with more accurately detailed reproduction than you have ever heard before.

Outwardly, the Veroe design is stately and beautiful. It will blend and enhance your living room decor. The Veroe occupies only an 8 inch square of floor space. Thus, one, two, or more Veroes can be freely placed anywhere you may desire, in any size living room.

The Veroe connects easily to any type of Hi-Fi/Stereo system and gives a much larger improvement in sound than you would ever think possible. We invite you to obtain more complete details on the high quality Veroe by writing to —

THE WESTRON  CO. P.O. Box 1036 Provo, Utah

CIRCLE NO. 64 ON READER SERVICE CARD

What is ZIP Code?

ZIP Code is a five digit distribution code designed to speed mail deliveries by cutting down on the steps now required to move a letter from sender to addressee. The code will also aid materially in the manual distribution of mail and will pave the way for mechanized distribution in post offices.

Ask your letter carrier or your post office for your ZIP Code—remember, it will speed your mail to you!

SAVE MONEY on
NATIONALLY
ADVERTISED BRANDS

HI-FI COMPONENTS

TAPE RECORDERS

TAPES, ACCESSORIES
SLEEP LEARN KITS
MERITAPE

Top Quality Recording Tape

* Franchised Distributors
* Factory Sealed Cartons
* Up to 2 yrs. Mgr. Warranty

Write for our
FREE CATALOG

DRESSNER

1523 Jericho Tpke. New Hyde Park 31, N.Y
Visit Our Showroom
CIRCLE NO. 18 ON READER SERVICE CARD

The Veroe into a youngster of such tenderness, forbearance, and insight that only his bad grammar ("a dream I used to have about you and I. Dad") is left to make one dubious about his future.

The sound effects are loud, all out of proportion to the voices. In stereo, particularly, cups bang onto saucers like trucks colliding, drinks are poured into glasses that sound as if they could be eight feet high, and a knocked-over vase of roses clatters to the floor with the aural impact of an earthquake.

In fairness, it should be noted that there are moving episodes—as when the father tries to persuade Timmy to stay at home—but only one resembling O’Neill’s Tyrones and Gilroy’s Clearys is adequately shown. With its neatly planned scenes, The Subjectivist is a Roses has been much praised as “well-carpetoned,” but cabinetwork is no substitute for drama. — P. K.

Mr. Gregory, the Negro night-club comedian who has been willing to endure jail stretches in the South for his beliefs, has made a number of discs in which the jibes at racial injustice contain, understandably, enough bitterness to make you want to cry instead of laugh sometimes. He is back on this one, a night-club recording, with a quiver of arrows, which he launches in many directions, hitting not only the Governor of Mississippi and the Ku Klux Klan, but such unexpected targets as Smokey the bear and a teacher who apologizes to the kids in the back when they find out they’ve "only" been telling dirty jokes: "Oh, that’s okay," she says, "I thought you were praying." At one point, a member of Mr. Gregory’s California audience calls out, "Talk louder!" "I can’t," he retorts. "The N-double-A-G told me not to. It destroys this new image of us." His favorite device is to pause, then tack on an extra tag to a joke, trying to top himself. And once in a while he really does. — P. K.

DICK GREGORY: Running for President, VEE-JAY VJ 1093 $3.98.

Performance: Hard-hitting.

Recording: Night-club type

These highlights and snippets from the complete play released by Columbia earlier disclose immediately the force and brilliance of Burton’s Hamlet, and should leave no doubt why it was celebrated. Yet this sampler, like so many others, is self-defeating. One cannot really appreciate the incandescence of the soliloquies, Hamlet’s speech to the players, or his encounter with his father’s ghost, when they are heard out of context.

Included, too, are such scenes as the death of Ophelia, the letter scene, Polonius’ advice to Laertes, and Horatio’s concluding remarks after Hamlet’s death, just to remind the listener that there were other people in the cast. Or were there? Mr. Cronyn’s Polonius holds up as a droll and intriguing caricature, even in a single speech. But Mr.

NOW...PERFECT FM
ELIMINATE
FM INTERFERENCE!
With the Sensational!
New! FINCO
FM BAND PASS FILTER

Get only pure FM signals. Use a Finco FM Band Pass Filter to stop interference and block unwanted signals from T.V., Citizens Band and Amateur transmitters, motors, autos and fluorescent lamps. Size: 4 3/4” x 2” x 1 1/2”. Available at your Finco Hi-Fi dealer. Satisfaction guaranteed!

Model 3007 Only $6.95 List

THE FINNEY COMPANY
34 W. Interstate St. • Bedford, Ohio
CIRCLE NO. 26 ON READER SERVICE CARD

CIRCLE NO. 15 ON READER SERVICE CARD

HIFI/Stereo Review
Drake’s King, Miss Herlie’s Queen, and Linda Marsh’s Ophelia are no more impressive out of context than in. It is Burton’s triumph, but there is no short cut to the proper appreciation of it: you must hear the whole play.

P. K.

RECORDING OF SPECIAL MERIT


Performance: Sweeping
Recording: Excellent

Julius Caesar suffers, as Shakespeare’s later tragedies rarely do, from an overabundance of supernumeraries who shout such unlikely remarks as “Peace there, hear the noble Antony!” But in addition to the wonderful headlong pace of the scenes leading up to Caesar’s murder and the famed funeral oration, the play boasts in Brutus one of those Shakespearean miracles of complex characterization. The play also is uncanny in its political contemporaneity, justifying the prophecy of Cassius, “How many ages hence/Shall this our lofty scene be acted over/In states unborn, and accents yet unknown?” As a study in the treacheries men stoop to, and rationalize as good, in their machinations to gain the seat of power, it is frighteningly accurate—and instructive.

Mr. Sackler, the director, is blessed here with a rare group of authoritative actors. John Mills paints the ambitious Cassius who coaxes and wheedles Brutus into murdering his benefactor. Anthony Quayle as Brutus lends a different quality to the successive speeches that reveal the contradictory nature of the character, the struggle between his ambition and his sensibilities. Sir Ralph Richardson seems to me exactly right in portraying Caesar as a blustering extrovert, blinded to the danger and treachery swirling about him by his own self-satisfaction.

As for the young and most promising Alan Bates, his is a rather curious approach to the role of Mark Antony. He makes of Caesar’s avenger a strangely temperate and subdued fellow, hardly the type associated with rousing the rabble and swaying the crowd. He seems to take as literal rather than ironic Antony’s claim “I am no orator.” And yet one may find textual support for this tack: to Caesar’s corpse Antony describes his behavior as “meek and gentle with these butchers.” By its consistency, and a ground basis of suppressed rather than outspoken anger that sets Antony off from the conspirators, the characterization emerges with some validity. The women in the cast make what they can of the pale and sketchy background roles. As usual, Mr. Sackler handles the crowd scenes and vignettes of battle superbly, and pitches each episode at the right degree of intensity. His direction evokes marvelously the weather of the ominous morning on which Brutus meets his cronies to plan Caesar’s murder. Mr. Sackler even all but overcomes the problem of those absurd exclamations by the plebs in the Roman throng. All in all, this is a handsome, excitingly paced production.

P. K.

(Continued overleaf).
SAVE over 40% on hi-fi Components & Tape Recorders
- Easy-Pay-Plan—Up to 24 months to Pay.
- 15 Day money-back guarantee
- 6 Month guaranteed re-purchase plan.
- Full 2 yr. warranty—parts & labor.
- Franchised all lines. We ship from stock.
- Trade-ins—Highest allowance—send your list.
- Shipments double posted & fully insured.
- 250 yr. of dependable service—World Wide.
- We guarantee "We Will Not Be Undersold"
Write for our price—You'll be glad you did.

BEST BUY-HI-FI
Reg. Special
Fisher X10OB 50W Stereo Amp...169.50 119.50
Fisher X202B 8CW Stereo Amp...249.50 149.95
Fisher FM 100B FM-MPX Tuner...249.50 149.95
Garrard "A" w/Shure M30 Cart...59.45
Sony 500 Tape Recorder...450.00 299.00
Sony 464D Tape Deck...119.50
RCA MK-VIII C.B. Transceiver...149.95 99.95
All merchandise brand new and in factory sealed cartons.
Please write for price on any hi-fi equipment.
We own the sharpest pencils in the U.S.A.

BEST BUY-HI-FI LIST FREE
HI-FIDELITY CENTER
"The House of Low Low Prices"
New York, N. Y. • 10028

RECORDING OF SPECIAL MERIT
© WALT WHITMAN: Leaves of Grass (Volume Two). Ed Begley (Reader). CAMPION TC 1154 $5.95.
Performance: Exhilarating
Recording: Good
Mr. Begley here gives a masterly performance that skillfully steers between the disasters that might have befallen it—the Seiha of bloodless droning on the one hand, and the Charabas of sentimental vulgarity on the other. Taking his cues from Whitman himself, Begley performs as a kind of Pied Piper, beckoning the young in spirit out of self-absorption and toward larger concerns. Particularly exhilarating is the reading on the first side of the complete Song of the Open Road. On the second side, the performance of When Lilacs Last in the Dooward Bloom strikes with a dual impact: written in mourning for Lincoln, it seems equally appropriate for John F. Kennedy. And Begley works a small miracle of understanding with 4th Captain. My Captain!—another key for Lincoln: he frees a classroom warhorse from musty associations and makes it sing again as poetry. This is Begley's second Campion album of astutely chosen excerpts from Leaves of Grass. P. K.

RECORDING OF SPECIAL MERIT
© MACLIAMMOIR: The Importance of Being Oscar, Parts One and Two. Michael MacLiammóir (Reader). COLUMBIA OS 2990 and 2991 $5.98 each, OL 5600 $4.98 each.
Performance: Monumental
Recording: Clever
The Importance of Being Oscar, an entertainment based on the life and works of Oscar Wilde, was imported from England for a critically acclaimed but brief run on Broadway in 1961. In the first volume of this set, based upon material from the period in which Wilde was in the ascendant as a playwright and man of wit, MacLiammóir brings the clever script to life with Gaelic vitality and fervor. Unashamedly old-fashioned in reveling his admiration for the subject of his impersonation, the actor quotes Wilde's epigrams and relates the incidents that led to his glory—and ultimate downfall —with unabashed gusto, and performs scenes from An Ideal Husband and passages (perhaps too many) from the novel about Dorian Gray. The high points are those moments when MacLiammóir is by turns master and servant, lord and (even) lady, in puppenly performed vignettes (these are especially effective in stereo, for MacLiammóir's different voices address each other from one speaker to the other). The actor goes so far as to offer a speech from Salome in the rather threadbare French in which Wilde originally wrote it, and manages to pull off even this stunt unembarrassingly. We learn painlessly of Wilde's marriage, of his ability to charm even the miners in Leadville, Pennsylvania, and, ultimately, of the friendship with Lord Alfred Douglas, whose (possibly) psychotic father was to bring about Wilde's downfall and imprisonment. Part Two, which takes up after Wilde, broken and degraded, is sent to prison on charges of homosexuality, is a sad and somber document. In contrast to the wit and the insouciance of his earlier life and work is a long quotation from his self-pitying letter to Lord Alfred, D. Proulbus, one of the most heartbreaking private manuscripts ever made public. MacLiammóir reads it with an emotionality that might have brought a lesser actor to grief but seems here in perfect consonance with the material. Then comes the account of the last days after Wilde's release, the drifting through Europe "like a detest," the futile attempt to be reunited with Douglas, and the last days in Paris, where, at forty-six, in 1900, he at-

BEST BUY-HIFI WORLD WIDE SINCE 1948
COMPONENTS • RECORDER KITS • SPEAKER SYSTEMS • TAPE
• LOWEST PRICES
• ALL BRAND NEW FACTORY SEALED
• MFRS. GUARANTEES UP TO 5 YEARS
• FAST, INSURED SHIPMENTS
• GET 'QUOTES' on PACKAGE DEALS AND SAVE MORE
• SAME DAY REPLY TO YOUR HI-FI INQUIRY
• PARKING METERS AT PREMISES

CIRCLE No. 31 ON READER SERVICE CARD
HIFI/SILENIO REVIEW

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND

WILDE AND FRIEND
NOW...GET THE FINEST
STEREO TEST RECORD ever produced
for just...$4.98

Featuring The Most Spectacular Music Demonstration On Disc Today

Why We Make the Model 211 Available Now

Although there are many stereo test records on the market today, most critical checks on existing test records have to be made with expensive test equipment. Realizing this, HiFi STEREO REVIEW decided to produce a record that allows you to check your stereo rig, accurately and completely, just by listening! A record that would be precise enough for technicians to use in the laboratory—and versatile enough for you to use in your home.

The result: the HiFi STEREO REVIEW Model 211 Stereo Test Record!

Stereo Checks That Can Be Made With the Model 211

- Frequency response—a direct check of eighteen sections of the frequency spectrum, from 20 to 20,000 cps.
- Pickup tracking—the most sensitive tests ever available to the amateur for checking cartridge, stylus, and tone arm.
- Hum and rumble—proof tests that help you evaluate the actual audible levels of rumble and hum in your system.
- Flutter—a test to check whether your turntable's flutter is low, moderate, or high.
- Channel balance—two white-noise signals that allow you to check your system's stereo channels for level and tonal characteristics.
- Separation—an ingenious means of checking the stereo separation at seven different parts of the musical spectrum—from mid-bass to high treble.

PLUS SUPER FIDELITY MUSIC!

The non-test side of this record consists of music recorded directly on the master disc, without going through the usual tape process. It’s a superb demonstration of flawless recording technique. A demonstration that will amaze and entertain you and your friends.

UNIQUE FEATURES OF HIFI/STEREO REVIEW'S MODEL 211 STEREO TEST RECORD

- Warble tones to minimize the distorting effects of room acoustics when making frequency-response checks.
- White-noise signals to allow the stereo channels to be matched in level and in tonal characteristics.
- Four specially designed tests to check distortion in stereo cartridges.
- Open-air recording of moving snare drums to minimize reverberation when checking stereo spread.

All Tests Can Be Made By Ear

HiFi/STEREO REVIEW’s Model 211 Stereo Test Record will give you immediate answers to all of the questions you have about your stereo system. It’s the most complete test record of its kind—contains the widest range of check-points ever included on one test disc! And you need no expensive test equipment. All checks can be made by ear!

Don't Miss Out—Order Now

The Model 211 Stereo Test Record is a disc that has set the new standard for stereo test recording. There is an overwhelming demand for this record and orders will be filled by HiFi/STEREO REVIEW on a first come, first served basis. At the low price of $4.98, this is a value you won't want to miss. Make sure you fill in and mail the coupon together with your check ($4.98 per record) today.

FILL IN AND MAIL TODAY!

Stereo Test Record
HiFi/STEREO REVIEW—Dept. SD
One Park Ave., New York 16, N.Y.

Please send me __________ test records at $4.98 each. My check (or money order) for $__________ is enclosed. I understand that you will pay the postage. (Add 50¢ to partially defray postage costs outside U.S.A.)

Name ____________________________________________
Address __________________________________________
City____________________ Zone__________ State__________

(Please Print)

SORRY—No charges or C.O.D. orders!
The only tape recorder capable of recording/playing hi-fi stereo tape at 1-7/8 ips!

Is this the year you get Long-Play Stereo Tape for your sound system?

If nobody will give you a Roberts Cross Field 770, there's only one thing to do: Give yourself a 770 as a Christmas Bonus. You deserve one. So does your sound system if you want to bring it up-to-date.

With a Roberts 770, your recording technique moves into the new era of LP stereo tape. Record up to 12 hours of 4-track hi-fi stereo on one 7″ reel; record a whole day's stereo broadcast; dub off 18 LP records without ever changing your reel.

As for playback, you've never heard more brilliant stereo. It's the Cross Field concept that does it. Only Roberts has it. Frequency response at 7½ ips is 40 to 22,000 cps (±2 db); at 1½ ips, it's 40 to 13,000 cps (±3 db).

The Roberts Cross Field 770 is a highly-sophisticated instrument with all the professional features you want. It costs $499.95. When you get yours, we'll add another Christmas Bonus: our valuable Collectors' Album, recordings by famous artists for playback at 1¾ ips, the world's finest LP stereo tape, free! See your Roberts Dealers, or write direct to:

Roberts Electronics, Division of Rheem Mfg. Co.,
5922 Bowercroft St., L.A., Calif. 90016. Dept. HFSR12

In Canada: J. M. Nelson Electronics, Ltd., 2149 Commercial Drive, Vancouver 12, B. C. Prices slightly higher in Canada.
HIFI/STEREO REVIEW'S CHOICE OF THE LATEST RECORDINGS

STEREO TAPE

Reviewed by CHRISTIE BARTER


Performance: Emphatic
Recording: Vivid

This release couples one of Beethoven's most substantial compositions, the C Minor Piano Concerto, with one of his least substantial, the so-called Choral Fantasia. The latter, up to now, has not been represented on tape. Small wonder. It is at once too short and too long to serve as a convenient couple; it requires sizable resources simply to perform; and despite consistent efforts to prove otherwise, it is dull. Generally regarded as a kind of sketch-pad for the final movement of the Ninth Symphony, it approaches its concluding choral pages (based on an obscure poem by the equally obscure Christian Kellner) through a coda-like piano solo, a thematic statement by piano and full orchestra, and a set of spirited if naïve instrumental variations on that theme. In the end, for all its noise, the vocal contribution is anticlimactic. If ever a work needed the services of an interpretive conductor and the assistance of a first-rate solo pianist, this is it. Bernstein is such a conductor—one who can almost convince a listener that structural logic exists even where there is none—and Serkin is such a pianist, though his exuberance can at times result in some rather slapdash playing. The Westminster Choir, heard for a few minutes singing the six stanzas by Herr Kellner, sounds admirably disciplined, but the New York Philharmonic sounds as if it could have used more rehearsal time. Yet, through it all, concerto and fantasia alike, there is a vitality that proves enormously exhilarating. The recorded sound is highly resonant, the piano perhaps a bit too forward in relation to the orchestra.

C. B.

Ansermet's complete Beethoven symphony series has been available for some time on tape, and other than the very recently released Krips package from Everest, it is the only Nine so available. But this recoupling of the First and Eighth Symphonies is particularly welcome. Not only are these works among Ansermet's most successful realizations in that imposing cycle, but they are otherwise unavailable as a pair. The apparent remastering also makes them sound better than ever—and they sounded pretty good to begin with.

C. B.

© BRITTEN: Peter Grimes, Claire Watson (soprano), Ellen Orford; Peter Pears (tenor), Peter Grimes; James Pease (baritone), Captain Balstrode; David Kelly (bass), Hobson; Owen Brannigan (bass), Swallow Chorus and Orchestra of the Royal Opera House Covent Garden, Benjamin Britten cond. London LOR 90083 two reels $21.95.

Performance: Definitive
Recording: A-1

Times do change. If the record industry had been as geared to public opinion some twenty years ago as it is today—technically, in particular—we might have had a recording of Peter Grimes within months of its premiere. For Benjamin Britten introduced what was to all intents and purposes his first opera in the summer of 1945, as British troops were returning from the bloody battlefields of Europe and as the people of the victorious little island looked forward to an era of what seemed then to be certain peace and prosperity.

Peter Grimes in those still-dark days represented not only a return to normal artistic pursuits, but proof positive that the cultural life of the nation had been spared, and that the creative spark that had fired its greatest musicians could still be counted on. This opera, the first opera-in-English of any consequence in well over a decade, might have been recorded as evidence of a rebirth and fresh beginning on the spot—or even a few years later when, during its first round of performances, it was so successfully produced at the Metropolitan, reaching millions of Americans via network radio. But it was not. Although the Four Sea Interludes and Précisions were excerpted and quickly became part of the international orchestral repertoire, the opera as a whole was put aside. The present recording, available for some time on discs, stems from a Covent Garden revival in the late Fifties.

As firmly rooted in English tradition as boiled beet and carrots, Peter Grimes, as drama, is by no means so bland a dish. Its vision of the sea, of the men and women who had lived by it and reeled a toil existence from it, is an austere one. The libretto by Montagu Slater is drawn from George Crabbe's poem The Borough, which has been likened to our own Spoon River Anthology. The hero is a simple fisherman, an ñee daimhba who "lives from all mankind sport"—apart, that is, from what both music and words compellingly depict as a brutish, petty, and wildly suspicious lot. Yet the tragedy of Grimes is neither accidental nor circumstantial but, as is the case with all great tragic heroes, the result of a basic flaw of character, a blindness—however justifiable—to an unbearable reality.

Peter Pears, the composer's longtime friend and close associate, created the title role in those early postwar performances, and he sings it here again with an authority and a conviction that no other tenor has yet been able to bring to it. The American soprano Claire Watson imparts warmth and vocal distinction to the role of Ellen, the girl who in the end is left behind. Britten himself had never conducted the opera before this recording was made, but he obviously conveys a full understanding of the work to every member of the splendid cast, and a remarkable spirit of dedication and purpose to the orchestra and chorus. The sound on tape is absolutely first-rate. A libretto is included.

C. B.

(Continued on page 136)
Why?

DO THOUSANDS OF HI-FI ENTHUSIASTS BUY FROM AUDIO UNLIMITED?

It's Obvious!

- LOWEST PRICES
- FAST SERVICE
- FACTORY SEALED UNITS
- FULLY INSURED SHIPMENTS
- UP TO 2 YEAR MANUFACTURERS' WARRANTY
- PACKAGE DEALS—SAVE MORE
- FRANCHISED DISTRIBUTORS
- Your opportunity to win a VESPA SCOOTER—except where prohibited by state or local law. Write today.

Write for FREE Catalog Today
SEND US YOUR LIST FOR OUR AIR MAIL QUOTE TODAY

Visit Our Showroom and Warehouse
CAUDIO unlimited, inc.
715-5 Second Ave.,(N.E) New York 16, N.Y. 3 blocks from the U.N.

CIRCLE NO. 7 ON READER SERVICE CARD

CIRCLE NO. 46 ON READER SERVICE CARD

at, it falls far short of expectations. The winsome Adele sung by Jeanette Stovetti and the Eisenstein of Richard Lewis hardly compensate for the embarrassing caricature of Orlovsky contrived by Riche Stevens, or for the self-conscious theatricalism of Sergio Franchi's Alfred. Anna Moffo is entirely too ingenuous in her approach to Rosalinda, George London too stylized and rather out of his element vocally as Falke. In sum, champagne yields to Pilsner. Magnificent sound, though.

C.B.

RECORDING OF SPECIAL MERIT

@ WAGNER: Orchestral Music:

WAGNER: Orchestral Music, Preludes to Rienzi, Der Freischütz, Tannhäuser, Lobengrin: Prelude to Act I; Die Meistersinger: Prelude to Act 1, Act 3, Act 4, Act 5. The Philharmonia Orchestra, Charles Mackerras; The London Philharmonic Orchestra, Alfred Wallenstein. CIRCLE NO. 46 ON READER SERVICE CARD

CIRCLE NO. 7 ON READER SERVICE CARD

HIFI/Stereo Review
Some plain talk from Eastman Kodak about tape:

**base characteristics, surface smoothness and sound brilliance.**

Visualize a roll of sandpaper 1/4-inch wide. Now thread it into your tape recorder and run it awhile. Devastating thought? Sure is. Some poorly made tapes seem just about like that. Here's the story: Iron oxide is actually harder than many types of sand. And each particle of this destructively hard material can exert thousands of pounds of pressure, cutting a recorder head brutally. Luckily, that sort of thing can't happen here.

And for two good reasons. The first is our "R-type" binder. This resinous material has a number of unique advantages. It covers each particle of iron oxide thoroughly. It can be critically controlled, and coated to a glass-like smoothness. No other binder can be handled like our "R-type" binder. This means that Kodak tape gives you a smoother, more friction-free surface to begin with.

We take this super-smooth surface and to make certain that your recorder heads will get tender treatment, we take the extra precaution of lubricating the entire thickness of the binder.

**A lubricant must lubricate, but not too well.**

Here are the requirements. Tape must slip over heads (and pressure pads if your recorder has them), but there must be no slippage at all over the capstan, otherwise constant speed will suffer. The ideal lubricant has a combination of characteristics that allows it to glide friction-free (relatively of course) in certain places and hold fast and not slip at all in others. Designing lubricants that give this sort of performance is difficult. After a few thousand tries, we hit it and got some big rewards in terms of performance.

For example: The length of tape from idler to capstan, is not just in forward motion. It is in longitudinal vibration as well. About 3000 CPS in some recorders, maybe 5000 or 6000 CPS in others. This acts as a sort of mechanical AC ripple superimposed on the DC motion of the tape, if we may be allowed an electronic metaphor. The result is the generation of sidebands that destroy the timbre of the music. Lubrication does effectively control the generation of these sidebands. Trouble with sidebands is that they peak way up. Lubrication also suppresses the peaks while reducing friction.

We incorporate our lubricants into the magnetic coating. And we lubricate the base as well. In that way, all bets are covered. You might have noticed from time to time how some tapes smear their lubricants all over your equipment. Because our lubricants are stable, you'll never get that sort of "gunking" from a Kodak tape.

**A dilemma: Polyester or Acetate?**

Base materials have their problems too. They must not stretch, or sound distortion will result. They must be strong so that they won't break. But they must be "short" enough to break clean without necking down and losing recorded material. They must be supple enough to be head-clinging but not so floppy they behave like wet spaghetti. Basically, two different materials are used in tape bases. Acetate and polyester. These two materials are so different that they are used for entirely different applications and do give us sufficient versatility to solve most base problems.

Polyester is a really tough material. It is a first choice when it comes to superior strength in thin coatings such as 1/4 mil materials. Where really long play is needed, polyester is the ticket. Acetate is a different story altogether. Especially our unique type of acetate which we have named Durol. Durol base is outstanding in its yield strength and elasticity characteristics. Under emergency loads it will break clean with virtually no permanent deformation.

The above chart shows what happens when you simulate tough rewind conditions. Tape was put under sudden stress until it snapped. The end of the curve is the breaking point. Note that the Durol base samples are 40% stronger than the conventional acetates. How much permanent stretch remains after breaking is known as residual elongation. With Durol base tape this is less than 2%, while conventional acetates average 8-10%. This means that Durol base tapes can be spliced with virtually no loss in recorded material. Next time let's dig a bit further into general tape technology.

Choose Kodak Sound Recording Tape, Type 31A, for all general-purpose applications. Choose Type 34A wherever high output characteristics are called for. For long-play applications choose new Type 12P—so thin you get 3600 feet on a 7-inch reel! Kodak Sound Recording Tapes are available at all normal tape outlets—electronic supply stores, camera stores, specialty shops... everywhere.

© Eastman Kodak Company, 1964

**EASTMAN KODAK COMPANY, Rochester, N.Y.**

DECEMBER 1964  CIRCLE NO. 26 ON READER SERVICE CARD  137
poor alternative to some of the other Watson entries on tape. But the Klemperer stand head and shoulders above any of them, especially by virtue of the conductor's truly remarkable interpretive insights—insights that disclose the difference, say, between the Italian influences in the Roczci Overture and the pure Teutonic asceticism of the Love Music from Tristan.

C. B.

ENTERTAINMENT

@ THE KING AND I (Richard Rodgers-Oscar Hammerstein II). Barbara Cook, Theodore Bikel, Jeanette Scovotti, Daniel Ferro, Anita Darian; orchestra and chorus, Lehman Engel cond. COLUMBIA OQ 655 $9.95.


Performance: Conscientious
Recording: Excellent
It is hard to tell what prompted these studio recreations. Oklahoma!, thought it hurts to say so, is beginning to wear thin. It is not that it sounds dated, just that its once undeniable freshness is no more. The King and I, in fact, may prove more durable. This summer's Lincoln Center revival found an audience in New York and might have made a successful tour through the rest of the country, as was originally planned.

Highlights from the New York King and I were recorded by RCA Victor (with a tour in mind) and released on a single disc, and it—to my ears, at least—sounds a good deal better than this Columbia recording on tape. Barbara Cook, who has received praise for her portrayal of Anna on stage, is here a bit too corn-fed for the role, too much the ingénue. Theodore Bikel, making like an oriental potentate in the "puzzlement" song, is simply miscast. The outstanding performances are those of Jeanette Scovotti, who shares a few winning moments with Daniel Ferro singing We Kiss in the Shadows and I Hate, I Dreamed, and Anita Darian, who tugs at the heartstrings with Something'll Soon Be Said. Florence Henderson and John Raitt, for their parts, are veteran Oklahomans and handle their respective assignments in that recording with assurance and style. New orchestrations are provided by Philip J. Lang in both instances, and are clever but not, despite the careful engineering, significant improvements upon the Richard Rodgers originals. Why, indeed, would anybody bother to try?

C. B.

© STAN GETZ-JOÃO GILBERTO: Getz/Gilberto. Stan Getz (tenor saxophone), João Gilberto (vocals, guitar), Antonio Carlos Jobim (piano); orchestra. The Girl from Ipanema; Desafinado; Pra machucar meu coração; Desafinado; and four others. Verve VSTC 317 $7.95.

Performance: Persuasive
Recording: Good but bass-heavy

There are two familiar bossa nova tunes in this set, Desafinado and Corcovado, and one that picked up quite a following this summer, the single, The Girl from Ipanema. My guess is that it was this version, sung by the mellow-voiced Gilberto in the slurring accents of the Portuguese tongue (and by his wife, Astrud, in a haunting English version), that first put the Girl on her commercial feet. And it is undoubtedly a highlight of this recording. Getz, a master at blending the Brazilian idiom with elements of jazz, is quietly assertive in his solos, and the rest of the musicians, including a drummer named Milton Banana, go about their chores with the casual finesse this music requires. The recorded sound is clean and well-focused, though a bit boomy. But just turn the bass control to about ten o'clock and pretend it is midnight. You'll be charmed.

C. B.

© PETER, PAUL AND MARY: In Concert. Peter, Paul and Mary (vocals and guitar). The Times They Are A-Changin': A'Soundin': Five Hundred Miles: Blis: and

João Gilberto
Master of the bossa nova

fourteen others. WARNER BROS. WSTP 1555 $11.95.

Performance: Professional
Recording: Fine

These three rarely miss, and they miss not at all here—at least while they are singing. A couple of comedy turns having to do with auto racing and motoring in general, exhibiting the not so extraordinary labial talents of Paul Stookey, might have been dispensed with. The songs are what count, sixteen in all, recorded at concerts the trio has given in five cities from Daytona Beach to San Francisco. Opening this double-length reel with Bob Dylan's Th, Times They Are A-Changin' , a clear challenge to mass-hyped citizens everywhere, the performers move on to some of their hits of recent years, including Puff: If I Had a Hammer: and the now-classic Blowin' in the Wind. For the rest, my only complaint musically is that they choose to ignore the fact that A'Soundin' ("Heigh ho, no-body home") can be treated as a round. They nevertheless sing it beautifully, with taste and imagination, as do the other ancient Three Rarities, the bluesy One Kind Favor, and their popular composite of children's tunes headed by It's Raining. On Oh! Rock My Soul, the audience provides some rousing countermotion to the singing on stage. C. B.
COMMERCIAL RATE: For firms or individuals offering commercial products or services, $0.50 per word including address. When ads are placed in 100 words or more, a 15% discount; $1.00, a 25% discount; $2.00, a 35% discount. Minimum order $5.00. Payment must accompany order or be charged to your credit card. All copy within the limit of this ad must be submitted as a single file.

READER RATE: For individuals with a personal item to buy or sell, 30c per word (including name and address). Minimum order $5.00. 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 all caps at 10c extra per word. All copy subject to publisher's approval. Closing Date: 5th of the 2nd preceding month (for example, March issue closes January 5th). Send order and remittance to: Martin Lincoln, HIFI/STEREO REVIEW, One Park Avenue, New York, New York 10016.

EQUIPMENT

LOW, Low quotes: all components and recorders. HIFI, Roslyn, N.Y. Manna.

WRITE for quotation on any Hi Fi components: Sound Reproduction Inc., 34 New St., Newark, N.J. Mitchell 2-8816.

BEFORE You Buy Receiving Tubes, Test Equipment, HIFI Components, Kits, Parts, etc. send for your Free Giant Zaloryn Current Catalog, featuring Standard Brand Tubes: RCA, GE, etc.—all Brand New Premium receivers. Tube & Resistor, One—set at Best Discounts in America! We serve professional servicemen, hobbyists, experimenters, engineers, technicians. Why Pay More? Zaloryn Tube Corp., 469-H Jericho Turnpike, Mineola, N.Y.

TRANSISTORIZED Products importers catalog, $1.00 Intercontinental. CPC 1717, Tokyo, Japan.


THE Price is Right! Hi-Fi Components, J. Wright Co., 65-B Jansen St., East Brunswick, N.J.

KIT Experts—Dynaco Specialists—Kits at reasonable prices are our specialty. Also custom wired kits guaranteed to exceed factory standards at substantial savings. Beautiful handcrafted Walnut cases for complete Dynaco line, plus everything in audio, Kitcraft, Dept. HS1-64, 738 Washington Boulevard, Brooklyn, N.Y. 11238, MA 2-5209.

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-Fi Fidelity Center, 1797 (HC) 1st Ave., New York, N.Y. 10029.

7" TV test tube—$6.99. Tubes—$1—$2.95. 6121 (A23) equiv. 39c, 3 for $1.00. Germanium diodes, tested, equiv. 1N34, 1N600 equiv., $3.00 for $1.00. Trimmer variable, $2.50. Transistor tubes, resistors, capacitors etc. bargain priced. Free catalog. Arcturus Electronics, Dept. ZD, 502-222nd St., Unincorporated, N.Y., N.Y. 10706.

COMPONENT quotations—tapes Mylar 1800' postpaid minimum ten $1.99 each, Concertone 6054R4K 40's, 40. Bayfa, Box 1311 Wantagh, N.Y.

FREE! Send for money saving stereo catalog =WIR and lowest on your individual components, tape recorder or system requirements. Electronic Ventures, Inc., 500 W 20th St., N.Y., N.Y. 10011.

CANADIANS—Giant Surplus Bargain Packaged Catalogs, Electronics, Hi-Fi, Shortwave, Amateurs, Citizens Radio, Rush $1.00 (refundable), ETCO, Dept. Z, Box 741, Montreal, Canada.

TAPE RECORDER & TELEVISION SALE. Latest models, $10.00 above cost. Arcay Sales, 22-01 Riverside Ave., Medford, Mass. 02155.

HEAR Aircraft, Tower Emergencies, weather. Portable 9 Transistor AM-FM-VHF Aircraft receiver. Beautiful Black with Gold trim. $26.95. Free Details. Transco, Box 13482, North County Station, St. Louis 38, Mo.


BRAND Name Stereo Components At Just Dealer's Cost Plus 10%. Interested? Write to Stereo Club of America, P.O. Box 2474, Milwaukee, Wisc. 53214.

MOVIE FILMS

LEARN TO OANCE AT HOME FAST! 8mm “Teach Yourself” movies with instruction by ARTHUR MURRAY Dance Studios enable you to learn Fox Trot, Swing, Waltz or Cha-cha-cha in the privacy of your home. New, improved Movie, $3.95 each, all—4—$14.95. SELFTAUGHT FILMS, 20-HF North Wacker Drive, Chicago, Ill. 60106.

TUBES

RADIO & T.V. Tubes—33c each. Send for free list. Cornell, 4215-H University, San Diego, Calif. 92105.

FOR SALE


DIAGRAMS Radios $1.00 Televisions $1.50. Schomatics, 618 Fourth Street, Newark, N.J. 07107.

RENSA Fone Schematic $2.00. Jerry Reeves, 1815 4th Street, SeaaNek, New York 80303.

RECORDS

TUBES & TAPE RECORDER & Tapes, $10.00 above cost. Beautiful handcrafted tapes. Tested, equivalent to 65-B Jensen Tubes. $10.00 guaranteed to exceed 65-B Jensen performance. RCA, GE, etc. Free catalog. Dynaco, Inc., 469-H Jericho Turnpike, Mineola, N.Y.

RECORDS

RARE 78's. State Catalog. Write Record-Lists, P.O. Box 2122, Riverside, California.

"HARD To Get!" records—all speeds, Record Exchange, 2572 Seventh Avenue, Kansas City, Missouri, $3.00.

The Record Collector Journal—comprehensive, valuable data, varied record mart. Introductory six issues —$1.50. Record Research, 131 Hart, Brooklyn 6, N.Y.

COLLECTOR'S ALBUM! "That's All" by Herman Chittison. A definitive LP destined to become the most important piano record of our time. Stereo $5.98. Monophonic $4.98. postpaid. LEEDS/LONDON, Suite 600, 110 West 47th, N.Y.C. 10036.

CASH for Unwanted LP's. Reel, 83 Forsyth St., Monsey, New York.

DISCOUNT Records—All Labels—Free Lists, write Cliff House, Box 42-H, Utica, N.Y.

IMPORTED RECORDS come from the most outstanding manufacturers in the world. Price list available on request. All shipments are made by insured mail, or World-Wide Express, at your option. A service to you, the discriminating listener, who demands the very best. We can supply records of all categories, at prices ranging from 25c to $1.25, shipped anywhere in the world. Write for a price list and an information sheet.

World Wide Record Services, Dept. H, Box 42-H, Utica, N.Y.


BARGAINS Galore! Top Labels—Artists. All Kinds. List Price, $3.00, Minimum Ship. 1.50. BARGAINS, Box 24138, West Lafayette, Mass. 02153.


DETECTIVES

DETECTIVE Opportunities. Experience unnecessary. Write, Waagner, 125 W. 86th, New York 10024.
## HIFI/STEREO REVIEW ADVERTISERS' INDEX

<table>
<thead>
<tr>
<th>READER SERVICE NO.</th>
<th>ADVERTISER</th>
<th>PAGE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 142</td>
<td>Acoustech, Inc.</td>
<td>100</td>
</tr>
<tr>
<td>2 26</td>
<td>Acoustic Research, Inc.</td>
<td>33</td>
</tr>
<tr>
<td>3 26</td>
<td>Airex Radio Corporation</td>
<td>118</td>
</tr>
<tr>
<td>4 26</td>
<td>Allied Impex Corporation</td>
<td>28</td>
</tr>
<tr>
<td>5 24</td>
<td>Altec Lansing Corporation</td>
<td>17</td>
</tr>
<tr>
<td>6 26</td>
<td>Antennas, FM</td>
<td>74, 75</td>
</tr>
<tr>
<td>7 26</td>
<td>Audio Formats, Inc.</td>
<td>95</td>
</tr>
<tr>
<td>8 26</td>
<td>Audio Unlimited, Inc.</td>
<td>136</td>
</tr>
<tr>
<td>9 26</td>
<td>British Industries—Garrard</td>
<td>2</td>
</tr>
<tr>
<td>10 26</td>
<td>Cambridge Records, Inc.</td>
<td>96</td>
</tr>
<tr>
<td>11 26</td>
<td>Carstens, Inc.</td>
<td>132</td>
</tr>
<tr>
<td>12 26</td>
<td>Chancellor Electronics, Inc.</td>
<td>105</td>
</tr>
<tr>
<td>13 26</td>
<td>Citadel Record Club</td>
<td>89</td>
</tr>
<tr>
<td>14 26</td>
<td>Command Records</td>
<td>87</td>
</tr>
<tr>
<td>15 26</td>
<td>Concertone</td>
<td>95</td>
</tr>
<tr>
<td>16 26</td>
<td>Concord Electronics Corporation</td>
<td>5</td>
</tr>
<tr>
<td>17 26</td>
<td>Decca Records</td>
<td>94</td>
</tr>
<tr>
<td>18 26</td>
<td>Deutsche Grammophon</td>
<td>73</td>
</tr>
<tr>
<td>19 26</td>
<td>Dresser, Inc.</td>
<td>130</td>
</tr>
<tr>
<td>20 26</td>
<td>Du Pont</td>
<td>128, 129</td>
</tr>
<tr>
<td>21 26</td>
<td>Electro-Voice, Inc.</td>
<td>137</td>
</tr>
<tr>
<td>22 26</td>
<td>Epaph alf Industries, Perpetual-Filter Division</td>
<td>137</td>
</tr>
<tr>
<td>23 26</td>
<td>Elpa Marketing Industries, Cecil E. Watts Division</td>
<td>36</td>
</tr>
<tr>
<td>24 26</td>
<td>Empire Scientific Corp.</td>
<td>9, 10</td>
</tr>
<tr>
<td>25 26</td>
<td>Epic Records</td>
<td>70</td>
</tr>
<tr>
<td>26 26</td>
<td>Finney Company, The</td>
<td>96, 130</td>
</tr>
<tr>
<td>27 26</td>
<td>Fisher Radio Corporation</td>
<td>23, 25, 27, 29</td>
</tr>
<tr>
<td>28 26</td>
<td>Fuji Photo Optical Products, Inc.</td>
<td>11</td>
</tr>
<tr>
<td>29 26</td>
<td>Harman-Kardon, Inc.</td>
<td>93</td>
</tr>
<tr>
<td>30 26</td>
<td>Heath Company</td>
<td>117, 119, 121, 123, 125, 127</td>
</tr>
<tr>
<td>31 26</td>
<td>Hi-Fi Center</td>
<td>127</td>
</tr>
<tr>
<td>32 26</td>
<td>Honeywell Photographic Products</td>
<td>120</td>
</tr>
<tr>
<td>33 26</td>
<td>JanZen Loudspeakers</td>
<td>102</td>
</tr>
<tr>
<td>34 26</td>
<td>Jensen Manufacturing Company</td>
<td>97</td>
</tr>
<tr>
<td>35 26</td>
<td>Lafayette Radio Electronics</td>
<td>131</td>
</tr>
<tr>
<td>36 26</td>
<td>Lansing Sound, Inc., James B.</td>
<td>68</td>
</tr>
<tr>
<td>37 26</td>
<td>London Records</td>
<td>122</td>
</tr>
<tr>
<td>38 26</td>
<td>Magnecord</td>
<td>124</td>
</tr>
<tr>
<td>39 26</td>
<td>Marantz, Inc.</td>
<td>71</td>
</tr>
<tr>
<td>40 26</td>
<td>Minneapolis-Honeywell (See Honeywell)</td>
<td>134</td>
</tr>
<tr>
<td>41 26</td>
<td>Neshaminy Electric Corp.</td>
<td>102</td>
</tr>
<tr>
<td>42 26</td>
<td>North American Philips Company, Inc.</td>
<td>113</td>
</tr>
<tr>
<td>43 26</td>
<td>Pickering and Company, Inc.</td>
<td>3rd COVER</td>
</tr>
<tr>
<td>44 26</td>
<td>Pure Quadramatic Promotions, Inc.</td>
<td>86</td>
</tr>
<tr>
<td>45 26</td>
<td>Rabson—57th Street, Inc.</td>
<td>136</td>
</tr>
<tr>
<td>46 26</td>
<td>Roberts Electronics, Inc.</td>
<td>134</td>
</tr>
<tr>
<td>47 26</td>
<td>Sansui Electric Company Limited</td>
<td>104</td>
</tr>
<tr>
<td>48 26</td>
<td>Scott, Inc., H. H.</td>
<td>2nd COVER, 1, 37</td>
</tr>
<tr>
<td>49 26</td>
<td>Sherwood Electronic Laboratories, Inc.</td>
<td>30</td>
</tr>
<tr>
<td>50 26</td>
<td>Shure Brothers, Inc.</td>
<td>106</td>
</tr>
<tr>
<td>51 26</td>
<td>Shure Brothers, Inc.</td>
<td>106</td>
</tr>
<tr>
<td>52 26</td>
<td>Sound Reproduction, Inc.</td>
<td>122</td>
</tr>
<tr>
<td>53 26</td>
<td>Superscope, Inc.</td>
<td>41</td>
</tr>
<tr>
<td>54 26</td>
<td>Sutcliffe, Inc.</td>
<td>118</td>
</tr>
<tr>
<td>55 26</td>
<td>Teleflex, Inc.</td>
<td>80</td>
</tr>
<tr>
<td>56 26</td>
<td>Telex Corp.</td>
<td>80</td>
</tr>
<tr>
<td>57 26</td>
<td>United Audio Products</td>
<td>6, 7</td>
</tr>
<tr>
<td>58 26</td>
<td>Universal Record Service</td>
<td>115</td>
</tr>
<tr>
<td>59 26</td>
<td>University Loudspeakers</td>
<td>98</td>
</tr>
<tr>
<td>60 26</td>
<td>Vanguard Records</td>
<td>88</td>
</tr>
<tr>
<td>61 26</td>
<td>Viking of Minneapolis, Inc.</td>
<td>35</td>
</tr>
<tr>
<td>62 26</td>
<td>Webcor, Inc.</td>
<td>16</td>
</tr>
<tr>
<td>63 26</td>
<td>Weston Co., The</td>
<td>130</td>
</tr>
<tr>
<td>64 26</td>
<td>Winegard Co.</td>
<td>24</td>
</tr>
<tr>
<td>65 26</td>
<td>Zeiss, Inc., Carl</td>
<td>22</td>
</tr>
<tr>
<td>66 26</td>
<td>Classified Advertising</td>
<td>140, 141</td>
</tr>
</tbody>
</table>

## HIFI/STEREO REVIEW PRODUCT INDEX

As an additional reader service, we list below, by classifications, the products advertised in this issue. If there is a specific product you are shopping for, look for its listing and turn to the pages indicated for the advertisements of manufacturers supplying that equipment.

### CLASSIFICATION PAGE NUMBERS

<table>
<thead>
<tr>
<th>CLASSIFICATION</th>
<th>PAGE NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessories</td>
<td>36, 106, 130</td>
</tr>
<tr>
<td>Amplification Systems</td>
<td>12, 17, 23, 25, 30, 37, 42, 79, 86, 100, 117, 123, 127</td>
</tr>
<tr>
<td>Antennas, FM</td>
<td>24, 96</td>
</tr>
<tr>
<td>Binoculars</td>
<td>22</td>
</tr>
<tr>
<td>Cameras</td>
<td>11, 120</td>
</tr>
<tr>
<td>Cartridges, Phonograph</td>
<td>21, 3rd Cover</td>
</tr>
<tr>
<td>Headphones</td>
<td>18, 80</td>
</tr>
<tr>
<td>Music Systems</td>
<td>83, 103</td>
</tr>
<tr>
<td>Organ Kits</td>
<td>125</td>
</tr>
<tr>
<td>Pipes, Tobacco</td>
<td>26, 118</td>
</tr>
<tr>
<td>Portable Phonographs</td>
<td>82</td>
</tr>
<tr>
<td>Records</td>
<td>70, 73, 74, 75, 85, 87, 88, 89, 94, 96, 115, 122</td>
</tr>
<tr>
<td>Speakers and Speaker Systems</td>
<td>9, 10, 14, 15, 23, 29, 68, 81, 97, 98, 101, 102, 130, 4th COVER</td>
</tr>
<tr>
<td>Tape, Recording</td>
<td>128, 129, 137</td>
</tr>
<tr>
<td>Tape Recorders and Decks</td>
<td>5, 16, 28, 35, 41, 95, 105, 113, 124, 131, 134</td>
</tr>
<tr>
<td>Tuners and Tuner-Amplifiers</td>
<td>2nd Cover, 1, 12, 17, 23, 27, 42, 71, 77, 93, 108, 117, 119, 123, 127, 131</td>
</tr>
<tr>
<td>Turntables and Changers</td>
<td>2, 6, 7, 13, 33, 36</td>
</tr>
<tr>
<td>TV</td>
<td>121</td>
</tr>
</tbody>
</table>

Printed in U.S.A.

HIFI/STEREO REVIEW
NATURAL SOUND BEGINS WITH PICKERING

Whether you own a record changer, automatic turntable, or a professional type manual turntable, Pickering has engineered the RIGHT V-15 pickup for you. Each of these applications requires a cartridge with specific characteristics and specifications to produce the maximum in NATURAL SOUND that is possible from the record playing equipment and other components in your system.

If it's RECORD CHANGER application, where high output and heavier tracking forces are required try the V-15 AC-1. Most of you, no doubt are tracking lighter on the late model AUTOMATIC TURNTABLES and will use the V-15 AT-1. Or if a professional type MANUAL TURNTABLE is your choice you'll need the even more compliant V-15 AM-1. And if it's unexcelled tracking ability you're seeking, you will demand the ELLIPTICAL STYLUS PICKUP V-15 AME-1.

All four of these pickups are radically different from any other cartridge. You can hear the difference. Pick up a V-15. Note its light weight—only 5 grams. Perfect for low mass tone arm systems. Now, see how Pickering's exclusive "Floating Stylus" and patented replaceable V-Guard assembly protects your record and diamond as it plays.
Which end of this popular hand tool is the handle?

(A) (B)

(Pass this test and you've qualified to build any of these handsome Electro-Voice Prefinished Kits!)

Do it yourself? Why not! We guarantee you'll be proud of what you see and hear when you assemble any E-V prefinished kit.

Instructions are clear, and simple as 1, 2, 3. Every panel is pre-cut to fit exactly. And mitered corners are perfect (we give you nylon dowel pins, just to be sure).

Even easier is the finish. It's done. Every visible panel already has a rich oiled walnut finish before you open the carton. No brushes or steel wool needed—and no "kit look" to any E-V cabinet.

Most important, there's no "kit sound" either—not with genuine Electro-Voice component speakers inside these acoustically correct enclosures. No short cuts—no compromise with sound quality (after all, that's what high fidelity is all about)!

And don't overlook our new equipment console. It matches the KD6A and KD9A exactly. Most popular equipment will fit, and it blends handsomely with any decor.

Don't put off better sound another day. Build it yourself with the new E-V prefinished kit that fits your budget and listening preference. (And if your answer to our little test above was (B), ask your E-V dealer to help you choose one of our factory-assembled speaker systems. He'll understand.)

ELECTRO-VOICE, INC.
Dept. 1244F, Buchanan, Michigan 49107

CIRCLE NO. 21 ON READER SERVICE CARD