

The Magazine for Music Listeners • November • 60 cents

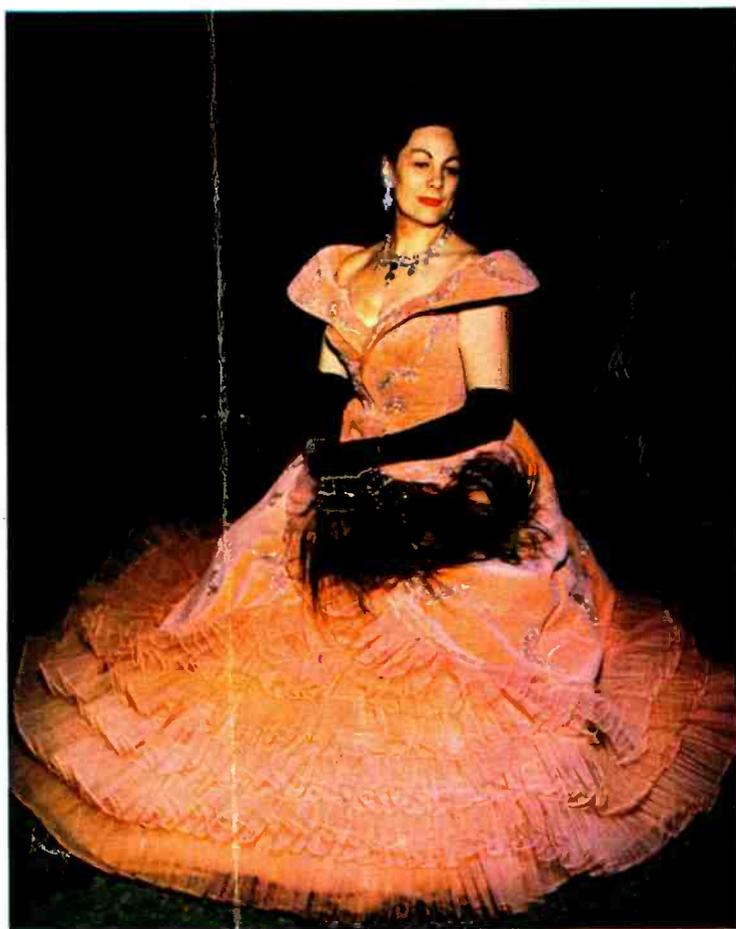
High Fidelity

The Natural History of the Orchestra

by Norman Pickering

Going Stereo

by Herman Burstein



As Violetta in *La traviata*

RENATA TEBALDI *Portrait of a Prima Donna*

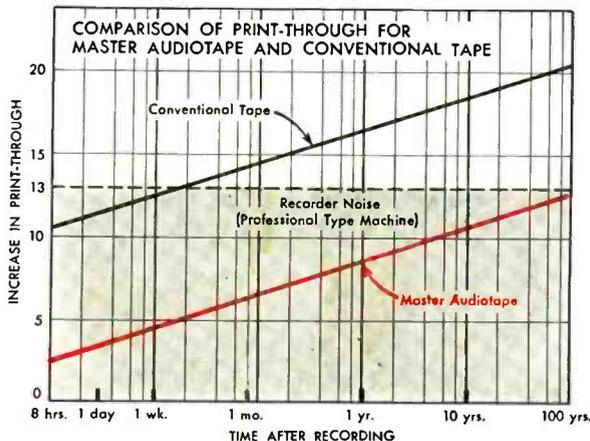
by Francis Robinson

Master Low Print-Through audiotape

The **FIRST** and **FINEST** low-print-tape...
Cuts "magnetic echo" by 8 db

What Is Print-Through?

Print-Through is the magnetic "echo" effect induced in adjacent layers of tape by any recorded signal. It continually increases with time while the recorded tape is in storage. To keep print-through from being too objectionable, conscientious recordists have heretofore had to lower recording levels as much as 6 to 8 db, with reduced signal-to-noise ratio and sacrifice in tone quality.



0 = 63 db below 3% distortion at 1 kc, peak bias

How Is It Eliminated?

In Master Low Print-Through Audiotape, print-through has been reduced 8 db, by the use of specially developed magnetic oxides and special processing techniques — *without changing any other performance characteristics*. The curves at the left show the remarkable improvement obtained. Since print-through of Master Low Print-Through Audiotape remains well *below* the machine noise, it is "eliminated" for even the most critical ear.



Master Low Print-Through Audiotape on 1 1/2-mil cellulose acetate



Master Low Print-Through Audiotape on 1 1/2-mil "MYLAR" polyester film

Thoroughly **PROVED** in service,
and now available in **AMPLE QUANTITY!**

Master Low Print-Through Audiotape has proved itself in over a year of actual service. Thousands of reels have been used by manufacturers of phonograph records and pre-recorded tapes and other top professional users. It has been in regular production since May, 1957, and is now available in ample quantity through dealers everywhere.

Laboratory studies indicate that stored Master Audiotape will take *more than 100 years* to reach the same print-through level that mars ordinary tape in one week! With an 8 db reduction in print-through, you can use higher recording levels, get better signal-to-noise ratio, and still have decades of freedom from harmful print-through effects. For a new high in hi-fi and new permanence for your priceless recordings, ask your dealer for Master Low Print-Through Audiotape. Available in 1200 and 2500 foot lengths in *two types* — on 1 1/2-mil acetate and on 1 1/2-mil Mylar*.

*DuPont Trade Mark

audiotape
TRADE MARK

it speaks for itself

AUDIO DEVICES, INC., 444 Madison Ave., New York 22, N. Y.

In Hollywood: 840 N. Fairfax Ave.
In Chicago: 5428 Milwaukee Ave.
Export Dept.: 13 East 40th St., N. Y. 16, N. Y.
Cables "ARLAB"



NEW Jensen DUAX^{*} HIGH FIDELITY LOUDSPEAKERS

You'll spend less for more performance
... get traditional Jensen quality!

Making the utmost of the hi-fi possibilities of two coordinated cones driven by one voice coil, Jensen's new DUAX speakers bring you a lot more performance at a lot less than you'd expect to pay. No one makes a better speaker at anywhere near the price.

Both acoustic elements operate together up to a "mechanical cross-over" at 4000 cps; above this the small cone operates with special effectiveness. Frequency range, 40-13,000 cps, with low end enclosure dependent, but working fine just about anywhere you put it. One pound new high efficiency DP-Alnico-5 magnet. Twelve inch DX-120, net \$25.50; fifteen inch DX-150, only \$35.50.

Free condensed Catalog 165-B tells about the complete new Jensen line. Write for it now.

^{*}T. M. Reg.



KTX-2 "STEP-UP" KIT

Start with a DUAX, up-grade later to a true 2-way system with compression horn tweeter for 2000-15,000 cps. Easy to add, costs only \$32.50 net.

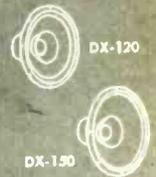
Jensen

MANUFACTURING COMPANY
6601 South Laramie Ave., Chicago 38, Illinois

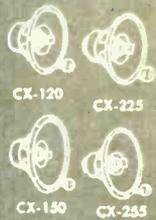
Division of The Muter Co. In Canada: J. R. Longstaffe Co., Ltd., Toronto
In Mexico: Radios Y Television, S.A., Mexico D.F.



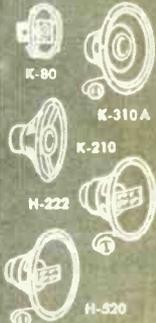
UNAX^{*}
SINGLE ELEMENT



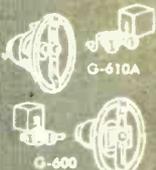
DUAX^{*}
2-ELEMENT SYSTEMS



COAXIAL
3-ELEMENT SYSTEMS



COAXIAL
2-WAY SYSTEMS



TRIAXIAL^{*} and TRIAX^{*}
3-WAY SYSTEMS

THE
WORLD'S
MOST
COMPLETE
HIGH
FIDELITY
LOUDSPEAKER
LINE

^{*}T. M. Reg.



The cover photograph, of Renata Tebaldi costumed for *La Traviata*, was taken at the Metropolitan Opera by Louis Melancon.

ARTICLES

The Natural History of the Orchestra <i>The evolution of the most complex instrument of artistic expression in all civilization.</i>	44	Norman Pickering
Renata Tebaldi — Portrait of a Model Prima Donna <i>Formula for a successful operatic career today: a beautiful voice and an insatiable appetite for work.</i>	48	Francis Robinson
A Look of Youth for a Ripe Old Art <i>Opera in opera's homeland now delights eye as well as ear.</i>	50	William Weaver
Going Stereo <i>How to make the most of the fact that you have two ears.</i>	53	Herman Burstein
The Audacious Oculist <i>A modern physician investigates the charges against the surgeon said to have killed Bach and Handel.</i>	56	Sol London
A Hi-Fi Primer <i>Part III of a basic instructional series.</i>	135	John H. Newitt

REPORTS

Books in Review	31	
Music Makers	61	Roland Gelatt
Record Section <i>Records in Review</i>	65	
The Tape Deck	105	R. D. Darrell
Tested in the Home <i>AMI Mark I radio-phonograph Tech-Master amplifier Ferrograph tape recorder Sonotone HFA-150 amplifier Weathers Barrington speaker system</i>	121	

AUTHORitatively Speaking	4	On the Counter	6
Letters	9	Noted with Interest	21
Audio Forum	139	Trader's Marketplace	160
Professional Directory	162	Advertising Index	165

John M. Conly
Editor

Roland Gelatt
Music Editor

Roy F. Allison
Audio Editor

Miriam D. Manning
Managing Editor

Jean Griffiths
Associate Editor

J. Gordon Holt
Technical Editor

Roy Lindstrom
Art Director

Martha Jane Brewer
Editorial Assistant

Frances A. Newbury
Manager, Book Division

C. G. Burke
R. D. Darrell
James Hinton, Jr.
Robert Charles Marsh
Contributing Editors

Charles Fowler
Publisher

Warren B. Syer
Associate Publisher

Claire N. Eddings
Advertising Sales Manager

Arthur J. Griffin
Circulation Manager

ADVERTISING

Main Office
Claire N. Eddings, The Publishing House
Great Barrington, Mass. Telephone 1300.

New York
Bernard Covit, 280 Madison Ave.
Telephone: MUrray Hill 3-4449 or 3-4450.

Chicago
John R. Rutherford & Associates,
Inc., 230 East Ohio St. Telephone:
Whitehall 4-6715

Los Angeles
Brand & Brand, Inc., 6314 San Vicente
Blvd. Telephone: Webster 8-3971.

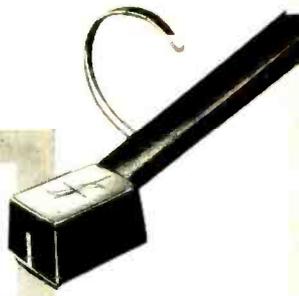
High Fidelity Magazine is published monthly by Audiocom, Inc., at Great Barrington, Mass. Telephone: Great Barrington 1300. Editorial, publication, and circulation offices at: The Publishing House, Great Barrington, Mass. Subscriptions: \$6.00 per year in the United States and Canada. Single copies: 60 cents each. Editorial contributions will be welcomed by the editor. Payment for articles accepted will be arranged prior to publication. Unsolicited manuscripts should be accompanied by return postage. Entered as second-class matter April 27, 1951 at the post office at Great Barrington, Mass., under the act of March 3, 1879. Additional entry at the post office, Pittsfield, Mass., application for additional entry at Bristol, Conn. pending. Member Audit Bureau of Circulation. Copyright © 1957 by Audiocom, Inc. The cover design and contents of High Fidelity Magazine are fully protected by copyrights and must not be reproduced in any manner.

NOVEMBER 1957

Look... only the *FLUXVALVE*

has 100%

IQF*



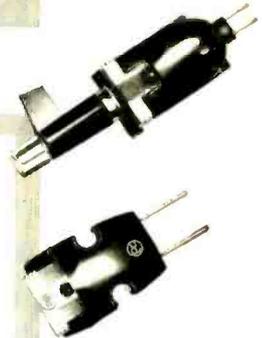
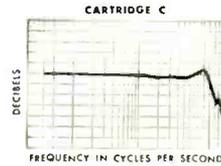
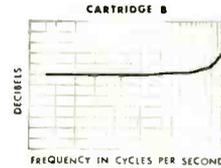
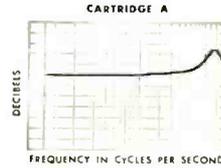
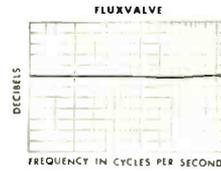
Choice of the *best* phonograph pickup can *only* be resolved by comparison! What is the yardstick? ... How can you tell? ... What do you look for? ... the answer is 100% **Important Quality Features***!

PICKERING has had long experience in the cartridge field, supplying the finest quality products for recording studios, broadcast stations, wired music services, and high fidelity home music systems. As a result of this extensive experience, PICKERING has developed the **FLUXVALVE** ... the *one* cartridge which incorporates *all* of the **Important Quality Features*** so necessary for high fidelity reproduction from records.

Before you choose a cartridge ...

LISTEN AND COMPARE ... demand 100% IQF*!

FREQUENCY RESPONSE CURVES



IMPORTANT QUALITY FEATURES
—so necessary for high fidelity reproduction from records.

Feature	FLUXVALVE	Cartridge A	Cartridge B	Cartridge C
Frequency Response: Flat 20-20,000 cps ± 2 db (See curves on right)	YES 20 Points	NO 0 Points	NO 0 Points	NO 0 Points
Low Tracking Force, 2-4 grams	YES 20 Points	NO 0 Points	YES 20 Points	NO 0 Points
High Output, No Transformer Required	YES 10 Points	NO 0 Points	NO 0 Points	YES 10 Points
Replaceable Styli	YES 10 Points	NO 0 Points	NO 0 Points	YES 10 Points
1/2 Mil Stylus	YES 15 Points	NO 0 Points	NO 0 Points	NO 0 Points
One Cartridge For LP's and 78's	YES 5 Points	NO 0 Points	NO 0 Points	YES 5 Points
Anti-Hum Design	YES 10 Points	YES 10 Points	YES 10 Points	YES 10 Points
Hermetically Sealed	YES 10 Points	NO 0 Points	NO 0 Points	NO 0 Points
TOTAL POINT VALUE	100%	10%	30%	35%

THE FLUXVALVE ... chosen time and again as the *top cartridge* solely on the basis of *listening quality* ... by panels of qualified experts ... tests which have proven that it is *actually* less costly to own a **FLUXVALVE**

The **FLUXVALVE** preserves the quality and prolongs the life of your record since there is complete absence of resonances throughout the audio frequency range.

It may interest you to know that the **FLUXVALVE**, because of its ability to make *precise* and *reproducible* record measurements, is used for calibrating recording channels and record masters.

Make the **IQF*** test today ... listen to your favorite record reproduced with a **FLUXVALVE** ... the gentle pickup.

Series 194D UNIPULSE Pickup Arm with FLUXVALVE Cartridge.

Model 194D with 1 mil diamond "T-Guard" stylus \$59.85
Model 194D with 2.7 mil diamond "T-Guard" stylus \$9.85
Model 194.5D with 1/2 mil diamond "T-Guard" stylus \$5.85

Peaks and/or resonances in the stylus assembly at any recorded frequency will distort; and, damage the record groove. Therefore, any deviation from flat response over the recorded frequency band results in eventual breakdown of the groove wall. Deviations of from 3-6 db distort the recorded material as much as 60-100%.

SERIES 370 SINGLE FLUXVALVE

370-1S	1 mil Sapphire	17.85
370-2S	2.7 mil Sapphire	17.85
370-10	1 mil Diamond	29.85
370-20	2.7 mil Diamond	29.85
370-5D	1/2 mil Diamond	35.85

SERIES 350 TWIN FLUXVALVE*

350-00	1 mil Diamond	36.00
350-500	1/2 mil Diamond	42.00
350-DS	1 mil Diamond / 2.7 mil Sapphire	42.00
350-DD	1 mil Diamond / 2.7 mil Diamond	54.00
350-D.5D	1 mil Diamond / 1/2 mil Diamond	60.00

SERIES 3500 "T-Guard" STYLI**

S-3510	1 mil Sapphire	6.00
S-3527	2.7 mil Sapphire	6.00
D-3510	1 mil Diamond	18.00
D-3527	2.7 mil Diamond	18.00
D-3505	1/2 mil Diamond	24.00

*Available in many other combinations of stylus. **Other stylus radii available on special order.



"For those who can hear the difference" FINE QUALITY HIGH FIDELITY PRODUCTS BY
PICKERING & COMPANY, INC., Oceanside, N. Y.

SOUND

Craftsmanship

In a world of mass production and competition by price there is, fortunately, still room for the individually assembled craftsman-made product. In the field of sound reproduction, Vitavox loudspeakers are renowned for just these characteristics and are prized by the purchaser who places quality of performance and construction above other considerations. The DU120 Duplex Coaxial Full Range Loudspeaker is a fine example of modern audio craftsmanship.

Made in
England by
VITAVOX
LIMITED
London, N.W.9



WRITE TODAY
for this fully descriptive brochure



from the sole agents:

IN THE
UNITED STATES

ERCONA CORPORATION
551 FIFTH AVENUE
NEW YORK, 17, N.Y.

IN CANADA

THE ASTRAL ELECTRIC CO. LTD.
44 DANFORTH ROAD
TORONTO, 13

AUTHORitatively Speaking

Norman Pickering, whose "Natural History of the Orchestra" leads this issue's contents, is well known to all audio enthusiasts, by virtue of his having devised — ten years ago — one of the first two high fidelity magnetic pickup cartridges to be offered the American phonophile. There is more than that, however, to know about Mr. Pickering, who is a sort of twentieth-century version of the eighteenth century's Universal Man. Born into a Connecticut clan of engineers, he entered perforce the family profession, despite a predilection for music that had started him playing the violin at seven. However, upon graduation from engineering school, he applied for a scholarship at Juilliard, got it, and, when he had finished his course, was hired almost at once as first horn of the Indianapolis Symphony. On the side he set up a small recording studio in Indianapolis. After three years he was lured away from horn-playing by G. C. Conn, Ltd., the instrument makers, to do research on wind instruments. The first reputable American bassoon is largely of his design. During the war he worked for the Sperry Gyroscope Company, and invented the original Pickering pickup, simply to play his own record collection. The company that bears his name he founded after the war. He has no connection with it now, having sold his interest last year to start another firm, Charles Denning, Ltd., which makes electro-magnetic timing devices. In his spare time he sails, flies, conducts the Huntington (Long Island) Symphony Orchestra, takes photographs, and plays viola or horn in chamber groups. He has, with his own hands, made two violins and ten violas.

Francis Robinson, who spent some pleasant hours at our behest interviewing Renata Tebaldi (see page 48), is publicity director of the Metropolitan Opera. He came to this position the hard way, as a full-time professional theatrical press operative. A Kentuckian with A.B. and M.A. degrees from Vanderbilt University, he was writing on the Nashville *Banner* when he was induced to try his hand at tour direction — preparing the route for road companies — for the Playwrights' Company and Cornelia Otis Skinner. He has performed this essential function for many of the theater's brightest stars, most notably Katherine Cornell. In one year (1948) he crossed the continent *six* times, stop by stop, re-creating cities for roving drama. His clients read like a Who's Who of the American theater. He came to the Met as tour director, became assistant manager in 1952, and publicity director in 1954. He has long been a record collector, and has just written and assembled a book, *Caruso: His Life in Pictures*, to be published soon.

Herman Burstein, our guide to "Going Stereo," (page 53), is no engineer, no technician. His bachelor's degree is in journalism, his doctorate in economics. About nine years ago, as he tells it, he rose in wrathful dissatisfaction with a commercial radio-TV-phonograph, and decided to learn the why and wherefore of high fidelity reproduction. He did. Now he is an authority, with thirty published articles and a technical handbook to prove it.

"It could hardly be bettered...there are passages where Horenstein gives us the spirit of the music more convincingly than Furtwangler, Karajan, Toscanini or Kleiber"—THE LONDON TIMES



AS A DEMONSTRATION

You may obtain *without charge*
this two-record album of
Music-Appreciation Records

IF YOU AGREE TO BUY ONLY TWO RECORDINGS
DURING THE NEXT YEAR

Beethoven's NINTH SYMPHONY "The Choral"

"THE GREATEST THING THAT HAS HAPPENED FOR MUSIC-LOVERS SINCE THE INTRODUCTION OF LONG-PLAYING RECORDS"
—DEEMS TAYLOR

THE PERFORMANCE RECORD IS BY THE PRO MUSICA SYMPHONY ORCHESTRA OF VIENNA, WITH THE SINGVEREIN DER GESELLSCHAFT DER MUSIKFREUNDE JASCHA HORENSTEIN, CONDUCTOR
THE ANALYSIS RECORD IS BY THOMAS SCHERMAN

A TRIAL SUBSCRIPTION

will show that you enjoy music far more when you know *what to listen for*

A DOUBLE-DISC MUSIC-APPRECIATION recording is made available—for subscribers only—every month. One of the records is a twelve-inch 33 $\frac{1}{3}$ R.P.M. recording of a great work of music, played without interruption by an outstanding orchestra or soloist. This is accompanied (but only if the subscriber wants it) by another long-playing record containing lucid commentary about the work, and filled with musical illustrations performed by soloist or orchestra. This latter record makes clear "what to listen for" in order to enjoy the music fully.

The two-record performance and analysis of Beethoven's *Ninth Symphony* announced here were recently distributed to subscribers. Because they make an unusually exciting introduction to the Music-Appreciation Records idea, we will be happy to send them to you, *without charge*, if you agree to order two other Music-

APPRECIATION selections during the next twelve months, from at least fifteen that will be made available. You will receive each month a descriptive announcement of the next work to be offered. *You take only*

those you want—no others! You may cancel any time after buying two selections. The regular price for each set of paired records is \$3.90 (plus a small mailing and handling charge).

PLEASE RETURN ONLY IF YOU HAVE A 33 $\frac{1}{3}$ R.P.M. RECORD PLAYER

MUSIC-APPRECIATION RECORDS R10-11
c/o Book-of-the-Month Club, Inc.
345 Hudson Street, New York 14, N. Y.

Please send me at once the 12-inch 33 $\frac{1}{3}$ R.P.M. Demonstration Record of Beethoven's *Ninth Symphony* together with its Analysis Record, without charge, and enroll me in a Trial Subscription to MUSIC-APPRECIATION RECORDS. I may return the recording within 10 days and be under no further obligation. Otherwise, on this special offer, I need buy only two MUSIC-APPRECIATION selections during the next year, and I may cancel my subscription any time thereafter.

Mr. }
Mrs. }
Miss } (PLEASE PRINT)

ADDRESS.....

CITY.....ZONE.....

STATE.....

Record prices are the same in Canada, and the Club ships to Canadian members, without any charge for duty, through Book-of-the-Month Club of Canada, Ltd.

MAR 95

the
sum
of
all
its
parts...

silence



REK-O-KUT Rondine Turntable

REK-O-KUT HIGH-FIDELITY TURNTABLES—TURNTABLE ARMS
Dept. HF 38-19 109th St., CORONA 68, N. Y.

Custom-crafted motors feature wear-resistant bearings, electronically-balanced rotors.

Motor pulley machined with motor in operation—insures permanently smooth power transmission.

Special neoprene tire on idler wheel provides rumble-free traction and durability.

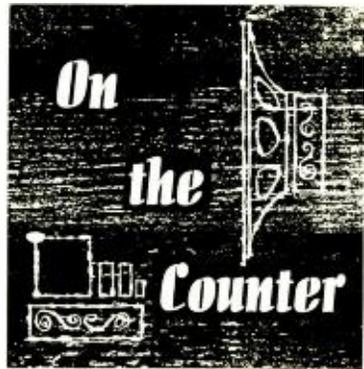
Motors and drives checked under operating conditions—insuring lifelong unerring performance.

Self-lubricating Spiral-Grooved turntable shaft, exclusive with Rek-O-Kut, provides oil-cushioned spin on chrome-steel ball bearing.

Cast aluminum turntable with resonant-inhibiting properties... machined to aircraft tolerances.

Prices from \$59.95

Write for
Catalog and
FREE STROBE DISC



The Monte Carlo is Paul Weathers' latest **SPEAKER SYSTEM**. It uses two 12-inch woofers and four 3-inch tweeters. Impedance 4 ohms; power handling capacity, 30 watts continuous; frequency range 25 to 20,000 cycles; size 36¹/₂ by 33¹/₂ by 14¹/₂ inches. Price not stated.

The new Pickering **370 CARTRIDGE** is a single Fluxvalve measuring only 28 by 28 by 1 inch. Response is stated to be flat from 10 to 30,000 cycles. It will track at from 2 to 6 grams; costs \$35.85 with 1/2-mil diamond.

An announcement of **REDUCED PRICES** was received from Pickering, applying to its cartridges, but the new prices were not given.

A new **TUNER**, the model 403B, has been added to the Stromberg-Carlson line. FM sensitivity is listed at 3μv for 20 db of quieting. Two controls only; tuning and FM-AM selector. Log scale on dial. Suggested retail price: \$105 with cabinet.

The latest Newark Electric **CATALOGUE** is No. 68. It's free.

The American Microphone division of Elgin watch has a **MICROPHONE** said to be designed specially for tape work. The ceramic model is listed at \$11; the dynamic one at \$17.85.

The latest Gray **TONE ARM** uses two sealed viscous-damped pivots for vertical as well as horizontal movement.

Bell's new FM-AM model 2520 **TUNER** features defeatable AFC on FM; Armstrong circuitry; 2.0 μv sensitivity for 20 db of quieting; a slim silhouette—4 inches high; and a price of only \$95.

The V-M Corporation enters the **RADIO-PHONOGRAPH** field for the first time with its Model 568, which features FM-AM radio, four-speed changer, ceramic cartridge, 12-inch woofer, 8-inch midrange unit, and a

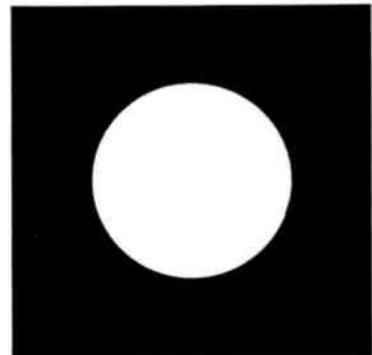
Continued on page 8



THE NEW TRUSONIC EIGHT-INCH SPEAKER

8 inches big!

8 inches small!



Not an acoustical illusion, this new full range speaker has big-speaker response designed into a rugged, compact unit. It establishes a new standard for clarity, power-handling capability, presence and lack of distortion in an eight-inch speaker. Like all TRUSONIC speakers and audio equipment, the new eight-inch 80 FR speaker is produced from the finest materials and engineered for a lifetime of faithful performance. Net Price: \$31.50

Listen... you'll always hear more from:

© STEPHENS TRUSONIC INC.
8538 Warner Dr., Culver City, Calif., Cable Address: "MORHANEX" Export Address: 458 Broadway, New York 13, N.Y.

ALLIED'S OWN knight® HI-FI COMPONENTS

MONEY-SAVING HI-FI • COMPARABLE TO THE FINEST



- ★ Advanced Design, Performance and Styling
- ★ Outstanding For Superior Musical Quality
- ★ You Get the Very Finest For Less
- ★ Each Unit Guaranteed For One Full Year



EASY TERMS AVAILABLE



Model KN-515 \$64.50
only \$6.45 down

NEW knight "Bantam" 15-Watt Hi-Fi Amplifier

Features:

- Rumble and Scratch Filters
- "A-B" Speaker Selector Switch
- Equalized Tape Head Input
- Loudness Switch
- Full Record Equalization
- Damping & Hum Balance Controls
- Latest "Trim-Line" Styling

More for your money in output, features, control versatility and styling. Response, ± 0.5 db, 20 to 20,000 cps. Harmonic distortion, 0.8% at mid-frequencies—never exceeds 1.5% from 30-20,000 cps. Extra-value features: 7 inputs for all possible signal sources; full equalization for all records; separate Bass and Treble tone controls; NARTB-equalized tape head input; automatic overload feature to prevent distortion on all inputs regardless of input signal strength; output impedances 4, 8 and 16 ohms. Beautiful brown "Plexitone" case with white control panel; $3\frac{1}{2} \times 13 \times 10\frac{1}{2}$ " U.L. Approved. Shpg. wt., 18 lbs. **\$64.50**
Model KN-515. Net, F.O.B. Chicago, only.....



NEW knight "Bantam" FM-AM Tuner

Model KN-100

\$74.50

only \$7.45 down

- "Lock-in" FM Tuning
- Tuned RF Stage for FM
- Adjustable AM Loop Antenna
- 10 kc Whistle Filter

Styled to match amplifier above—a standout for value! Remarkable sensitivity: $3\frac{1}{2}$ μ v for 20 db of quieting on FM; 10 μ v for 20 db signal-to-noise ratio on AM. Top-value features: AFC "lock-in" tuning on FM; 10 kc whistle filter on AM; temperature-compensated oscillator; tuned RF stage for FM; inductor di-pole antenna for FM; adjustable loop for AM; 200 kc IF bandwidth on FM. Handsomely styled case, $3\frac{1}{2} \times 11\frac{1}{2} \times 9\frac{1}{4}$ " U.L. Approved, 13 lbs. **\$74.50**
Model KN-100. Net, F.O.B. Chicago, only.....

SELECT FROM A COMPLETE LINE OF MONEY-SAVING knight HI-FI COMPONENTS



15-Watt "Bantam" Hi-Fi Amplifier \$64.50



"Bantam" FM-AM Hi-Fi Tuner \$74.50



30-Watt Deluxe Hi-Fi Amplifier \$94.50



Deluxe FM-AM Hi-Fi Tuner \$99.50



10-Watt "Mini-Fi" Hi-Fi Amplifier \$42.95



32-Watt Basic Hi-Fi Amplifier \$74.50



"Uni-Fi" Tuner-Amplifier \$119.50 (less case)



FM-AM Tuner-Preamplifier \$139.50



Stereo-Monaural Preamplifier \$79.50

FREE!

404-PAGE
1958
ALLIED
CATALOG

Your Buying Guide to the world's largest selection of Hi-Fi components, complete music systems, recorders, Public Address Equipment—as well as Everything in Electronics. Send for your FREE copy today.



See our 1958 Catalog for full details

ALLIED RADIO
America's Hi-Fi Center

ALLIED RADIO, Dept. 49-L7
100 N. Western Ave., Chicago 80, Ill.

Ship the following KNIGHT Hi-Fi Components:

_____ \$_____ enclosed

Send FREE 1958 ALLIED 404-Page Catalog

Name _____

Address _____

City _____ Zone _____ State _____

our
37th
year

ON THE COUNTER

Continued from page 6

pair of 4-inch tweeters. The Model 568 lists at \$400 in most states.

Telectro's model 1960 TAPE RECORDER is a two-speed unit featuring a double low: low weight—15 pounds; low price—\$79.95. It also is very compact ($7\frac{3}{4}$ by 11 by $11\frac{5}{8}$ inches) and simple to operate.

Another 15-pound item is the Acrovox heavy-duty DEGAUSSER. It is designed for professional and home use; will handle up to 10-inch spools of tape. Operates from 110-volt AC lines; costs \$49.95.

A new STEREO TAPE RECORDER is the Sterecorder, manufactured and distributed by Superscope, Inc. It records, as well as plays back, stereophonically; it has two VU meters, is supplied with two microphones: a pair of 12-inch Jim Lansing speakers are available in separate but interlocking enclosures (to make one carrying case for the speakers). Price is \$525 for the recorder; speakers are extra, we believe.

The Dyna Mark III AMPLIFIER KIT is rated to deliver 60 watts continuous with less than 1% IM distortion. Frequency response is ± 0.1 db from 16 to 24,000 cycles at full power. Price is not stated.

Also from Dyna is their PREAMPLIFIER KIT. Features: feedback tone controls with range ± 20 db at 30 cycles and ± 15 db at 15,000 cycles; frequency response ± 0.5 db from 6 to 60,000 cycles; six inputs, of which one can be for extra phone, tape head, or microphone; AB monitor switch; total noise 70 db below level of 10 μ v cartridge. Price not stated.

CBC Electronics has a TURNTABLE PAD, of aerated polyurethane, which has a stroboscope label area.

Webcor's new line of Fonographs and recorders features three stereo TAPE RECORDERS, and three monaural units. The Imperial stereo units, for example, play back stereo tapes; records and plays back monaurally. Uses stacked heads. No reel turnover (plays both directions); 8-watt power amplifier; two preamps; use optional accessory portable amplifier-speaker system for second channel power amplifier; speaker system contains 8-, 6-, and 4-inch speakers. External amplifier jacks; two speeds. Other two stereo models are similar except for less ambitious speaker systems. Prices not given.



Pleasants Protested

SIR:

I should like to take this opportunity to acknowledge Mr. Pleasants' use of my article [Aug.] and to comment upon it.

Mr. Pleasants has read into his excerpt of my article a meaning it was certainly not intended to have. It dealt, specifically, with the percussion section [of an orchestra] and its possibilities in a compositional sense. It was only in such a connection that I advised composers interested in expanding their knowledge of percussion techniques to listen and watch drummers such as Shelly Manne, Max Roach, Art Blakely, etc., so as to get an idea of how a percussionist can move around a set of drums.

I stated that the jazz percussionist plays *within* his organization as opposed to the contemporary composers' concept (with exceptions) of seemingly writing for the percussion section outside the inner fabric of his music. This should not have been construed as a critical comment on the "beat" or "swing" of either kind of music. It was simply a point of reference in highlighting the difference in compositional styles in regard to the percussion section.

Now then, if Mr. Pleasants wishes to use what I have written about the percussion section as a link in his chain of argument about the "beat," I am compelled to disagree completely, in essence, with his entire article.

I do not, as Mr. Pleasants says, "recognize the beat, or pulsation as the distinctive element of jazz"; at least not his version of the "beat" which seems to me to be ambiguous to say the least. As one who has played in the jazz as well as the classical orchestra, I believe the "beat" is not the simple thing that Mr. Pleasants seems to think it is. For me there are three distinct "beats" that move within any jazz organization. A question may

Continued on next page

ALLIED knight-kit HI-FI EQUIPMENT

EASY-TO-BUILD HI-FI EVERYONE CAN AFFORD



- ★ World's Finest Hi-Fi in Kit Form
- ★ Beautiful Custom-Styled Line
- ★ Advanced, Easiest-to-Build Design
- ★ Money-Saving Hi-Fi At Its Best



EASY TERMS AVAILABLE



Model Y-754 **\$39⁹⁵**
Only \$3.99 down

NEW knight-kit Hi-Fi Preamplifier Kit

features:

- Printed Circuit Switches
- 2 Printed Circuit Boards
- Equal, Guar. Within 1/2 db
- DC on Tube Filaments
- Loudness & Level Controls
- Cathode Follower Output
- Latest Custom Styling

Revolutionary hi-fi preamplifier-equalizer at amazing low cost. Features precise equalization guaranteed within 0.5 db of recommended accuracy! Exclusive new printed-circuit switches and 2 printed-circuit wiring boards for easy, error-free assembly; built-in power supply; response, ± 0.5 db, 10-50,000 cps; 8 inputs (including tape head); 16 equalization combinations; separate Bass and Treble controls; separate Level and Loudness controls; Tunable Filter Switch; DC on all tube filaments; separate output to recorder; 2 extra AC outlets. Beautiful custom-styled case, 4 1/4" x 13" x 8". Ready for easy, money-saving assembly. Shpg. wt., 12 1/2 lbs.

Model Y-754. Net, F.O.B. Chicago, only **\$39⁹⁵**

knight-kit 25-Watt Basic Amplifier Kit



Model Y-755 **\$44⁵⁰**
Only \$4.45 down

- Printed-Circuit Wiring Board
- Williamson-Type Circuit
- ± 0.5 db, 10-120,000 cps
- Over 25 Watts Output

Ideal for use with preamp above. Linear-deluxe circuit delivers 25 watts of virtually flawless response. Printed-circuit board for easy assembly; balance control for precise adjustment of output tubes; variable damping control. Response: ± 0.5 db, 10-120,000 cps at 20 watts. Harmonic distortion; 0.15% at 25 watts. Intermodulation: 1.0% at 20 watts. Output impedances: 4, 8, 16 ohms. Chrome-plated chassis, 6 1/4" x 14" x 9". Easy to assemble. Shpg. wt., 25 lbs.

Model Y-755. Net, F.O.B. Chicago, only **\$44⁵⁰**

THERE IS AN EASY-TO-BUILD knight-kit FOR EVERY HI-FI NEED



Deluxe Hi-Fi Preamplifier Kit **\$39⁹⁵**



25-Watt Basic Amplifier Kit **\$44⁵⁰**



30-Watt Hi-Fi Amplifier Kit **\$76⁹⁵**



FM-AM Hi-Fi Tuner Kit **\$49⁹⁵**



18-Watt Hi-Fi Amplifier Kit **\$39⁹⁵**



FM Hi-Fi Tuner Kit **\$38⁹⁵**



20-Watt Complete Amplifier Kit **\$35⁷⁵**



10-Watt Hi-Fi Amplifier Kit **\$23⁵⁰**



2-Way Hi-Fi Speaker Kit **\$49⁹⁵**

FREE!

404-PAGE
1958
ALLIED
CATALOG

Send for this value-packed catalog featuring the world's largest selection of Hi-Fi Kits, components and complete music systems, including Everything in Electronics. Send for your FREE copy today.



See our 1958 Catalog for full details

ALLIED RADIO

America's Hi-Fi Center

ALLIED RADIO CORP., Dept. 12-L7
100 N. Western Ave., Chicago 80, Ill.

Ship the following HI-FI KNIGHT-KITS:

_____ \$ _____ enclosed.

Send FREE 1958 ALLIED 404-Page Catalog

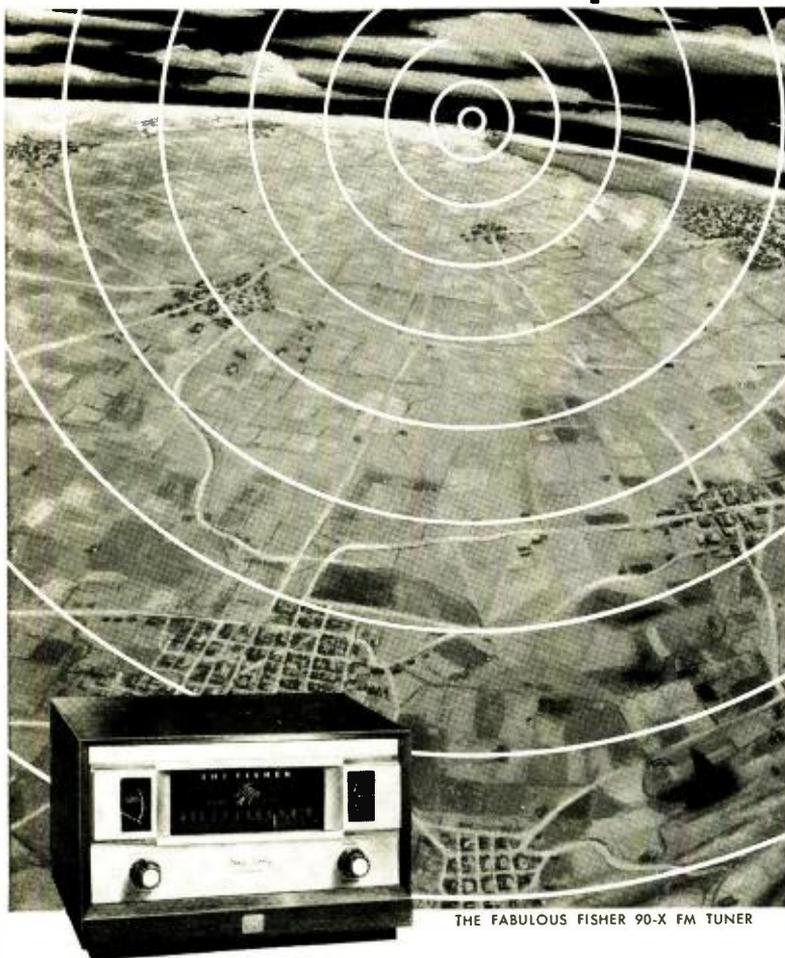
Name _____

Address _____

City _____ Zone _____ State _____

our
57th
year

245-Mile FM Reception!



THE FABULOUS FISHER 90-X FM TUNER

Fred W. Scholl, Jr. of Lancaster, Ohio, reports:

"My FISHER FM-90X Regularly Receives a 245-Mile Signal!"

■ "My 90-X is the most astounding FM tuner I have ever had the pleasure to own or operate, including the best to date. WWJ, Detroit, is our usual station for listening—air line about 245 miles!"

FM reception at distances over 200 miles, terrain permitting, is a *regular occurrence* if you own a FISHER FM-90X. There has never been a tuner like it in radio history. Such performance is no accident, for the key to the unequalled reputation of the FM-90X is the exclusive FISHER Gold Cascade RF amplifier, plus companion circuitry that takes full advantage of the Gold Cascade. Some evidence of the precision-jeweler characteristics of the Gold Cascade's internal construction will be found in the simple fact that we guarantee this tube for *two* years. With its half-microvolt sensitivity, THE FISHER FM-90X has, in one sweep rendered all other FM tuners in its price range obsolete. **Chassis, \$169.50**

Mahogany or Blonde Cabinet, \$17.95

WRITE TODAY FOR COMPLETE SPECIFICATIONS

FISHER RADIO Corporation • 21-25 44th Drive, Long Island City 1, N. Y.

LETTERS

Continued from preceding page

arise about my choice of names for these "beats" but there can be no argument about their existence.

One is a "harmonic beat," not easy for the layman to hear, but vitally important to the improvising musician. This is best illustrated by the classical blues I, IV, I, V, I, pattern, which sets up a "beat" and framework of changes over a lengthy period of time, within which area the "melodic beat" occurs. It also builds form.

A second and much more complicated beat is what I call the "melodic beat" and is set up by the instrumentalist or singer who plays his or her own variation over the "harmonic beat." Listen to some of Louis Armstrong's very early recordings, almost anything by the late Charlie Parker, and choose wisely of Ella Fitzgerald, and you will begin to hear a melodic, rhythmic counterpoint that begins to spell jazz.

The third and most obvious "beat" is the one Mr. Pleasants extracts as the "distinctive element in jazz." This is the steady, or irregularly steady, pulse set up by the rhythm section, i.e., drums, piano, bass, and guitar. As an integral *part* (and I stress the word *part*) of jazz, which of these three "beats" is the most important? I have not the space to elaborate fully, but I do believe the following.

Let any reader visualize his favorite jazz musician (other than a drummer) all by himself with nothing for company but his horn. It is not difficult to imagine that if he were to play for a period of time, say four minutes, one could not fail to recognize his music as jazz, and its sound as particularly American, or rather, unlike the music of other countries.

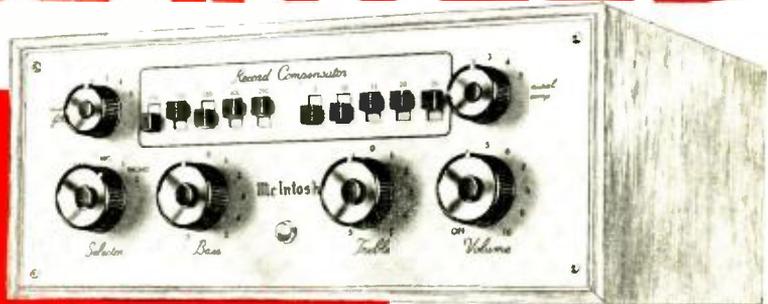
Now, let that same reader pick his own rhythm section and let him likewise, for a four-minute period of time, set up Mr. Pleasants' concept of "the distinctive element of jazz," a swinging rhythmic pulse, or "beat." Think of the result, and then let me quickly assure one and all that this is just a *part* of jazz. Perhaps, if you begin thinking regionally, you may come to the conclusion that this element of jazz is not so "distinctive" after all, but a series of swinging rhythmic patterns that could have emanated from almost any of the countries in the world whose music utilizes a "beat."

Continued on page 12

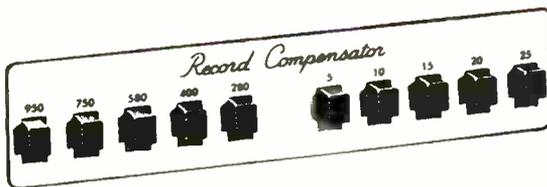
FLEXIBILITY GUARANTEED

McIntosh

C-8 Professional Audio Compensator and Pre-Amplifier



C-8 (Less Cabinet) \$88.50



Record Compensator

Reproduction to satisfy the novice or the most critical listeners is achieved by the more than 500 compensation positions on these unique bass and treble switches. Room acoustics and electrical characteristics are completely controlled only in the flexible C-8.

Rumble Filter



A five position control designed to eliminate the annoying mechanical rumble inherent in turntables and record changers. A narrow band suppression that rejects noise not music.

Aural Compensator



Five fixed positions of balanced volume reduction with equalization for the hearing losses experienced at low volumes. Greatest flexibility for greatest enjoyment.

Here is the only compensator designed to critically balance electrical playback of records plus the flexibility to correct for all listening room acoustics. McIntosh, creators of the world's finest amplifiers and pre amplifiers *guarantees* 1 Flexibility, 2 Specifications, and 3 Craftsmanship. Hear McIntosh today at your favorite dealer.

Send for complete information
or visit your nearest
Franchised McIntosh Dealer.

In Canada manufactured under license by McCurdy Radio Industries, Ltd.
22 Front Street W., Toronto, Canada



HF-11-57

NOVEMBER 1957

11



The "King of Instruments"—an Aeolian-Skinner organ installation.

The sound of the organ is one of the most difficult to reproduce, because of its wide tonal and dynamic range, and because of the large amount of fundamental energy that appears at extreme bass frequencies.

At a recent public demonstration, staged by the Audio League at St. Mark's Church, Mt. Kisco, N. Y., the recorded sound of an Aeolian-Skinner organ (from stereo tape) was instantaneously alternated with that of the "live" instrument. The reproducing equipment selected included four AR-1 speaker systems. Here is some of the press comment on the event:

The Saturday Review (David Hebb)

"Competent listeners, with trained professional ears, were fooled into thinking that the live portions were recorded, and vice versa. . . . The extreme low notes were felt, rather than heard, without any 'loudspeaker' sound. . . ."

AUDIO (Julian D. Hirsch)

"Even where differences were detectable at changeover, it was usually not possible to determine which sound was live and which was recorded, without assistance from the signal lights. . . . facsimile recording and reproduction of the pipe organ in its original environment has been accomplished."

audiocraft

"It was such a negligible difference (between live and recorded sound) that, even when it was discerned, it was impossible to tell whether the organ or the sound system was playing!"

The price of an AR-1 two-way speaker system, including cabinet, is \$185.00 in mahogany or birch. Descriptive literature is available on request.

ACOUSTIC RESEARCH, INC. 24 Thorndike St., Cambridge 41, Mass.

LETTERS

Continued from page 10

Perhaps you caught the suggestion of a complex rhythm from India, or an irregular (to our ears) Japanese pattern, and finally a wildly swinging African "beat." If this then is the case, why call the "beat" distinctive and furthermore, why American?

I think the reason jazz is American is because of what I call the "melodic beat." By way of further clarification, put an instrumentalist from any of the above countries in a situation similar to our American instrumentalists and listen to the result. Try to find something akin to American jazz that their "beat" not only seems to have but does have.

Perhaps we who are proud of jazz and its distinct American quality will have some back-tracking to do if Mr. Pleasants' assumption about the "beat" being "the distinctive element of jazz" is true.

I do not believe this, and I will cling to my comment about the American symphony (the word symphony not to be used in its classical sense). I said the "swing" that will have to pervade it will derive from *all* the materials of music, as opposed to Mr. Pleasants' comment at the conclusion of his article that American music will be sustained by the pulsating presence of the "beat."

Harold Farberman
Boston, Mass.

P. S. For Mr. Pleasants' edification he has my word for it that members of the Boston Symphony Orchestra *do* beat time with their feet.

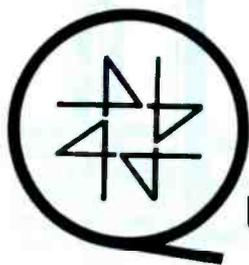
Teen-age Stereophobe

SIR:

This letter is intended as a feeble protest to a world which seems obsessed with the idea that Mozart sounds better through two fifteen-inch holes in the wall, rather than one. . . .

Having heard a good many stereo systems, I feel that the following remarks apply (perhaps unequally) to ALL of them: Stereo is fine for accurate reproduction of trains, planes, and games of Ping-pong. . . . But step into the realm of serious music, and I see stereo in an entirely different light. No matter where I sit, or how hard I strain my overworked imagination, the sound of the same instrument or voice

Continued on page 14

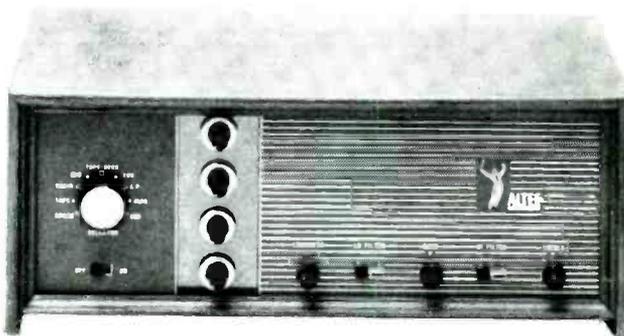


THE NEW ALTEC

Quartet **344A**

20-watt power amplifier and preamplifier

INVITES COMPARISON



The new ALTEC "Quartet" (named for its unique 4 independent volume controls) is the only complete amplifier with all of the control features found in the best separate preamplifiers plus a full 20 watts of power.

Compare these outstanding features of the "Quartet":

Six Inputs—3 lo-level for magnetic phono pickup, microphone, and tape deck...3 hi-level for tuner, tape reproducer, and spare.

Four Major Source Volume Controls allow you to pre-set the level of any major program material and change from input to input or turn the power on and off without the necessity for readjustment. D. C. powered program indicator lights for completely hum-free operation.

Guaranteed Performance Specifications: 20-22,000 cps range, 20 watts (40 peak), 138 db gain, 32 db bass control range, 35 db treble tone control range.

Four Position loudness compensation control... continuously variable wide range bass and treble controls...*Three Position* independent rumble and scratch filters—all designed to give complete flexibility

ity to suit reproduction quality of individual tastes and material.

Tape Recording Output—provided so material from any input may be selected for recording.

Equalization—4 phono compensation curves: European, LP, RIAA, and 78 rpm. 1 tape deck compensation.

Quality Construction—an example of the quality built into the "Quartet" is its "professional" printed circuit. Unlike common printed circuits, all components are attached through riveted eyelets making it possible to replace components without destroying the circuit.

Extraordinarily Sleek Design: Dimensions (less cabinet)—4-5/8" H, 13-3/4" W, 7-1/8" D... (with cabinet)—5-15/16" H, 14-5/8" W, 8-13/16" D.

Price: (less cabinet) **\$106⁰⁰** Walnut, blond, or mahogany solid hardwood cabinet, \$18.00.

Write for free catalogue
ALTEC LANSING CORPORATION H-11
1515 S. Manchester Ave., Anaheim, Calif.
161 Sixth Ave., New York, N. Y.



12-4

Need a better AMPLIFIER?

Choose from the **STROMBERG-CARLSON** matched line of components for perfection in the future, too

The "Custom Four Hundred"[®] line of audio components is equally attractive to the audiophile who sets up a complete system in one operation, and the man who builds to eventual perfection over the years.

Each component will stand on its own feet in any comparison of performance and price. And *all* our components are designed, matched to perfection and produced in the same laboratory and factory. No matter where you start, or what you add later, there's a "Custom Four Hundred" system that will operate in unbeatable harmony—for your ear and for your purse!

*"There is nothing finer than a
Stromberg-Carlson"[®]*



... or write for your nearest dealer's name and free literature.



AE-426 PREAMPLIFIER • Highest quality, self-powered audio control center. Continuously variable record equalization, loudness compensation, rumble suppression, tonal balance. Frequency response 10 to 100,000 cps. ± 1 db. Tape output and input jacks. AC operated with DC on tube filaments. 3" x 14" x 8". **\$95.00**



AP-428 POWER AMPLIFIER • Includes famous Stromberg-Carlson Duo-Power Circuit. Peak power-handling capacity, 50 watts. Frequency response, 10 to 32,000 cps. Noise level better than 80 db. below rated output. Distortion, well under 1% at 25 watts. 4, 8, 16, 150 and 600 ohms and 8 VU output taps for tape recorder. 8 1/4" x 16" x 7". **\$95.00**



AR-411 AMPLIFIER • A budget-priced gem—probably the best first step in converting from ordinary record-playing to Hi-Fi. 12 watts at less than 1% total harmonic distortion; peak, to 15 watts. Frequency response, 15 to 25,000 cps. Magnetic phono, radio tuner, tape and auxiliary inputs. 3 1/2" x 13" x 7". **\$65.00**

Prices stated slightly higher in the West.



STROMBERG-CARLSON
A DIVISION OF GENERAL DYNAMICS CORPORATION
1719c UNIVERSITY AVENUE • ROCHESTER 3, N. Y.



LETTERS

Continued from page 12

coming from two different locations (which no one can deny is the case) leaves me totally unnerved. Beethoven didn't want his sonatas to be smeared all over my living room.

Then why (in my opinion) has the public so readily accepted stereo sound? *Promotion*—both in the form of exaggerated advertising by the manufacturers, and in the form of eloquent spiels by overenthusiastic salesmen who ruthlessly shower the poor customer with superlative upon superlative.

In anticipation of your two probable reactions to this letter I append the following remarks:

(a) No, I am not rationalizing because I don't own a stereo outfit. I am firmly convinced of the superiority of monaural tape over disc, and I could convert my deck to stereo tomorrow with a minimum of expense.

(b) No, I am not an old fogey who is trying his best to hold back the march of civilization. On the contrary, I am seventeen years old, consider myself thoroughly modern, and plan to study electronic engineering. I just hate to see the three B's massacred. (Many of my friends who dig Bach and Dohnanyi as well as bias and decibels, and of whom some are adults, agree with me wholeheartedly.)

Question: Am I a victim of defective hearing (unidirectional ears, perhaps?) or are there others who agree with me?

Ted Illavac, Jr.
Oakmont, Pa.

Rebuke to Reviewer

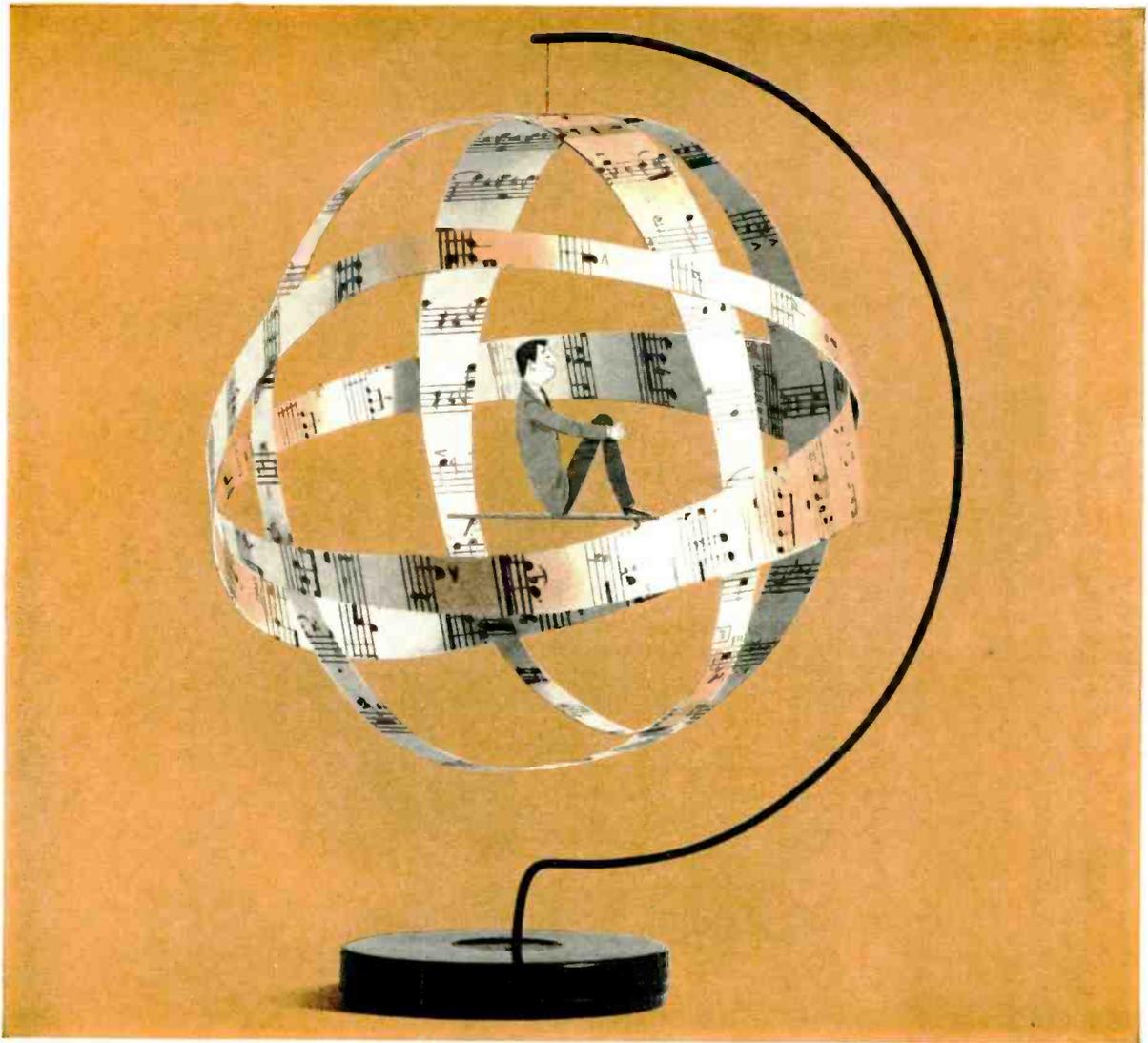
SIR:

In a recent issue of *HIGH FIDELITY* [Apr.] appeared a very uncomplimentary review of a Westminster recording—"Hi-Fi in The Making" with Sir Adrian Boult conducting Britten's *Young Person's Guide to the Orchestra*.

The reviewer, of course, is entitled to his own opinion of the recording, but I cannot agree with him in his knuckle rapping of an excellent recording company. . . . Frankly, I purchased the record *after* reading the review and have enjoyed it immensely. Not only is it novel and unusual entertainment, but very educational for old

Continued on page 16

HIGH FIDELITY MAGAZINE



Bell High Fidelity puts you in a world of your own!

As if ordinary high fidelity isn't good enough, here comes Bell with new Stereophonic Sound that is sure to make your hi-fi system the talk of the neighborhood.

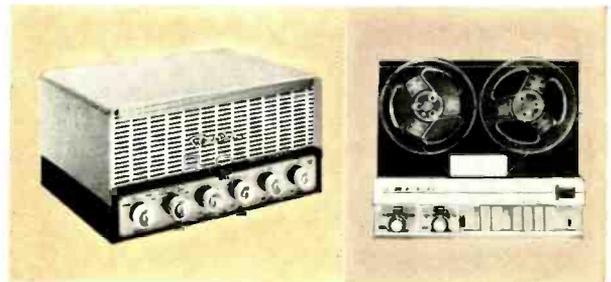
It doesn't shatter glass; but it will provide you with a new kind of thrill every time you listen to music.

With conventional monaural sound (Bell has that, too) music goes in one ear and out the other. With Bell Stereophonic, music goes in both ears simultaneously. The resulting sound will send you out of this world!

Even your wife will beg you to bring your high fidelity system up from the basement. All will be forgiven when she hears how wonderful the music sounds when played through your Bell 2 channel Stereophonic Amplifier. She may even let you keep the entire system in the living room where you can build it into a cabinet or bookshelf.

Better ask your Bell High Fidelity dealer for a demonstration soon. For literature and name of your nearest Bell dealer, write:

*Bell Sound Systems, Inc. (A Subsidiary of Thompson Products, Inc.)
555 Marion Road, Columbus 7, Ohio*



How does Bell Stereo work? Music that originates from the Bell Tape Transport (with Stereophonic Tapes, naturally,) goes through the Bell 2-channel amplifier and comes out through 2 speakers. Sounds easy? Sounds wonderful, too. Hear it today!

Bell 'World Renowned For the Best in Sound'

BEST BUY IN HI-FI



20PG 20 Watt High Fidelity Amplifier

A deluxe amplifier with new styling and exceptional performance . . . the best buy in the medium priced field. The new 20PG has greater flexibility of controls, new advanced circuitry and the highest quality components. Features: Feedback throughout, separate turnover and roll-off record compensators, new loudness control, wide range bass and treble controls, rumble and scratch filters and six inputs including tape head. The 20PG is designed for the audiophile who wants all the features and flexibility of the finest amplifiers built and knows that 20 watts is all the power he can utilize in his home.

SPECIFICATIONS

Frequency response: ± 0.5 DB, 20 to 30,000 CPS, at 1 watt.
Power response: ± 1. DB, 20 to 20,000 CPS, at 20 watts.
Distortion: 1% harmonic and 2% intermodulation at 20 watts.
Feedback: 70 DB, plus throughout; 15 DB, around output transformer.
Outputs: 4, 8 and 16 ohms plus high impedance for tape recorder.
Sensitivity: Aux.; tuner; tape amp. channels—.4 volts. Phono channel—.008 volts at 20 watt output.
Hum and Noise: 75 DB, below rated output on high level inputs.
Tubes: 3-12AX7, 2-6L6GB and 5U4GB.
Cabinet: In charcoal gray with brushed brass control plate.
 13" W x 5" H x 9" D. Weight 21 lbs.

Net Price \$89.50

15PG8 15 Watt High Fidelity Amplifier. The all new deluxe 15PG8 has less power but the same advanced circuitry, the highest quality components and greater flexibility of controls. Features feedback throughout, record compensators, new loudness control, wide range bass and treble controls, rumble and scratch filters, and six inputs including tape head. Frequency Response: ± 0.5 DB, 20 to 20,000 CPS. Distortion: 2% harmonic and 3% intermodulation at 15 watts. In charcoal gray and brass.

Net Price 69.50

10PG8 10 Watt High Fidelity Amplifier. Here is new styling with a full set of controls providing exceptional flexibility in a moderately priced amplifier. The simple efficient flat compact design features modern feedback circuitry, record compensator, loudness control, wide range bass and treble controls, rumble and scratch filters, and five inputs, including one for tape head. Frequency Response: ± 1 DB, 20 to 20,000 CPS. Distortion: 2% harmonic and 3% intermodulation at 10 watts at 1,000 CPS.

Net Price 55.00

Ask your High Fidelity Dealer to demonstrate the New PG Series or write for complete details and where to buy.

Grommes Div. of Precision Electronics, Inc.
 Dept. H-11, 9101 King Street, Franklin Park, Ill.

- Send Free Hi-Fi Equipment Brochure.
- Send details on "Little Genie" kits.

Name
 Street
 City Zone State

Exciting News for Kit Builders!

Grommes
Little Genie KITS

"So simple . . . it's like magic!"

New exclusive method

- LAYER-BUILT
- COLOR-GUIDE

Write for details before you build another kit!

LETTERS

Continued from page 14

and young alike—not to be considered as a claim of "see how we strive for our fi." Westminster needs no such demonstrations, the product speaks for itself with very few exceptions and everyone is entitled to a mistake now and then.

Incidentally, I fail to recall any similar tirades after Columbia Records released *The Birth of a Performance*, a two record album costing twice as much. I have no fault to find with Columbia's effort along these lines as I also have the album. But if one company is to be belittled then others doing the same thing should receive like treatment. Regardless, it wouldn't hurt for similar records to be placed on the market.

Other companies could take a tip from Columbia on its interview with Bruno Walter and use such records as a bonus for purchasing a certain number of records involving other great conductors. Columbia should follow through with Ormandy, while others could use their outstanding performers, eliciting their views on musical subjects. RCA Victor certainly missed the boat with the world's greatest conductor, unless the Maestro flatly refused as is very likely.

Henry S. Gordon
 Pampa, Tex.

As it happens, I know and like Kurt List, Westminster's musical director, who furnishes ninety per cent of the talk on the "Making" side of this record. Indeed, part of my dislike of the disc owes to my feeling that it shows Mr. List in a bad light, in apparent discourtesies to Sir Adrian. A recording director ought not to imply, in the presence of an orchestra, that its conductor doesn't know if the kettledrums are in tune. Further, there is a difference between "Hi-Fi in the Making" and Columbia's Bruno Walter record. The latter shows us how a great conductor shapes up a musical performance, the former merely how a recording crew works for a good "take." I submit that most people could imagine this for themselves (if they care to) quite accurately, and that it is somehow unfair to make them pay for it if they want the excellent *Young Person's Guide to the Orchestra* that adorns the obverse of the disc. With respect to Toscanini rehearsals: Walter Toscanini has many hours of them on transcription discs, and it is quite possible that selections may be issued some day by RCA Victor. —J.M.C.



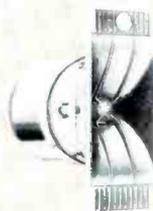
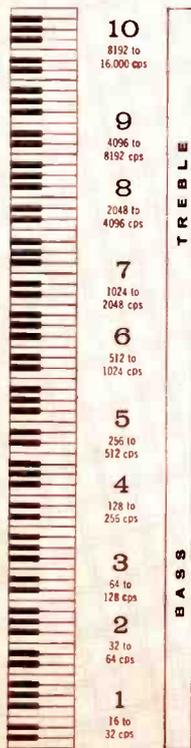
Electro-Voice®

**BUILDS
"TEMPLES OF TONE"
IN YOUR HOME**



Patrician 600, Mahogany, Net \$819.00

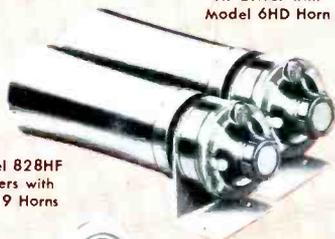
Octaves
and Frequencies



Model T350
VHF Driver



Model T25A
HF Driver with
Model 6HD Horn



Model 828HF
Drivers with
A8419 Horns



Model 18WK
LF Driver

These are the Tasks Performed by Specialized Driver Units in the Famous PATRICIAN

Very High Section. This octave adds the final touch to the illusion of musical reality. Its upper harmonics, tingling and effervescent, impart delightful brilliance to music. The range above 3,500 cps, extending well beyond the range of hearing, is reproduced by the E-V Model T350 Super-Sonax very-high-frequency driver. Through the Model T350, the remaining octaves of the upper audible register are completely accomplished with no measurable distortion.

Treble Section. At usual listening levels the ear is most sensitive in this portion of the audible spectrum. Augmenting the power in these octaves enhances the magical illusion of "presence." You are there. From 600 to 3,500 cps or the next 2½ octaves, the Electro-Voice Model T25A treble driver exhausts into a 600-cycle Model 6HD diffraction horn. This diffraction horn is of the latest design and employs the principles of optical diffraction to disperse high frequencies uniformly. Thus the important "presence" range is assured of complete and proper transmission by this specialized driving unit. Other frequencies, not a part of this range, are completely excluded from this driver.

Mid-Bass Section. Because the ear is fairly sensitive in this range, almost all reproducers handle it with facility. A separate horn employed as an indirect radiator with its two complimentary Model 828HF driver units takes over for only the next 1½ octave range to 600 cps. Because no metal horn presently developed satisfactorily reproduces down to 200 cps, the horn load for the intermediate bass drivers is fabricated of wood and phenolic tubes. These are a part of the overall interior assembly.

Low-Bass Section. Only the finest high-fidelity systems reproduce these lowest tones, down to the threshold of feeling in the first octave. Except for the organ, most serious music is written for the second octave and above. The Patrician IV utilizes an 18-in., low-frequency driver, Model 18WK. When the Patrician is placed in a corner, the entire room becomes a part of the bass horn, allowing the large wave lengths of the second and the upper part of the first audible octave to be formed properly.

Crossover Network. To allocate the various portions of the spectral energy to the respective driver units, the Model X2635 crossover network divides the amplifier power into four separate portions, and eliminates upper harmonic and intermodulation distortion from one driver in the region covered by the next.

This is the famous Electro-Voice Patrician 600 speaker system. Model 115 Interior Horn Assembly, Net \$190.00. Components Model 103E System, Net \$431.00.



...These Important Points will help you to choose easily the

a



Model 12BW,
Net \$35.00



Model 15W,
Net \$89.00



Model 18W,
Net \$120.00

a Which LOUDSPEAKER DIAMETER should you select?

The diameter of the loudspeaker governs the bass response range which can be achieved in simple enclosures of a certain size. Choice of the diameter therefore depends upon the size of the cavity in the enclosure. *Electro-Voice* offers a wide selection of enclosures to fit various size speakers. Smaller diameter drivers will deliver extended bass range in cavities of smaller volume. However, the additional cone area of a large 15-inch unit allows about 2 db more efficiency (almost twice the acoustic output) when used in a proper size cabinet. This increase is quite noticeable to the ear. Some 15-inch drivers employ heavier magnet structures and provide greater efficiency in smaller enclosures without further bass extension, but in a larger enclosure of proper acoustic size, the large diameter loudspeaker will give both greater power-handling capacity and lower range bass response, with less distortion. Indirect Radiator Corner Horns are designed around *Electro-Voice* speakers or drivers of specific diameters, and changing from the designed size to another will degrade both range response and efficiency. In infinite baffles, or in very large cavities, the 15-inch and 18-inch diameters deliver the most extended bass range.

b



later you can add

Model 5P12,
Net \$66.00

Model T35,
Net \$35.00

Model 8HD,
Net \$18.00

Model T25A Driver,
Net \$58.00

Model 15TRX,
Net \$149.00

b COAXIAL versus INTEGRATED 3-WAY DRIVERS

Should you purchase a narrower-range coaxial unit with large magnet, or a wider-range integrated 3-way unit with lighter magnet when the prices are comparable? This question can be answered only by you, bearing these points in mind: Choose integrated 3-way units if you have established their price as your ultimate expenditure. While distortion is slightly greater with lighter magnets, the wider range offered presents the best value. The *Electro-Voice* Model 15TRX is an excellent integrated 3-way speaker with a 5 $\frac{3}{4}$ lb. magnet. There is little distortion with this speaker. Choose the coaxial unit with large magnet when you wish later to add, in step with the budget, mid-range and very-high-frequency components eventuating in an *Electro-Voice* deluxe system of highest quality.

c Choosing between INTEGRATED and SEPARATE 3-WAY SYSTEMS

In integrated, or unitary 3-way driver systems, the crossover point from bass to treble is dictated by the space available within the cone apex. This means a higher crossover frequency is necessary than that achieved with separate multi-way combinations. Integrated speakers make their appeal to the common desire for a compact assembly, although actual speaker space is dictated by the cavity or housing required for extension of the bass range. This volume is the same for both integrated and separate multi-way systems with bass cones of the same diameter. In separate multi-way systems, there is no compromise on treble component size or crossover point. The higher frequencies are dispersed more efficiently and with less distortion. The cost is greater but well worth it if the budget allows.

d How to select CROSSOVER NETWORKS and the HIGHER-FREQUENCY HORNS

The size of the mid-bass, treble and very-high-frequency horns determines the crossover point or frequency at which the transition from the lower driver to the higher one should take place. All *Electro-Voice* high-frequency driver specifications list the recommended lowest crossover point. You may cross over higher but never lower than this frequency or irregular response will result. The larger the higher-frequency horn, the lower can be the crossover point employed. The lowest possible crossover from the cone-type driver should be chosen because this will reduce system intermodulation distortion. But the size of the treble horn sometimes enters the picture. For instance, the *Electro-Voice* 6HD 600-cycle horn is too deep to fit in the *Aristocrat* enclosure. The smaller, lower cost 800 cps Model 8HD horn fits perfectly and calls appropriately for the Model X8 800 cps crossover. The *Electro-Voice* Model T35 is recommended as a very-high-frequency driver at a moderate price while the Model T35B gives VHF reproduction for multi-way systems with medium efficiency. The *Electro-Voice* Model T3500 Ionovac offers the ultimate for those who desire the very finest in smooth, extended high-frequency reproduction. Its notably smooth high response reaches well into the ultrasonic range. A glowing violet "cloud" of ionized air replaces the speaker diaphragm in this radical new approach to reproduction of the higher octaves. It must be remembered that the efficiency of any speaker depends upon the magnet weight and *Electro-Voice* has a great variety for every purpose to choose from.

d



Model X6,
Net \$39.00



Model 6HD,
Net \$22.00

Model T25A Driver, Net \$58.00,
with Model 8HD Horn, Net \$18.00

Model T25A,
Net \$58.00



Model X8,
Net \$32.00



Model 8HD,
Net \$18.00

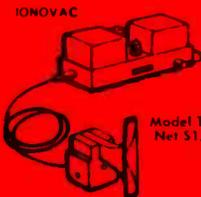
Model T10A,
Net \$42.50



Model T35,
Net \$35.00



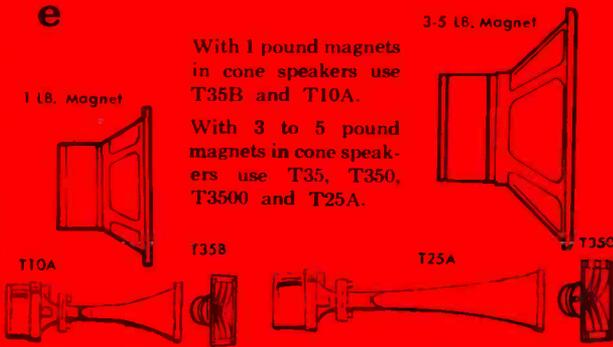
Model T350,
Net \$60.00



Model T3500,
Net \$150.00

Speaker Equipment best suited to your musical taste and budget

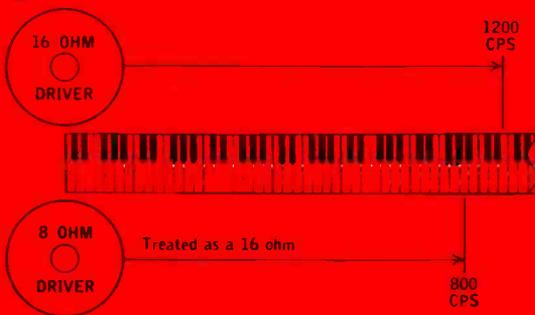
e



e The meaning of RETMA SENSITIVITY RATINGS and how you should use them in choosing MULTI-WAY COMPONENTS

The Radio Electronic and Television Manufacturers Association has established a method of rating the acoustic output of a driver for a given power input. The higher this rating, the more efficient is the driver. Granting good design, the larger magnet structures will deliver the greatest efficiency with the least distortion. A high RETMA sensitivity rating, therefore, is one of the hallmarks of excellence. *Electro-Voice* is proud of its high RETMA ratings. Make certain that the sensitivity ratings of the mid- and high-frequency units are comparable, otherwise musical imbalance between one portion of the reproduced spectrum and the other will result. The E-V Model AT37 Level Control will offset this discrepancy when very-high-efficiency drivers are employed.

f



f Here is the significance of IMPEDANCE RATINGS and what they mean to you

There has been a tacit acceptance among most high-fidelity manufacturers of the 16-ohm impedance as the standard for high-fidelity systems. This makes economic sense, for an 8-ohm impedance would require double the value of condenser and therefore more than double the final cost of the crossover network. Higher impedances are not used commonly, for the speaker manufacturers find difficulty in avoiding voice coil losses due to winding with finer wire. An 8-ohm bass unit can be used properly by treating it as a 16-ohm unit and keeping the crossover point below 800 cps. This will sacrifice some efficiency in the upper register but will actually cause an increase of efficiency below 100 cps.

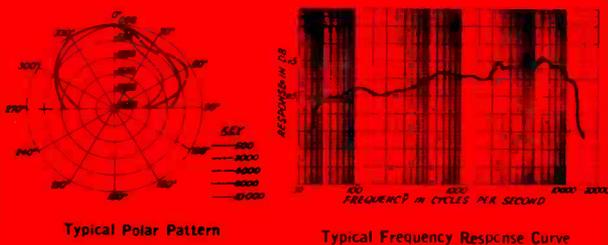
g



g What the ELECTRO-VOICE CRITICAL DAMPING FACTOR RATING means in enhancing speaker performance

Every *Electro-Voice* cone speaker specifies a certain CRITICAL DAMPING FACTOR to which the amplifier should be adjusted to insure an optimum distortion-free bass response and flatness of frequency response. Most, but not all, quality amplifiers have a variable damping control. The recommended setting for the particular speaker and the type of enclosure in which it is employed should be used to achieve the utmost in musical enjoyment.

h

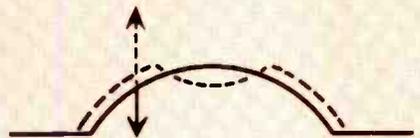
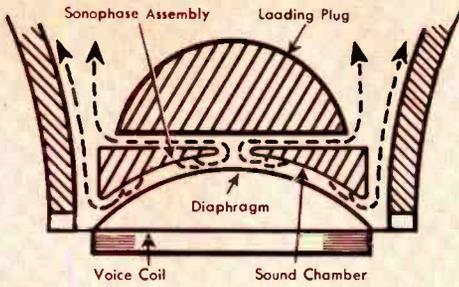


What do FREQUENCY RESPONSE CURVES mean in the selection of loudspeakers and components?

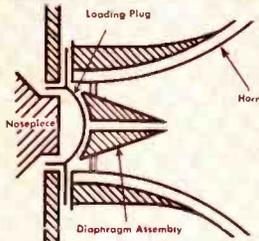
Curves are very important provided that the viewer is instructed in the interpretation of them. It is vital that the manner in which the curves are run be stated and that the environment of the loudspeaker under test be recognized and evaluated. A frequency response curve alone, even with complete corollary data mentioned, gives no hint as to how the speaker will sound in a living room unless polar curves are included. Polar curves show distribution of energy throughout the listening area and the response and polar curves form an excellent measure of quality when judged with each other.

Electro-Voice®

Here Is The Story of Electro-Voice Superiority!



Action of diaphragm at higher frequencies. Dotted line shows departure from piston action.



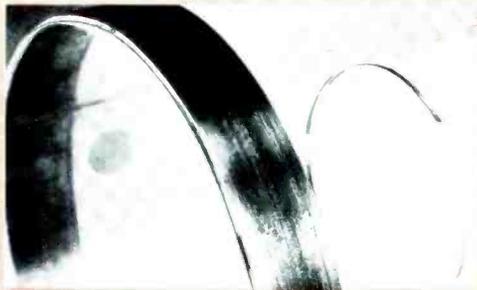
Avedon Throat Design

The unique throat design illustrated here overcomes a problem common in conventional high-frequency drivers. This is diaphragm deformation at high-frequencies occurring at frequencies above 5-kilocycles. Piston action is destroyed, the phase is shifted and the result is destructive interference. Electro-Voice UHF Drivers solve the diaphragm deformation problem with a longer sound path from the center of the diaphragm. This restores proper phase relationship. This is especially important above 12-kilocycles where sound must be taken from the center of the diaphragm and from the outer edge simultaneously. The first diagram shows E-V's Avedon construction. Diagram 2 shows what happens in a conventional high-frequency driver. There is excellent response up to 4- or 5-kc. But beyond this, destructive interference results from the diaphragm's inability to act as a piston. Diagram 3 shows the conventional high-frequency driver. Increasingly higher frequencies cause the phase to shift due to central diaphragm deformation.

The Hoodwin Diffraction Horn

This is the Electro-Voice development which is used in all E-V horns to disperse sound *equally* in all lateral directions from a single point source. This is especially important in stereophonic reproduction to preserve the undistorted depth and width of the original sound. Diffraction horns insure balanced levels throughout the room from both right and left speakers.

These Great Electro-Voice Speaker Features Assure Quality Reproduction



Heaviest Magnetic Circuits

Lowest distortion and greatest range. The heaviest, most powerful magnetic structures in their price class.



Hidden Parts are Precision Ground

Perfect assembly. E-V internal parts have watch-jewel accuracy.



Specialized Adhesives and Plastics

To achieve the lightest but most rigid moving mechanism possible, recent advances in thermosetting adhesive compounds are used in *Electro-Voice* drivers and loudspeakers.

High Pressure Die-Cast Frame Assemblies

Lifetime durability. Rigid frame or basket assemblies of E-V cone-type speakers or drivers are designed to support the magnet weight and prevent any bending of the precision magnet structure.

1 Voice Coils of Edgewise-wound Ribbon

Electro-Voice utilizes edgewise-wound pure aluminum ribbon voice coils in all full-range reproducers. This provides 18% more efficiency. Even under hard driving, this greater structural rigidity gives greater power-handling capacity and assures finer reproduction.

2 Moisture-Resistant Cones and Suspension Spiders

E-V speakers deliver sustained quality response because both high- and low-frequency driver cones are specially treated to prevent moisture-absorption even in regions of high humidity.

3 Tough One-Piece Molded Cones

Heavy, compliant, ribbed one-piece molded bass-driver cones lower displeasing transient and harmonic distortion. Used in E-V speakers, a naturalness of response for greater listening pleasure is the result.

NO FINER CHOICE THAN— **Electro-Voice**

ELECTRO-VOICE, INC., BUCHANAN, MICHIGAN

Printed in U.S.A.



Audio/Music Clubs, continued

Latest additions to the list of audio clubs, with names and addresses of secretaries or correspondents, follow:

Louisville, Ky. — Louisville Audio Society; Mrs. Norma L. Hodapp, Tucker Station Road, Jeffersontown, Ky.

Jackson, Miss. — A new club was born here on August 12. Write J. G. Housand, 54-35 Waynland Dr. (Briarwood), Jackson, Miss.

Spokane, Wash. — Write Howard Gellhorn, S. 1804 Cedar St., Spokane 41, Wash.

Orange, Calif. — Marlies and Bob Dier, 509 Poinsetta St., Corona Del Mar, would like to form a club. Phone is Harbor 4195-W.

Providence, R.I. — Norman B. Jagolinzer is Chairman of the Young Adult Music Listening Group of the Providence Jewish Community Center. Their address is 170 Sessions St., Providence 6; his address is 45 Blackstone Blvd., Providence 6. This listening group has been in existence since November 1953, now has an attendance of over thirty.

Good Music, New York Area

Readers within the WQXR-FM/AM range have a treat in store: the station will broadcast Saturday concerts by the Boston Symphony, and has obtained exclusive rights to these broadcasts within an eighty-mile area. Saturday nights, from 8:30 to and about 10:30, starting October 5 and ending April 26. No commercials; no interruptions. (WQXR's customary on-the-hour news broadcasts will be scheduled for the intermission.)

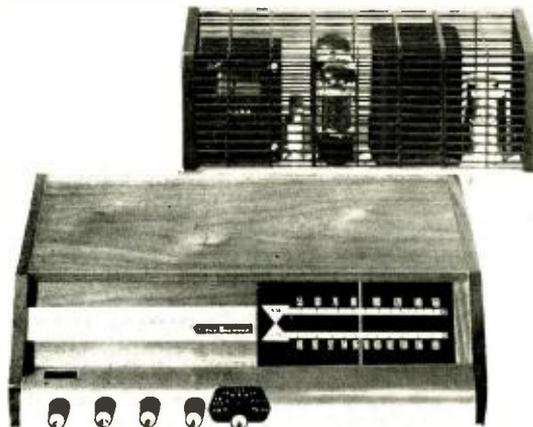
Where's our tape recorder?

Watts: British

A few issues ago we commented on the London Audio Fair; our reporter mentioned English satisfaction with

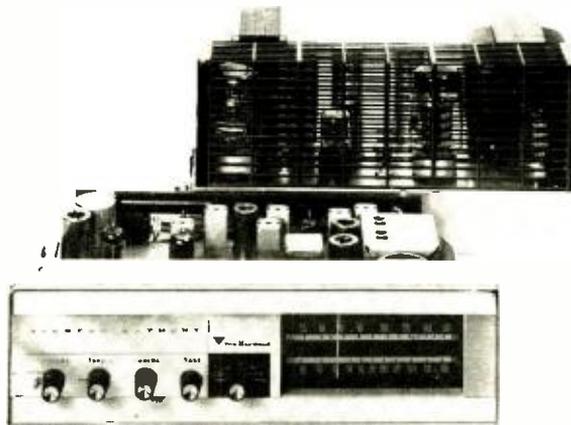
Continued on page 24

SARGENT-RAYMENT SR-300



***now available with either console mounting escutcheon or cantilevered wood cabinets.**

***also available with either 20 watt or 70 watt (using KT-88 output tube) amplifier.**



WITH MORE OUTSTANDING FEATURES

The SR-300 "Maywood" AM-FM tuner, pre-amp, tone control and amplifier, has become recognized as "the top performer in its price bracket" among the Nation's leading hi-fi dealers. And now, more flexible than ever, it is available in these four combinations.

SR-300-M (with mounting escutcheon) with 20 watt amplifier . . .	\$189.60
SR-300 (in cantilevered cabinet) with 20 watt amplifier	\$199.95
SR-300-M70 (with mounting escutcheon) with 70 watt amplifier. . .	\$249.30
SR-300-70 (in cantilevered cabinet) with 70 watt amplifier	\$259.43

Write for brochure on the SR-300 series and other SR products today.



The Exciting **NEW** Anniversary Series by **FISHER**

IT IS APPROPRIATE that Avery Fisher, pioneer maker of high fidelity instruments, should mark his twentieth year of engineering leadership with the introduction of the new, **FISHER Anniversary Series**. In this group of outstanding instruments will be found two FM-AM tuners and the very latest of Fisher audio amplifiers.

Nothing we can say here, no photographic illustration we reproduce, could possibly convey the giant step forward represented by these new models. They will serve to establish even more firmly the leadership that Fisher equipment has held these two decades. Be sure to visit your high fidelity dealer soon, to *see* the Anniversary Series — and best of all, compare their performance to any competitive equipment — *regardless of price*. You are in for the most pleasant surprise of your hi-fi life!

Write today for complete specifications.

FISHER RADIO Corporation

21-25 44th Drive • Long Island City 1, N. Y.



THE FISHER

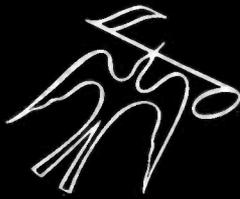
Model 90-R • FM-AM TUNER

■ Combining engineering excellence and dazzling performance, THE FISHER 90-R is truly representative of the renowned FISHER tradition for quality. Providing both maximum sensitivity and maximum signal-to-noise ratio, without compromise, the 90-R may even bring in FM stations before you have connected the FM antenna! Incorporating the celebrated FISHER Gold Cascode RF amplifier, and companion circuitry, the 90-R has a rated sensitivity as low as 1 microvolt—with AM sensitivity better than 3 microvolts at full output. The exclusive, new Microbeam Tuning Indicator provides ease of tuning never before possible—and is more accurate on weak signals than a meter or conventional tuning eye. Still another FISHER exclusive, the new, three-position Push-Button FM Muting and AM Bandwidth Selector effectively eliminates both interstation noise and annoying on-station side-response distortion. The most advanced FM-AM tuner in the world today, THE FISHER 90-R is a superb, professional instrument.



■ Outstanding specifications of the 90-R include: ■ 1 microvolt FM sensitivity for 20 db of quieting; 1.6 microvolts for 30 db of quieting, using 72-ohm antenna. ■ FM sensitivity 2 microvolts for 20 db of quieting; 3.2 microvolts for 30 db of quieting, using 300-ohm antenna. ■ 12 tuned circuits, including 3 variable. ■ Gold Cascode RF Amplifier stage. ■ Entire front end features silver-plated shielding against undesirable noise, interference and radiation. ■ Special antenna input circuit on FM and AM accommodates five different kinds of antenna connections. ■ Four IF amplifier stages provide maximum bandwidth while maintaining maximum selectivity. ■ Dual Dynamic Limiters for instantaneous limiting of random and impulse-type noise. ■ Wide Band Ratio Detector. ■ High capture ratio eliminates co-channel interference. ■ Uniform frequency response from 20 to 20,000 cycles within 1 db. ■ Delayed AGC for constant audio output. ■ FM Dipole antenna included. ■ Antenna input accommodates 300-ohm or 72-ohm external antenna. ■ Separate AM front end with 9 tuned circuits, including 3 variable. ■ AM sensitivity better than 3 microvolts for full rated output. ■ Special antenna input designed for maximum signal-to-noise ratio. ■ Convenient antenna terminal and switch permits choice of ferrite loop or external antenna. ■ Tuned RF amplifier stage has constant bandwidth over tuning range for optimum fidelity-to-selectivity ratios. ■ Two IF amplifier stages featuring three-position push-button controlled adjustable bandwidth. ■ IF bandwidth 18 Kc in Broad, 11.5 Kc in Medium, and 6 Kc in Sharp positions. ■ AM Detector circuit incorporates separate diode and operates without distortion even on high-modulation broadcast signals. ■ Special Bridged-T circuit design of 10-Kc sharp cut-off filter assures complete suppression of undesirable adjacent-channel interference, or heterodyne "whistle." ■ Two low-impedance, high-level outputs, one for amplifier and one for recording. ■ Hum and Noise Level: 77 db below signal for 2 volts output. ■ Die-cast, three-dimensional brushed-brass escutcheon. ■ Large, brilliantly illuminated dial with logging scale. ■ Pin-point indicator lights for FM muting or AM bandwidth. ■ Smooth, fly-wheel tuning. ■ 12 tubes including Microbeam Tuning Indicator, plus 6 crystal diodes. ■ Size: 15½" wide x 10½" deep x 7" high. ■ Shipping Weight: 21 pounds.

Chassis, **\$199.50**
Mahogany or Blonde Cabinet, **\$19.95**



THE FISHER

Model 90-T • FM-AM TUNER

■ If any FM-AM tuner possibly can offer more in performance and engineering than the 90-R, it is the equally new, FISHER Model 90-T. Here is the identical, extreme-sensitivity FM-AM tuner as the 90-R—with the Gold Cascade RF amplifier, Microbeam Tuning and Push-Button FM Muting-AM Bandwidth Control—plus an audio control center incorporating stimulating new concepts in design and engineering. A new FISHER feature, the Presence Control, creates the concert-hall effect of emphasizing and bringing forward from the orchestra, instrumental and solo passages. A three-position, sharp cut-off Rumble Filter eliminates low-frequency noise with minimum possible loss of frequency response. A similar, three-position, sharp cut-off Noise Filter suppresses noise, interference and other annoying high-frequency effects such as static, record scratch and high-frequency distortion. The additional tuner specifications of the FISHER 90-T FM-AM tuner are identical to the new FISHER 90-R.



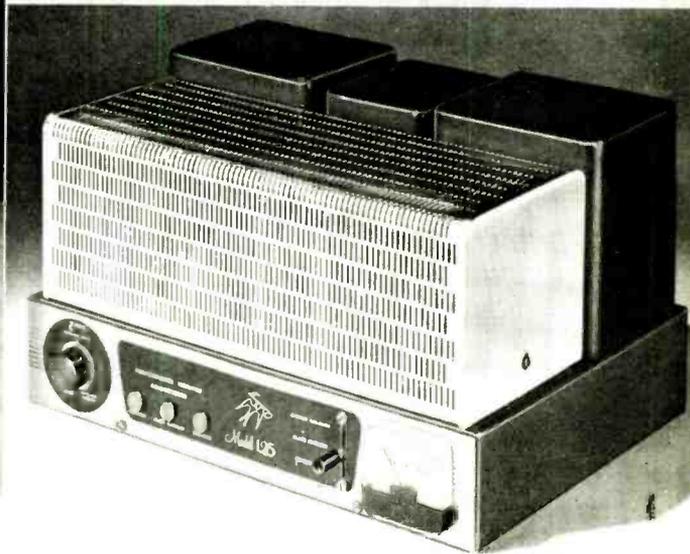
■ The four input jacks of the control center can accommodate a low-level magnetic phonograph cartridge and a tape playback head, plus a stereo channel, TV sound, a ceramic, crystal or FM cartridge, tape recorder or other high level signal source. ■ Two output jacks provide a low-impedance connection for use with an amplifier or separate signal for recording. ■ Less than 0.1% distortion for 3 volts output, with uniform frequency response from 25 to 40,000 cycles, within 1 db. ■ Hum and noise level better than 80 db below signal for 2 volts output. ■ High-gain, two-stage preamplifier for low-level phonograph cartridges and tape playback head. ■ Three-positions of equalization for all makes of recordings, plus standard NARTB tape equalization. ■ Individual bass and treble controls for complete, personal tonal adjustment. ■ Master Volume Control eliminates need for separate volume controls on associated equipment. ■ Four-position Loudness Contour Control accurately compensates for the natural loss in hearing sensitivity at low listening levels. ■ Die-cast, three-dimensional brushed-brass escutcheon. ■ Large, brilliantly illuminated dial with logging scale. ■ Pin-point channel indicator lights. ■ Smooth, fly-wheel tuning. ■ 15 tubes including Microbeam Tuning Indicator, plus 6 crystal diodes. ■ Size: 15½" wide x 10½" deep x 7" high. ■ Shipping Weight: 23 pounds.

Chassis, **\$239.50**
Mahogany or Blonde Cabinet, **\$19.95**

THE FISHER

Model 125-AX Audio Amplifier

■ 125 Watts! THE FISHER Model 125-AX sets new standards for power amplifiers—from the standpoint of design, performance and reliability. Its exceptionally high power output and significantly low distortion provide the ideal combination for quality reproduction, with ample reserve power for every requirement of the music connoisseur or professional user. The 125-AX is ideal for use with the most critical recording and laboratory instruments, in addition to the newest, low-efficiency and cone-type speaker systems.



■ Outstanding specifications of the new FISHER Model 125-AX audio amplifier include: ■ 125 watts with normal program material. ■ 90 watts continuous sine wave duty. ■ Harmonic distortion less than 0.6% at 125 watts; less than 0.5% harmonic distortion at 90 watts. ■ Two separate power supplies, assuring optimum amplifier operation. ■ Unique, illuminated FISHER Performance Monitor meter indicates correct adjustment of output tube bias, screen voltage and output balance—and shows average power in watts. ■ Less than 1% IM distortion at 90 watts; less than 2% IM distortion at 125 watts (measured 60/3000 cycles at 4:1). ■ Frequency response within 0.25 db, 20 to 20,000 cycles. ■ Hum and noise better than 92 db below full output. ■ 4, 8 and 16-ohm speaker output impedances, plus 70.7-volt output at 90 watts. ■ Power socket supplies all necessary voltages for operation of unpowered, external components. ■ Exclusive FISHER Z-Matic, a variable damping factor control with three times the range of ordinary controls of this type, assures a perfect impedance match between the amplifier and speaker system. ■ Total of eight controls: Input Level, Speaker Impedance Switch, Meter Switch, Bias, Screen Voltage, Output Balance, Driver Balance, Z-Matic. ■ Tube Complement: Total of 12, including 2 neon regulators—1-12AU7, 1-12AX7, 4-EL34 (6CA7), 1-6Y6, 1-6AU6, 2-5R4GY, 2-NE16. ■ Size: 14" wide x 11½" deep x 8½" high. ■ Shipping Weight: 55 pounds.

Model 125-AX, **\$229.50**
Model 125-A, with 8 and 16-ohm outputs only, **\$219.50**

PILOT

and only

PILOT

offers you peak performance
in high fidelity at low cost

3-in-1 COMPONENT UNITS

Pilot engineering and ingenuity at its best! Tuner, amplifier and preamp-audio-control built onto a single chassis for greatest convenience in assembling a high fidelity system. Only the speaker, and record player or tape recorder need be connected.



HF-42

Includes FM-AM Tuner with tuned RF stage and dual cascade limiter-discriminator FM circuit for maximum sensitivity — perfect quieting even with fringe signals; precise BEACON tuning indicator; AFC with disabling switch; 10 KC filter for AM; built-in FM and AM antennas; flywheel tuning.

Preamp-Audio Control with hum-free DC on tube heaters; tape head and phono inputs with separate equalization; bass and treble controls; loudness-contour and volume controls; tape recorder output.

Power Amplifier with less than 1% distortion at 20 watts rated output (40 watts peak); frequency response: 20 to 20,000 cycles, ± 1 db; built in rumble filter. Housed in handsome enclosure finished in brushed brass and burgundy.

Dimensions: $4\frac{3}{4}$ "h x $13\frac{3}{4}$ "w x $12\frac{1}{4}$ "d.

\$209.50 Complete

HF-30

Includes FM-AM Tuner with tuned RF stage for high sensitivity — perfect quieting even with fringe signals; precise BEACON tuning indicator; AFC with disabling switch; 10 KC filter for AM; built-in FM and AM antennas; flywheel tuning.

Preamp-Audio Control with phono and auxiliary inputs, bass and treble controls, loudness-contour and volume controls, tape recorder output.

Power Amplifier with less than 1% distortion at 12 watts rated output (24 watts peak); and frequency response: 20 to 20,000 cycles, ± 1 db; selector switch for independent or simultaneous operation of two speaker systems. Housed in handsome enclosure finished in brushed brass and burgundy.

Dimensions: $4\frac{1}{2}$ "h x $14\frac{1}{4}$ "w x $10\frac{1}{4}$ "d.

\$169.50 Complete



Make your own performance test of these component units at your Pilot dealer.

For complete specifications, write to Dept. AV-11

Prices slightly higher west of Rockies.

Pilot

RADIO CORP., 37-06 36th St., Long Island City 1, N. Y.

Over 38 years leadership in electronics.

NOTED WITH INTEREST

Continued from page 21

low (10 to 20) wattage amplifiers. R. N. Wellington, managing director of Sound Sales Ltd., has brought to our attention the fact that his Tri-Channel system (TITHeD in May 1956) uses a 50-watt amplifier in its latest model. Mr. Wellington's company also produces a straight power amplifier rated at 50W continuous, 100W peak.

Hi-Fi Bird Calls

The *Wall Street Journal* had an item we wish we'd run. Seems smart bird hunters have been making tape recordings of live bird calls. Hearing them played back through hi-fi systems in the field (or swamp), ducks and geese are confused and attracted to such an extent that the Department of the Interior's Fish and Wildlife Service plans to ban hi-fi — at least as far as certain birds are concerned. Hi-fi recordings of rabbit sounds are approved by the Service; they attract coyotes. Now what would a hi-fi recording of a coyote attract?

By the way, how does the F & W Service determine what is, and what is not, hi fi?

New in New York

The Audio Exchange has opened a new branch at 836 Flatbush Ave., Brooklyn.

Consultants

Arvada, Colo. — B. Dimond, 5500 West 56th Ave. Phone: Harrison 4-1063.

Hato Rey, Puerto Rico — Charron's, 306 Ponce de León Ave. Phone: 6-3502.

All This and Hi-Fi Too

Reader Sid Loeb of New York sent us a clipping of an advertisement for a hi-fi custom phono system for \$49.95, including four speakers. And so on and on, Mr. Loeb suggests standards. We do too; we don't know that they will help, beyond a certain point, because standards and policing of advertising are not the same. But standards would help organizations like the Better Business Bureau (which we happen to know has been after the particular advertiser mentioned

above). And though standards of performance may be extraordinarily difficult to work out, for obvious reasons, standards of measurements should not be. And they would help, no end.

Name Changed

Old: Radio - Electronics - Television Manufacturers Association (better known as RETMA). *New:* Electronic Industries Association, which will no doubt soon become EIA. RETMA could be pronounced by anyone; if there is difficulty with EIA, we'll be glad to help. It should come out something like the affirmative used in certain parts of New England, which can be transcribed phonetically as "eh-yah."

Long Playing

The commercial background-music Tefifon, distributed by Audio Master, plays for eight hours. Now a home-type machine has been introduced; it plays up to four hours. Utilizes a vinyl soundband, half an inch wide, containing ninety-two grooves. Looks pretty much like a tape recorder, of the cassette variety.

Good Music, Cleveland

Readers in the Cleveland-northeastern-Ohio area should know about *Fine Music*, a small-size publication doing a big job. It lists, as completely as possible, the classical and semiclassical music programs which can be picked up by listeners in this area. It is published weekly; costs \$4 a year or \$2 for six months. Address: Fine Music, P.O. Box 7232, Cleveland 29, Ohio.

Atomic Sobrimer

We were in San Francisco not long ago, talking to Will Rayment of Sargent-Rayment, when he gave us a preview of a small device which is as clever and may well be as valuable as any seen in a long time. It's about one-quarter the size of a pack of cigarettes. You look into it, let your eyes adapt for half a minute to the darkness, and then count the rectangles you can see. GARD, as it is called, is a detector for determining the presence of radio-active fallout. If you see one rectangle, you're safe. If you see two, you're in a medium intensity zone and may be safe for a couple of hours. If

Continued on next page

PILOT

and only

PILOT

*offers you peak performance
in high fidelity at low cost*

TUNERS

Traditional Pilot engineering and quality assure optimum performance. All Pilot tuners feature *Beacon* tuning for precise station selection. All Pilot tuners are also fully shielded to conform with FCC radiation specifications.



FA-550 FM-AM
Has tuned RF stage and dual cascade limiter-discriminator FM circuit for maximum sensitivity; — perfect quieting even with fringe signals; AFC with disabling switch; 10 KC filter for AM; flywheel tuning; built-in FM and AM antennas. Features preamp-audio control with five input channels; hum-free DC on tube heaters; tape head and phono inputs with separate equalization; bass and treble controls; separate cathode follower outputs for tape recorder and power amplifier. Housed in handsome enclosure finished in brushed brass and burgundy.
Dimensions: 4 $\frac{3}{4}$ "h x 14 $\frac{1}{2}$ "w x 10 $\frac{1}{4}$ "d.
\$159.50 Complete

FA-540 FM-AM
Has tuned RF stage for high sensitivity — perfect quieting even with fringe signals; AFC with disabling switch 10KC filter for AM; cathode follower output; phono and auxiliary inputs; flywheel tuning; built-in FM and AM antennas. Housed in handsome enclosure finished in brushed brass and burgundy.
Dimensions: 4 $\frac{3}{4}$ "h x 13" w x 8 $\frac{3}{4}$ "d.
\$109.50 Complete

FM-530 FM Only
Has tuned RF stage for high sensitivity — perfect quieting even with fringe signals; AFC with disabling switch; cathode follower output; phono and auxiliary inputs; flywheel tuning; built-in antenna. Housed in handsome enclosure finished in brushed brass and burgundy.
Dimensions: 4 $\frac{3}{4}$ "h x 13" w x 8 $\frac{3}{4}$ "d.
\$89.50 Complete

Make your own performance test of these tuners at your Pilot dealer.
For complete specifications, write to Dept. AW-11

Prices slightly higher west of Rockies.

Pilot RADIO CORP., 37-06 36th St., Long Island City 1, N. Y.

Over 38 years leadership in electronics.

PILOT

and only

PILOT

offers you peak performance
in high fidelity at low cost

AMPLIFIERS

Pilot-engineered Williamson-type circuits employing specially wound output transformers to insure absolute stability and lowest distortion. Power specifications are conservatively rated, and amplifiers are designed for continuous operation at full output.



AA-920

Rated output with less than 1% distortion: 20 watts (40 watts peak); frequency response: 20 to 20,000 cycles, ± 1 db. Has built-in preamp and audio control with hum-free DC on tube heaters; tape head and phono inputs with separate equalization; 3-position rumble and scratch filters; bass and treble controls; loudness-contour and volume controls; plus tape recorder output. Housed in handsome enclosure finished in brushed brass and burgundy.

Dimensions: 4 $\frac{3}{4}$ " h x 13 $\frac{1}{4}$ " w x 9" d.

\$99.50 Complete



AA-903B

Rated output with less than 1% distortion: 14 watts (28 watts peak); frequency response: 20 to 20,000 cycles, ± 1 db. Has built-in preamp and audio control with hum-free DC on tube heaters; tape head and phono inputs with separate equalization; 2-position rumble and scratch filters; bass and treble controls; loudness-contour and volume controls; plus tape recorder output. Housed in handsome enclosure finished in brushed brass and burgundy.

Dimensions: 4 $\frac{3}{4}$ " h x 13 $\frac{1}{4}$ " w x 9" d.

\$79.95 Complete

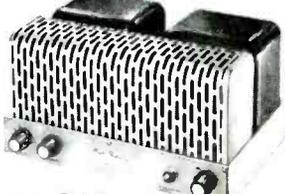


AA-410A

Basic amplifier—rated output with less than 1% distortion: 20 watts (40 watts peak); frequency response: 20 to 20,000 cycles, ± 0.5 db; 6L6GB output tubes. Chassis and cover case finished in brushed brass.

Dimensions: 4" x 12 $\frac{3}{4}$ " x 6" high.

\$59.50 Complete



AA-908

Basic amplifier—rated output with less than 1% distortion: 40 watts (80 watts peak); frequency response: 20 to 20,000 cycles, ± 0.1 db; 6CA7 output tubes; provision for selecting optimum damping factor. Chassis and cover cage finished in brushed brass.

Dimensions: 12 $\frac{1}{4}$ " x 8 $\frac{1}{4}$ " x 6 $\frac{1}{2}$ " high.

\$125.00 Complete

Make your own performance tests of these amplifiers at your Pilot dealer.

For complete specifications, write to Dept. AX-11

Prices slightly higher west of Rockies.

Pilot RADIO CORP., 37-06 36th St., Long Island City 1, N. Y.

Over 38 years leadership in electronics.

www.americanradiohistory.com

NOTED WITH INTEREST

Continued from preceding page

you see three rectangles, scream as fast as possible. Cost of GARD is \$7.50; civilian defense and many other authorities are enthusiastic.

If you're sure of the atomic radiation situation, the GARD might have another use: to test sobriety. The instructions read: "See one rectangle, safe; see two, caution; see three, danger."

Pittsburgh FM

A reader advises us of KDKA-FM's new good music programming; says it is sorely needed and hopes HIGH FIDELITY readers will encourage the station by letting it know of their enjoyment.

Funny how easy it is to write a letter of complaint, how hard, one of commendation.

Record Wear

The owner of a record store near Boston has brought to our attention a problem which he says plagues him and many other record dealers. This is the "skip" record. The customer complains of a worn or damaged record; the needle skips or sticks. This happens on some records, not on others; it will happen on one side of a disc, not on the other. The dealer has tried playing a new copy of the "defective" record for the customer, to prove that the new one is in good condition, but in a short while, the customer will be back with the complaint that this record, too, is bad.

The dealer asked us what we thought might cause the trouble. We can make a guess: a pickup arm which binds, just a little, somewhere in its traverse of the record, combined with a record that might have one or more of several troubles. For example, suppose the arm sticks a trifle one inch in from the lead-in groove, and right along there, there's a loud passage. The sticky arm would soon break through a thin groove wall; result, skipping. Or perhaps a tiny piece of dust wedges into a groove in this danger area. Again, the added friction of the arm at this point would cause trouble.

We'd urge readers therefore, to check the lateral or horizontal freedom of movement of their pickup arms, be they on turntables or changers. And if there isn't a test record

already on the market, let some manufacturer leap to the front. Simply make a disc with a spiral, widely spaced groove moving slowly across the record. It should be cut very shallow, so that the least friction of the arm would make the stylus skip.

World Travel

From the European Travel Commission, we received a list of the approximate spots on your dial where you can receive the principal short-wave transmissions in English. Changing atmospheric conditions occasionally make a little experimenting necessary for perfect reception.

	TIME* (Eastern Standard)	Wave Length (Meters)
DENMARK	8:30 p.m.-9:35 p.m. 11:30 p.m.-11:55 p.m.	31.54 35.83
FRANCE	6:55 p.m.-11:55 p.m. 12:30 p.m.-2:30 a.m.	25.6 31.12
GERMANY	8:35 p.m.-11:55 p.m.	25.11
GT. BRITAIN	11:55 a.m.-11:15 a.m. 12:30 a.m.-1:30 p.m.	25.15 19.65 16.95
ITALY	7:15 p.m.-7:55 p.m. 9:25 p.m.-9:45 p.m.	31.33 25.2 9.48
HOLLAND	4:45 p.m.-1:55 p.m. 9:30 p.m.-1:30 p.m. (Weekdays)	31.28 19.43
NORWAY	6:30 p.m.-7:30 p.m. 8:30 p.m.-9:30 p.m.	19.31 25.56 19.77 6.83
SPAIN	1:15 p.m.-11:30 p.m. 11:15 p.m.-12:30 p.m. 12:15 a.m.-1:30 a.m.	39. 37. 37.
SWEDEN	9:30 p.m.-9:30 p.m. 1:30 p.m.-1:55 p.m.	25.4 26.82
SWITZERLAND	8:30 p.m.-9:15 p.m. 9:15 p.m.-10:15 p.m. (Thurs. & Sun.) 11:15 p.m.-11:30 p.m.	34.46 25.28
IRELAND	1:45 p.m.-2:30 p.m. 3:30 p.m.-4:15 p.m.	31.53 16.84

*Daily unless otherwise stated.

Startling Statistic

Waco says they turn out over 3,000 diamond and 25,000 sapphire needle tips per day at the present time. Whew! That's 2,000 x 5 days x 50 weeks = 500,000 sapphires a year.

Hi-Fi Spelling

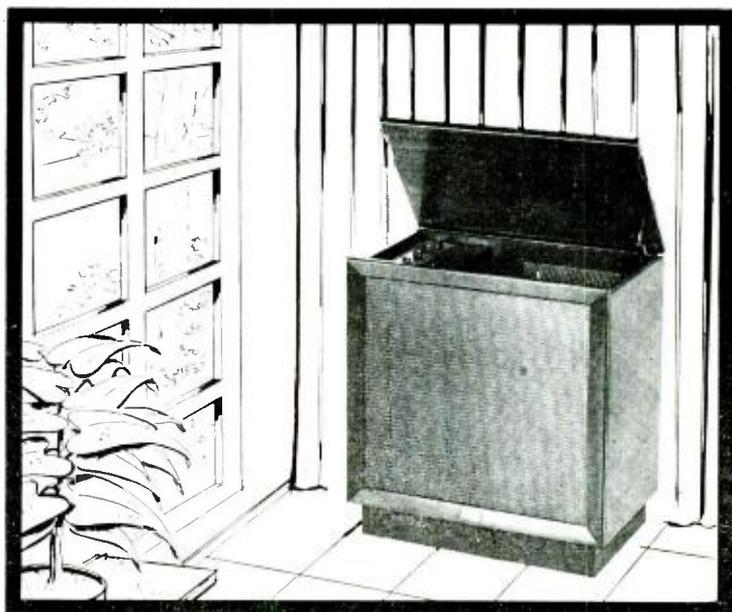
That seems to be next on the list. Fine idea, might get rid of such stupidities as the pronunciation of the following words: bough, cough, dough, lough, rough, through, trough. And so on, and on, including Pough-

Continued on next page

PILOT and only PILOT

*offers you standard custom
high fidelity components in*

CONSOLE SYSTEMS



Pilot has combined component quality with console convenience.

Pilot consoles are actually high fidelity component systems made up of the very same nationally advertised high fidelity components designed for use in custom installations. You can readily identify them by type and model number - you can buy them separately.

The Ensemble 1030D, one of eight superb Pilot console systems, includes the standard Pilot AA-903B 14-watt (28 watts peak) amplifier-preamp, the famous Garrard RC-88 4-speed record changer with diamond-sapphire magnetic cartridge and a perfectly matched 4-way, 4-speaker system built into an acoustically engineered enclosure.

Next time your friends ask about authentic high fidelity with the 'plug-in-and-use' convenience of a single cabinet, tell them about Pilot Component-Consoles. But, before you do, hear one yourself - you're due for a delightful surprise. For complete information, write to:

Pilot RADIO CORP., 37-06 36th St., Long Island City 1, N. Y.
Over 38 years leadership in electronics.

The curious analogy of the black diamonds

Nearly every issue of the Schwann Catalog shows a large number of black diamonds to the left of listings of recorded performances of fine music. Each black diamond means that music will be missing from future issues.

These black diamonds can be an object lesson to every serious listener to music, too, for there is a strong analogy in music reproduction. For instance, if you listen to music on outmoded phono equipment—or even if you've paid all outdoors for a new TV-

phono combination, you're suffering from the black diamond malaise. *You're missing a lot of music!*

You can recover all the music by playing your records on really good high fidelity equipment—the kind of equipment that's recommended by Listening Post engineers. Typically fine equipment from The Listening Post's complete stock are shown below. Order now to eliminate "black diamond" listening from your home.

Listening Post Engineers Recommend These Components Without Reservation

Amplification by McIntosh! Superb performance, realistic price from the acknowledged leader in the field. Mc 30-watt power amp delivers full 30 watts with less than 1/2 of 1% distortion. C-4 preamp gives full flexibility at modest cost. Specify blonde or mahogany C-4 case.

Net price	Mc 30	\$143.50
	C-4 (w/case)	\$72.50

Fairchild 16" Arm & 225A Cartridge—An exceptionally fine plug-in transcription arm with the finest of cartridges—the Fairchild 225A. Output flat within 2 db from 20 to 20,000 cps thanks to moving coil design and Fairchild workmanship.

Net Price	16" Arm	\$39.95
	225A Cartridge	37.50

Garrard 301 Turntable—Built with the precision and strength of an aircraft gun turret, this fine transcription turntable offers adjustable speed, negligible wow and rumble. Typically British—typically Garrard. Ebony base included.

Net price with base	\$113.00
Turntable only	89.00

BOZAK 302A . . . This compact 3-way speaker system delivers a quality of sound far above the promise of its size and price. Clean, balanced sound from 40 to 16,000 cycles. 20 watts continuous rating, 8 ohm input. Mahogany, Walnut, Birch . . . **\$235.60**



All prices F. O. B. Boston, Mass.



THE LISTENING POST, INC.

161 Newbury Street, Boston 16, Mass.

Please ship me Mc 30 Amp Mc 60 Amp (\$198.50) C-4
 Mc C-8 preamp (\$96.50 w/case) Fairchild Arm 225A
 Garrard 301 Bozak 302A Blond Mahogany

Enclosed is check for \$

Name

Street or P.O. Address

City Zone () State

NOTED WITH INTEREST

Continued from preceding page

keepsie, N.Y. How does anyone learn to speak English?

Thanks to Newell W. Tune of Los Angeles for bringing this to our attention.

Hi-Fi Patterns

No, this has nothing to do with printed circuits. We are now discussing hi-fi printed patterns—and that is what the girls are now modeling their dresses from. At least, according to a news item in the *Hartford Courant*. The clipping was sent to us by Nathan Margolis, and to him our thanks.

Next, please.

Short Tone Arm

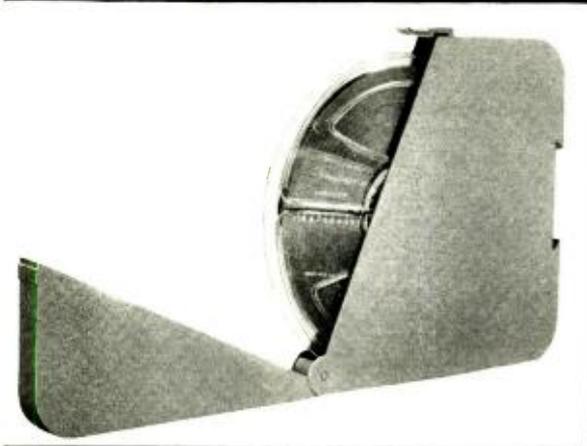
Ever want an extra short tone arm? Long enough to play 7-inchers, including 45s, but no more? They're available; Webster Electric makes one, for instance. Uses a miniature plug-in cartridge, too.

Chicago Phone Numbers

The Illinois Bell Telephone Company and the Reuben H. Donnelley Corporation, which publishes classified telephone directories, inform us jointly and happily that high fidelity is on the upsurge in the Windy City, as if we didn't know. The current Chicago "Red Book" has 131 entries in the "hi-fi" listings, as against 97 last year, 62 in '55. We can easily remember when there was no hi-fi listing at all, not only in Chicago, but anywhere. It's a changing world, and aren't you glad?

Austin of Philadelphia

Last month the City of Brotherly Love got itself a new high fidelity emporium: Austin Electronics, Inc., 1421 Walnut Street, self-described as a "Hi-Fi Center for Home and Industry." The store is under the supervision of its namesake, Austin K. Gutman, whose name will be far from unfamiliar to audiophilic Philadelphians. In the postwar years he planned and built up the Radio Electric Service Company, the city's largest audio equipment outlet. The new store, he says, is "luxuriously modern."



THE QUALITY
RECORDING TAPE
IN THE NEW
PERMANENT
PLASTIC CONTAINER

SONORAMIC

Here is an extraordinary new product designed to protect, preserve and facilitate storage of your Sonoramic Wide Latitude Recording Tape. It's the exclusive NEW Sonoramic permanent plastic tape container. Sonoramic's fine quality magnetic recording tape PLUS the new container makes this your best buy in recording tape.

Here's the story on the container:

- Protects tape against dust and dirt.
- Made of high-impact, shatter-proof, polystyrene plastic in handsome decorator color.
- Opens at flick of finger pushing tape forward for easy access.
- Stacks neatly on shelf, bookcase, or table.
- Dovetail strip (available from company) lets you hang a row of tape containers on wall.
- Unique Sonoramic indexing system on pressure sensitive labels included free in every package. Permits you to keep tabs on all recordings.
- Tape time ruler on carton permits accurate measurement of elapsed and remaining time.

Inside the container...

...is Sonoramic Wide Latitude Recording Tape, a superb new miracle of recording tape engineering. From the selection of raw materials, to coating, slitting and packaging -- this tape reflects the care and precision it takes to make a quality product. Here's the story on the tape:

*A DuPont trade mark.

- Distortion-free recordings guaranteed by exclusive time-temperature dispersing techniques.
- Broad-Plateau Bias assures maximum performance regardless of make of recorder, line voltage fluctuations, tube age, head condition.
- High resistance to abrasion, print-through and cupping.
- Life-time lubrication eliminates squeal, layer-to-layer adhesion, and deposits on heads.

There are three tapes designed for all uses -- all on 7" reels. These include: *Standard Play*, 1½ mil acetate, 1200 feet, meets rigid requirements for both professional and home use. *Long Play*, 1 mil mylar,* 1800 feet, a premium quality tape designed for maximum strength and immunity against heat, humidity and other weather conditions. *Extra Long Play*, ½ mil mylar,* 2400 feet, a high quality tape useful for extra recording time, and where tape tension is not excessive.

When you buy your next reel of tape remember these facts: not only do you get the excellent quality of Sonoramic Wide Latitude Recording Tape -- but every reel comes in its own handsome permanent plastic container.

NOTE: To the first 50 people who write in requesting it -- we'll be happy to send out a free Sonoramic tape container. Please remember: we can only do this with the first 50 requests: Write to Dept. H-101, Ferrodynamics Corporation, Lodi, New Jersey.



Store on table...



...or on wall...



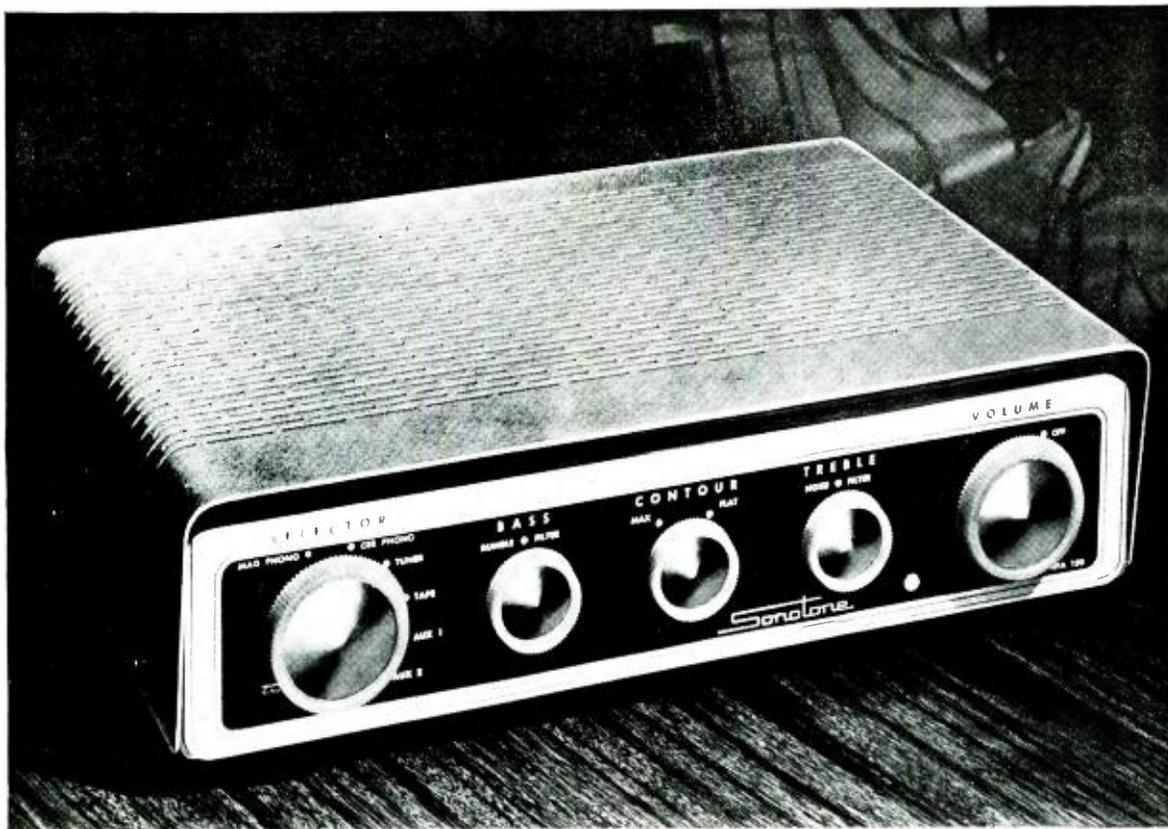
...or in bookcase.

SONORAMIC IS A PRODUCT OF THE



CORPORATION • LODI, NEW JERSEY

All new ultra-compact amplifier SONOTONE HFA-150



15-WATT POWER AT A 10-WATT PRICE!

No amplifier on the market today can compare with the all-new Sonotone HFA-150. Full 15-watt power—superb sound—plus more new, useful “firsts” than any other amplifier at any price.

ONLY 3” HIGH—12” WIDE! For the first time, a complete power *and* control amplifier this compact... without an iota of performance being sacrificed to compactness. The ultra-smart cabinet cover is available in a *choice* of colors—another Sonotone first!

SIX INPUTS! Now, for the first time, you can buy a quality amplifier in this price range that gives you single switch choice of 6 inputs. Three of these in-

puts have *individual pre-set level controls!*

SEPARATE CONTOUR CONTROL! For the first time you get new, exclusive push-pull rumble and noise filters. Bass, treble and volume controls with a *separate* continuous contour control, infinitely variable from flat to 26 db of contour compensation.

The Sonotone HFA-150 is, unquestionably, the greatest value in *fine* high fidelity components in many years. Make seeing and hearing it a “must”!

ONLY \$79⁵⁰ NET Optional cover \$3.50 Net

Write for detailed information without obligation to:

Electronic Applications Division

SONOTONE[®] CORPORATION

ELMSFORD, N. Y.





Books in Review

IMAGINE that, shortly after Beethoven's death, a prominent amateur musician, who had been an intimate friend since the composer's arrival in Vienna as a young man of twenty-one, realized what a unique personal portrait he could dedicate to his hero and to all those who would hear and love his music in the years to come.

"Beethoven's work—and this is something I feel with increasing certainty—must speak for itself, must be its own witness in the decades and centuries ahead of us [such a man might have written]. When the man who made that music has for years lain under the earth, men and women to whom music means anything at all will need no help from me to discover *what* he was; but they still will want to know *who* he was, what *kind* of man was behind that music—and it is this discovery that I hope to facilitate by these notes."

Such a man with such a purpose existed in the very real person of Nikolaus Zmeskall, Edler von Domanovetz (born some ten years before Beethoven, died six years after him)—Secretary to the Hungarian Chancellery in Vienna, amateur but skilled cellist and composer of quartets, long-time friend of Beethoven (and the only one with whom Beethoven at one time or another did not quarrel), dedicatee of the Op. 95 *Serious* Quartet, and careful preserver of over 100 Beethoven letters and "conversation" notes which were to prove invaluable to later biographers. And the Edler von Domanovetz did indeed keep a diary which he intended to bring out as a memorial to his friend and hero.

This priceless diary never was published nor even, as far as is known, preserved. Yet what it *might* have contained is not beyond the re-creative powers of a present-day Luxembourg musician, businessman, and writer—Carl Pidoll—who has steeped himself so deeply in everything that is known of both Beethoven and Zmeskall that he has metamorphosed himself as the latter's *alter ego* and writes of the former with all the insights of a sympathetic close companion and passion-

ate, yet far from uncritical, admirer in what he has chosen to call *Eroica: A Novel About Beethoven* (translated from the German by Anthony Powell, Vanguard, \$3.50).

"The Beethoven Memoirs of Nikolaus Zmeskall" would have been a juster subtitle. Fiction though this book may be, it is not only consistently authentic to the factual letter of the available documentation, it is more significantly true to the spirit of both its subject and purported authorship. For in his some hundred "chapters" or journal entries, many of them not more than a couple of paragraphs long, Pidoll miraculously gets right under the skin of Zmeskall, enabling us to see and marvel and grieve over the tormented evolution of the crude youth from Bonn from a strictly improvisatory pianist to the Promethean composer of 1802–12 . . . through the crucial period of the next three or four years when the apparently burned-out Titan descended to such potboiler triumphs as the *Battle* Symphony and *Der glorreiche Augenblick* Cantata . . . and finally to the mystical heights and agonies of the last years and their then nearly incomprehensible masterpieces.

Pidoll-Zmeskall makes no attempt to solve such enigmas as the identity of the "*ferne Geliebte*," although that episode (like those of the difficulties with his nephew Karl, the acrimonious lawsuits, the subscription sale of *Missa Solemnis* manuscripts, the lifelong quarrels with landlords, servants, etc.),



is used as background detail in the delineation of the man's complex nature and contributory explanation of the "compensatory" elements in his

work. The means here are hardly unique, but the insights strike me as truly incomparable: at least no biographies or analytical studies I have ever read before have given me as persuasive a revelation both of Beethoven's prickly personality and of his creative goals. And certainly no musical "discovery" since the wholly fictive Jean Christophe of Romain Rolland and Serenus Zeitblom of Thomas Mann has ever been more heartwarmingly welcome than the Nikolaus Zmeskall re-created by Carl Pidoll. Although Pidoll himself is scarcely a writer of Mann's stature, his *Eroica* must rank not far below *Doctor Faustus* as one of those rare works of fiction that unveil more of the mysteries of musical genius than any literal documents save possibly the letters of Mozart.

The Role of Fiction in a World of Facts

Unfortunately, "musical fiction" has assumed strong pejorative connotations over the years—and not without reason, since the term nowadays commonly applies either to highly romanticized biographies or to potboiler novels and whodunits in which musicians serve incidentally as protagonists. Yet surely it is not impossible for certain subjects and characters (real or imaginary) to serve as the bases of excellent stories which are in essence, if not in specific detail and dialogue, "true." I don't suppose that many music lovers of today ever tackle *Jean Christophe*, "Henry Handel Richardson's" *Maurice Guest*, or George Moore's *Evelyn Innes*. But to take more recent examples, how many musicologists or historians have provided more authentic revelations of the world of modern music and the tortured "genius" in general than Thomas Mann in the aforementioned *Doctor Faustus* (Knopf, 1948)? . . . of the jazz world and one of its most characteristic figures than Dorothy Baker in *Young Man with a Horn* (Houghton Mifflin 1938, Signet reprint 1945)? . . . or more touching insights

Continued on next page

MIRATWIN

world famous quality cartridge brings out
**THE BEST IN ANY
 HI-FI SYSTEM!**

MIRATWIN

mst-1 single

with diamond stylus for LP
 or standard diamond stylus

Formerly \$34.50 **NOW \$26.50**



MIRATWIN

mst-2 turnover

with sapphire stylus
 for standard and diamond
 stylus for microgroove

Formerly \$45.00 **NOW \$31.50**



NOW AT NEW LOW PRICES!

If you have a hi-fidelity system, bring out its finest tonal values with MIRATWIN. Because MIRATWIN is as smooth and sensitive a cartridge as man can make... faithfully transmits the *complete* recorded sound! Acclaimed by audio engineers and music appreciation enthusiasts alike, MIRATWIN fits *all* standard tone arms, has instant stylus replacement. Enjoy it in your hi-fidelity system for the *best* in recorded music! Recommended tracking force when used in separate tone arms 4 to 8 grams; in record changers 6 to 8 grams. Ask your dealer to give you an A-B Test today.

MIRATWIN CARTRIDGES

MST-1D Single Diamond	\$26.50
MST-1S Single Sapphire	10.00
MST-2D Dual-1 Sapph., 1 Diam.	31.50
MST-2A Dual Sapphire	15.00

REPLACEMENT STYLI

DM-2 Micro-Diamond	\$16.50
DN-2 Standard Diamond	16.50
SM-2 Micro-Sapphire	5.00
SN-2 Standard Sapphire	3.00

FAR AHEAD > THE FINEST BY FAR



AUDIOGERSH CORP. 514 Broadway, New York 12, N. Y.

WORTH 6-0800 IN CANADA: Atlas Radio Corp., Ltd., Toronto



BOOKS IN REVIEW

Continued from preceding page

into Mozart and Bach than Eduard Mörike in *Mozart on the Way to Prague* (trans. W. & C. A. Phillips, Pantheon, 1947) and Johannes Rüber in *Bach and the Heavenly Choir* (trans. Maurice Michael, World, 1957 — reviewed here last April)? The vital consideration always is less the exclusive reliance on fact than the "ring of truth." And here fiction *can* be more revelatory than any "facts," which by themselves, unless organized and illuminated with a skill comparable to that commanded by a master novelist, may seem less convincing than fiction.

A case in point is G. I. C. de Courcy's new biography, *Paganini*, the Genoise (Univ. of Oklahoma, 2 vols., \$12.50). In one sense it warrants the often abused accolade of "definitive," since it is the first full-length work on its subject in English and the first of any to disentangle authentic data from the morass of romantic legend. Unhappily, however, Miss de Courcy is neither a first-rate biographer nor a persuasive fictioneer; and in her first major work (apart from many translations) she presses much too hard in her determination to shine both as omniscient scholar and distinctive prose stylist. This is indeed a monument of indefatigable, extensive research and — by virtue of its subject if for nothing else — is inexhaustibly fascinating to read. But too many of the footnotes with which the author relentlessly peppers almost every one of nearly 900 pages have no immediate pertinence, and most of those which do might better have been incorporated in the appendices or an annotated character index modeled after the ideal example devised by Richard N. Coe for his recent edition of the *Life of Rossini* by Stendhal.

Similarly, the readability of her volumes is handicapped less by the undeniable prosiness of the many letters from and to Paganini, which she properly quotes, than by her own susceptibility for patches of purple prose. These, along with the biographer's wide-eyed gullibility for astrological "significances" in Paganini's life, made one ordinarily nonsqueamish reader squirm as nervously as at the adulatory raptures quoted from reviewers of Paganini's concerts.

Perhaps I should hasten to add, however, that any personal annoyance

at the flamboyance with which Miss de Courcy flaunts both her scholarship and rhetoric is a very minor handicap to learning at last an immense amount about Paganini the man and unlearning even more about Paganini the legend. At best, too, she succeeds in evoking a very considerable sympathy for Paganini both as a human being who, despite his notorious conquests, was far from being a truly lovable man and as an artist *manqué*.

Toscanini in Italian Eyes

If disease — against which Paganini waged an almost lifelong battle — can be said to be the stimulus as well as the curse of that musician, it may not be too farfetched to theorize that *health* was at once the greatest gift and burden allotted to a later Italian musical magician, Arturo Toscanini. The paradox isn't quite as extreme as it may appear at first glance: for in the Maestro's constitutional inheritance lie not only the clues to his fabulous energy and length of active career, but also (perhaps) those to the excesses of his temperament and his blind-spots for certain segments of the musical repertory.

This perhaps startling notion is barely hinted at in the latest biography of the incomparable conductor, Filippo Sacchi's *The Magic Baton: Toscanini's Life for Music* (Putnam, \$3.75). What is made explicit there, and proves to be the most valuable clue to the Maestro's character I've yet encountered, is the nature of his ancestry and early influences in the Oltretorrente section of his native city, Parma, whose Regio opera-house audiences obviously set the pattern for many of the traits we now identify as essentially Toscaninian: an ultrapasionate concern with music, the memorization of every detail of favorite works, a rigorous insistence on traditional standards of performance, and vituperation of any performer, no matter how famous, unlucky enough to fall below, even momentarily, these standards.

Sacchi is an Italian journalist, a very good one indeed; and if he has not acted as his own translator (his book originally appeared in 1951 in Italian and is here brought up to date — not without occasional slips in tenses — and somewhat abridged), whoever has done the translation has brilliantly preserved the crispness, point, and verve of the original. This is a far cry from

Continued on next page



you
can
enjoy
the
best
in Hi-Fi

be sure your system includes

MIRACORD XA-100

THE ONLY 2-IN-1 FULLY AUTOMATIC
CHANGER AND AUTOMATIC MANUAL PLAYER



MIRACORD XA-100 is the 4 speed record changer that makes Hi-Fi easy for everyone. It does everything *automatically*, at the push of a button . . . starts, stops, repeats, pauses, filters! It intermixes 10" and 12" records! It changes from automatic to manual in a moment. And it has the unique "free-wheeling" tone arm that *can't jam!* No other record-player has *all* these features! So get a MIRACORD XA-100, if you're assembling your own system . . . or having your dealer hook-up a system for you! **\$67⁵⁰**

*...and for transcription quality
in a 4-speed manual player...*

MIRAPHON XM-110A

at only **\$37⁵⁰**

complete with every feature to satisfy the most critical listener!

ask your dealer for a demonstration



FAR AHEAD > THE FINEST BY FAR



AUDIOGERSH CORP. 514 BROADWAY, NEW YORK 12, N. Y.

WORTH 6-0800 IN CANADA: Atlas Radio Corp., Ltd., Toronto

An announcement we hope
will gladden some very
patient people . . .

HERE IS THE NEW

JansZen DYNAMIC

PRECISION-DESIGNED WOOFER

From the day designer Arthur Janszen finished the production prototypes of the JansZen 130, the electrostatic loudspeaker was here to stay. Such true, transparent, trouble-free treble had not been heard before from a loudspeaker. Music lovers succumbed at once, in delight, and demand ran away from supply.

This was gratifying, especially so because there had been strong misgivings here about marketing the tweeter without a woofer to match. (Not that we had any choice. It is almost axiomatic among small manufacturers of precisely crafted devices that you must sell one product to pay for the development of the next.) Worthy woofers existed, but they had been carefully designed—good woofers do not just happen—to complement tweeters of operating principle similar to their own: a moving coil driving a cone or diaphragm. Most of them, when teamed with electrostatic tweeters, showed irreconcilable variances of phasing, midrange roll-off, transient attack, impedance, and efficiency.

A few, fortunately, worked rather well, earning our recommendation, and it must be said here, with profound respect, that certain ingenious home sound experimenters managed with multiple woofers and special enclosures, to produce sound with which we could find no fault at all, except that it cost them more hours and/or dollars than most people can afford.

Obviously, we still had an obligation, but we had not been delinquent about it. As soon as the 130 was launched, Mr. Janszen and his staff had gone back to work designing a bass speaker to complement it. Silence was imposed until he could be reasonably sure of success; premature mention would have been unfair both to prospective buyers and to other manufacturers. Early last summer he admitted he had something satisfactory, which is for him a wildly enthusiastic statement. We present this product to you, as the JansZen DYNAMIC woofer. It consists of one cone in a special cabinet. It is unique in some particulars. It had to be, because it was conceived, designed, and empirically crafted to work in seamless sonic unison with the 130 tweeter. It does. Expert listening juries have been (happily) unable to detect its point of crossover. Further, it is small, hearteningly inexpensive, and capable of clean, solid bass down to a measured 30 cycles per second. You will be able to buy it either by itself or in a common enclosure with the 130.

Write for literature and the name of your nearest dealer

Product of NESHAMINY ELECTRONIC CORP., Neshaminy, Pa.

Export Division: 25 Warren Street, N.Y.C. 7, Cable Simonrice, N.Y.

BOOKS IN REVIEW

Continued from preceding page

a "definitive" biography, of course, for it devotes comparatively little space to Toscanini's career in the United States and makes no attempt at critical analyses of his performances. But it is uniquely valuable, for the American reader at least, in its extensive documentation of Toscanini's early and mid-career—especially Italian—years.

What probably will make Sacchi's book a popular favorite is its combination of fast-moving yet informative narration and a wealth of human-interest anecdotes. Yet for me it is most significant in its oblique emphasis on a fact most American idolators of Toscanini seldom remember or are willing to acknowledge: that the Maestro's American years (at least the post-Met ones with the Philharmonic and NBC Symphonies) represent a kind of coda to—rather than peak of—his career. Long before that, during the Scala years in particular, Toscanini's personality, techniques, and interpretative values had acquired unchangeably their distinctive characteristics. Despite all the later triumphs, it is at least arguable that the American concert, broadcast, and disc audiences seldom heard him at his artistic greatest.

This is no place to belabor that argument (except perhaps to suggest that it can be indirectly bolstered by comparing earlier and later recorded versions of works like the Mozart *Haffner* and Haydn *Clock* symphonies, or some of the British and American recordings of the same Beethoven symphonies). Quite regardless of this issue, Sacchi's book is sure to provide new Toscanini insights, and not the least of its merits is the sympathetic portrait it paints of the man himself—one especially valuable as an amplification and revision of the brutal near-caricature of the aged tyrant depicted in Chotzinoff's Toscanini book.

Jazz Vintages & Distillations

André Hodeir's *Jazz: Its Evolution and Essence*, which I missed when it first appeared (translated by David Noakes from the 1951 French original, *Hommes et Problèmes du Jazz*, and published by the Grove Press in a hardbound edition at \$3.50), received so enthusiastic a reception outside as well as within jazz circles, that I eagerly anticipated the current paperback

reprint (Grove "Evergreen" series, \$1.45). I must now report that it proved to be surprisingly hard, if certainly not unrewarding, going.

Yet if I can't promise that you'll find it any easier to read than I did, I emphatically can attest that if you have any serious interest in jazz, you simply can't afford not to expend the close study demanded by Hodeir's tightly organized analyses of jazz styles and their development. For this author, unlike most of those who have written about the same subject, is a thoroughly trained musician in so-called "art" as well as jazz domains, and his book is far superior even to the first of its kind (Sargeant's *Jazz: Hot and Hybrid*, Dutton, 2nd enl. ed. 1946) in that it is written much more from the "inside," as well as being far more ambitious in scope. And, incidentally, if your library includes most of the specific recorded performances (by Armstrong, Ellington, Dickie Wells, Charles Parker, Miles Davis, *et al.*) Hodeir selects for bar-by-bar analysis, you'll find the "going" much easier than I did, since the full value of these pages emerges only in direct conjunction with the sounded music itself. And even the nonjazz discophile can profit by the no-less-discerning explorations of the pseudo-jazz compositions of Ravel, Milhaud, and Stravinsky—the clearest explanation I've found for these works' lack of notable significance either as "serious" or jazz music.

Fanatical sectarians unquestionably will quarrel with many of Hodeir's hierarchies and even more catholic *afficionados* may be baffled by some of his minute distinctions among the vital jazz "essences," but as one who shares some of Hodeir's biases (toward the minimization of both African and New Orleans influences, for example), I found him impressively persuasive. Difficult and specialized as this book is, it is a brilliant source of new illumination on the ancient problems of musical art in general and its most eloquent spokesmen in particular.

GRACE NOTES

Symphony Conductors of the U.S.A. Hope Stoddard interprets her title freely: her detailed story-lives of thirty-two "major" conductors (from Maurice Abravanel to Robert Whitney) and thumbnail biographical sketches of some 428 others (from Henry Aaron to Herbert Zipper) include visitors

Continued on next page

JansZen *Electrostatic*

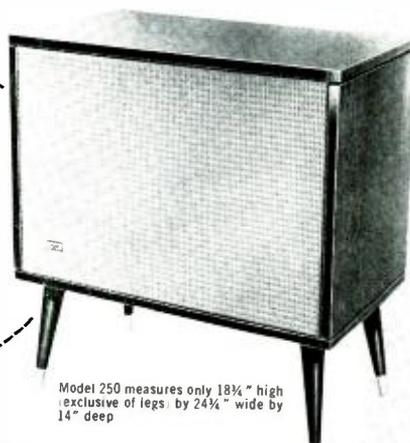


Model 130

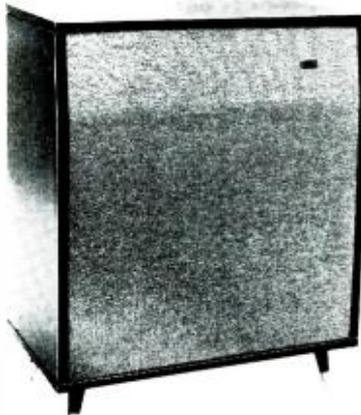
THE MOST
NEARLY PERFECT
LOUDSPEAKER

JansZen DYNAMIC

A NEW
STANDARD
IN CONE
WOOFERS



Model 250 measures only 18 1/4" high exclusive of legs, by 24 1/4" wide by 14" deep



Model Z-200 measures only 32" high (including 4" legs) by 24 1/4" wide by 14" deep

A COMPLETE
RANGE
LOUDSPEAKER
SYSTEM

NOW more than ever...
Hear the Music, not the Speaker

Write for literature and the name of your nearest dealer

Products of **NESHAMINY ELECTRONIC CORP.**, Neshaminy, Pa.

Export Division: 25 Warren Street, N.Y.C. 7 • Cable Simonrice, N.Y.

for the look
as well as the
sound...

house your
components in

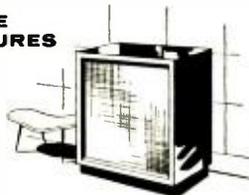
★
WELLCOR

HIGH FIDELITY ENCLOSURES



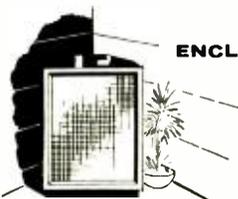
EQUIPMENT CABINETS

Accommodates turntable-changer tuner, amplifier, recorder, storage.



CONSOLE ENCLOSURES

Highest quality acoustic baffling, maximum efficiency.



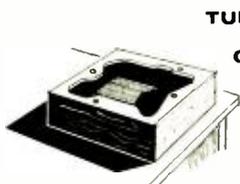
CORNER ENCLOSURES

Ideally suited for minimum space requirement.



SPEAKER KITS

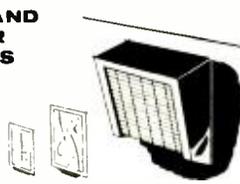
Can be fully assembled in less than five minutes.



TURNTABLE AND CHANGER BASES

Exact fit for all leading models.

WALL AND CORNER BAFFLES



Six sizes to satisfy every need.

Wellcor, suppliers to leading original equipment manufacturers, now offer their own line of acoustically superior enclosures. Tastefully designed in fine wood finishes or heavily embossed leatherette.

Over fifty "in stock" selections. Send for new illustrated literature and name of nearest dealer.



SEE **WELLCOR**

FOR THE LOOK AS WELL AS THE SOUND

WELLCOR inc.

1214 NORTH WELLS
CHICAGO 10

BOOKS IN REVIEW

Continued from preceding page

to as well as citizens of the United States, also a considerable number of those who normally lead orchestras of less than symphonic stature. Miss Stoddard is strong on human-interest anecdotes, often weak on up-to-date career data, and blissfully oblivious of any need for critical values or specific discographic documentation — characteristics hardly permissible in a purportedly adult publication (Crowell, \$5.00).

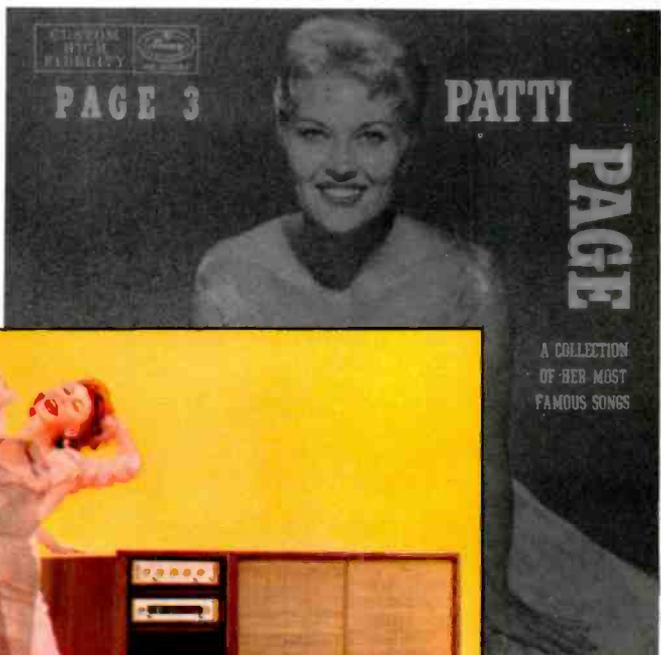
Busoni's Essence of Music. Musical metaphysics *can*, on occasion, closely approach the literal limits of unintelligibility — and if the present essays do not set a new record for approximating those limits, it is only because that dubious honor remains firmly in the grasp of Nicolas Medtner's *The Muse and the Fashion* (as translated by Alfred J. Swan, Haverford College, 1951, via Peters Editions). As a matter of fact, thanks to Rosamond Ley's heroic efforts as translator, there are occasional glints here of true Busonian originality, force, and even humor. But for the most part what he tries to write about himself, other composers, and the music of the future is glimpsed only in the darkest glass of thick Teutonic inarticulateness (Philosophical Library, \$6.00).

Musical ABC's for Eyes, Ears, and Fingers. Do your friends, too, laugh when you sit down at the piano or pretend to read musical notation? The cures for such frustrations are easy (it says here in big print): all you have to do is to profit by the helpful hints of two professors of music who apparently think that untrained music-lovers can be baby-talked into acquiring digital dexterity and musical literacy. Well, maybe so, if you can tolerate the kindergarten approach adopted here (Howard Shanet: *Learn to Read Music*, Simon & Schuster, \$2.50; M. Emmet Wilson: *How to Play by Ear*, Abelard-Schuman, \$3.75).

Basic Mathematics for Radio & Electronics. My first recommendation for the audiophile anxious to review (or learn for the first time) the elements of math most useful for audio practice long has been Nelson Cooke's *Mathematics for Electricians and Radiomen* (McGraw Hill, 1942), but beside or even above it I now must set

Continued on page 59

HIGH FIDELITY MAGAZINE



for Ultimate Fidelity

SHERWOOD*

What do **you** prefer—classical, popular, opera, jazz, folk music? No matter what your preference; no matter what your source of music—your own discs, tape or FM—you will achieve **ultimate** enjoyment from Sherwood's complete home music center . . . most honored of them all!

*Outstanding honors bestowed, unsolicited, by most recognized testing organizations

INTRODUCING

the complete Sherwood music center



- ▶ New S-1000 II—36 watt Amplifier
- ▶ Sensitive FM-AM or FM tuners
- ▶ Unparalleled cabinet design and craftsmanship
- ▶ "Realistic" 3-way speaker systems

You are a music lover, wishing for better music reproduction. Or, you are a Hi-Fi expert, wanting improved sound—greater flexibility. Why Sherwood?

Sherwood is the Ultimate production of engineers who designed Hi-Fi components for a score of nationally-recognized manufacturers—who developed the first FM tuner with AFC. You may rely fully on Sherwood, backed by the industry's longest warranty—1 year! Here is a complete Music Center, including 3-way speaker systems, amplifiers, and tuners, so simple to plug together and operate you'll be amazed.

Tastefully designed for use without cabinets; they may be placed on book shelves, desk top, or chairside table for remote control. Cabinetry speaks for itself—the finest woods, expertly crafted; styled to suit any decor. Technical specifications may be had on request.

SHERWOOD

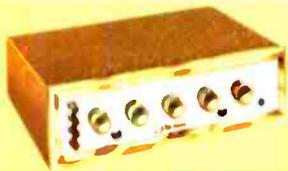
ELECTRONIC LABORATORIES, INC.



Cabinet finishes below.

All Bezels—24 carat gold finished

Dept. 3, 2802 W. Cullom Ave., Chicago 18, Illinois. Export Dept.: 549 W. Washington St., Chicago 6, Illinois



A BROWN FLEXTONE



B BLACK FLEXTONE



C MAHOGANY LEATHERETTE GOLD-TOOLED



D BLACK LEATHERETTE GOLD-TOOLED



E TAN LEATHERETTE GOLD-TOOLED



F WHITE LEATHERETTE GOLD-TOOLED



With New "Presence" Risa Button and DC filaments

S-1000 II—36 Watt Amplifier. This all new amplifier is designed to bring the maximum pleasure to music lovers—the greatest joy to the Hi-Fi expert.

Controls are simple, easy-to-handle, yet complete—include 6-db presence-rise switch, equalizer control for 4 record compensation choices or microphone and tape-

playback equalization, Inverse-feedback type bass and treble controls, Sherwood exclusive "center-set" loudness control, loudness compensation switch, 12-db/octave scratch and rumble filters, phono level control, tape-monitor switch, and selector for 5 inputs (including 2 w/ high-gain pre-amplifier)—all on front panel. Output tube balance control features adjustment without meters. Phono preamp and tone control amp. operated from quick warm-up type DC filament supply. Power Output: 36 watts (72 watts peak) at 1½% IM Distortion (60.7kc/4:1). Outputs: 16, 8, and 4 ohms. Inverse Feedback: 21 db. Frequency Response at 36 w: 20-20,000 cps ± 1½ db. Preamp Sensitivity 2½mv. Preamp noise level: 60 db below rated output. 85 watts, fused, 8 tubes, plus rectifiers. Size: 14 x 10½ x 4 in. high. Shipping weight: 24 lbs.

Model S-1000 II chassis . . . \$109.50; Model A or B . . . \$114.50; Model C . . . \$119.50; Models J, T, or W . . . \$124.50; west of Rockies, add \$3.00 to above prices.



With New "Feather-Ray" Tuning Eye

FM-AM Tuner S-2000, Engineered and styled to match the performance of the incomparable S-1000 II Amplifier, this tuner offers features not previously available in this price range. These include 0.95 uv (20 db quieting) FM sensitivity, cascade 6BS8 balanced Input, automatic frequency control,

flywheel tuning, wide/narrow AM switch, (15-kc "hi-fi" bandwidth or 5-kc selective bandwidth), precision calibrated dial, directable AM rod antenna, cathode-follower output, output level control, FM multiplex output, 10-kc "bridged-T" AM filter. Delayed AGC on FM reduces IM distortion to below ½% at 100% modulation. 11 tubes plus rectifier. New "Feather-Ray" tuning eye. Dimensions: 14 x 10½ x 4 in. high. 47 watts, fused. Shipping Weight: 18 lbs.

Model S-2000 Chassis . . . \$139.50; Model A or B . . . \$144.50; Model C . . . \$149.50; Models J, T, or W . . . \$154.50. Model S-3000—FM Tuner only; same FM specifications as the Model S-2000 PLUS "local-distance" switch to suppress cross-modulation responses.

Model S-3000 chassis . . . \$99.50; Model S-3000 A or B . . . \$104.50; Model C . . . \$109.50; Models J, T, or W . . . \$114.50; west of Rockies, add \$3.00 to above prices.

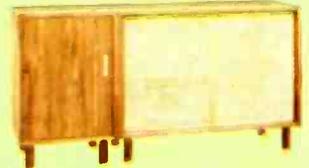
Forester 3-Way Speaker. This speaker system with horn-loaded cabinet is a delight to the woman's distortion-sensitive ear and style-conscious eye. It features a 300-cps crossover network (once obtained only in expensive "dream systems")—reducing intermodulation distortion, eliminating "harshness and fuzziness." Careful balance of the 12-in., 8-in., and 5-in. speakers gives realistic music reproduction. Response: 40-13,500 cps (-5 db); IM dist. 1½% at 25 watts. Tweeter level control.

Low-Boy Cabinet: (featured above) natural walnut or mahogany, (42 x 16 x 27 in. high) \$239.00. Matching equipment cabinet has slide-out phono base, record or extra equipment compartment, 5-in. high amplifier-tuner shelf, with sliding cane doors \$149.50, plain wood or ridged doors extra. (All above, add \$5.00 west of Rockies.)

New Space-Saver System: (shown right) features 15-in., 8-in., and 4-in. speakers with 300 cps crossover in resistive port, bass-reflex enclosure. Details include natural cane

grille, equipment console with push-latch door and fine hardwood finish. Speaker in oil-treated natural walnut, blond or dark mahogany (size: 36 x 16 x 29 in. high) \$239.00; matching equipment console (size: 18 x 16 x 29 in. high) \$109.50.

Speaker system kits with 12, 8 and 5 in. speakers plus crossover—\$89.50. Also available, crossover networks or fly.



BOOKS IN REVIEW

Continued from page 36

a British work originally published by Hiffe in London for the famous journal *Wireless World*, in which parts of it first appeared serially. F. M. Colebrook, the principal author, deals with elementary algebra up through the calculus; J. W. Head is the contributor of two additional chapters on the Heaviside and other more advanced techniques; and both men boast the lucidity characteristic of British writers at their best and providing the best incentive I know to a study admittedly difficult but by no means impossible for even the previously untrained layman to master (Philosophical Library, 3rd ed., \$6.00).

How to Plan and Install Hi-Fi Systems. Another in the long list of magazinelike, profusely illustrated, popular paperbacks, apparently the first of a projected series, which has the merits of an authoritative specialist-writer, Irving Greene, and is particularly useful for its surveys of available commercial equipment, do-it-yourself kits, and literature (Fawcett, 50¢).

The Music Masters, Vol. 4. Shortly after I reviewed (Sept. 1957) Vol. 1 (*From the 16th Century to the Time of Beethoven*) of the reprint series edited by A. L. Bacharach, the fourth and final volume (*The Twentieth Century*) came along, leaving the intermediate two still to appear. The present work, like the others, is a collection of miniature essays dealing primarily with composers' lives and outputs, rather than analyzing in detail the music itself. Fifty-four composers (alphabetically from Barber to Walton, chronologically from Gretchaninov and Strauss, b. 1864, to Britten, b. 1913) are discussed by twenty-one authors, of whom the major contributors are W. R. Anderson with eight pieces (including those on the only four North Americans represented—Barber, Copland, Harris, and Schuman) and Ralph W. Wood with six. Some of the omissions (e. g., Webern) are rather curious and the prevailing point of view is perhaps excessively British; nevertheless there is a lot of useful information on most of the leading contemporary composers presented in conveniently succinct and readable form (Pelican paperback, 95¢). R.D.D.

Special prepublication offer

\$4.45 to HIGH FIDELITY readers

Records in Review

1957

The Third
High Fidelity Annual

Edited by Joan Griffiths, Associate Editor, HIGH FIDELITY Magazine

Here, between the covers of a single volume, is the expert guidance needed by everyone who would make intelligent purchases of LPs and tapes.

This book, the only one of its kind, contains over 900 reviews of classical and semiclassical music, and the spoken word, that have appeared in HIGH FIDELITY Magazine from July 1956 through June 1957. Written by some of this country's distinguished music critics and intended for both instruction and pleasure, the material is arranged for convenient use. An index of performers is included. RECORDS IN REVIEW is published by The Wyeth Press, an affiliate of HIGH FIDELITY Magazine. The book is printed in clear type on fine quality paper, attractively bound and jacketed.

Offer closes November 30 after which date the price will be \$4.95.

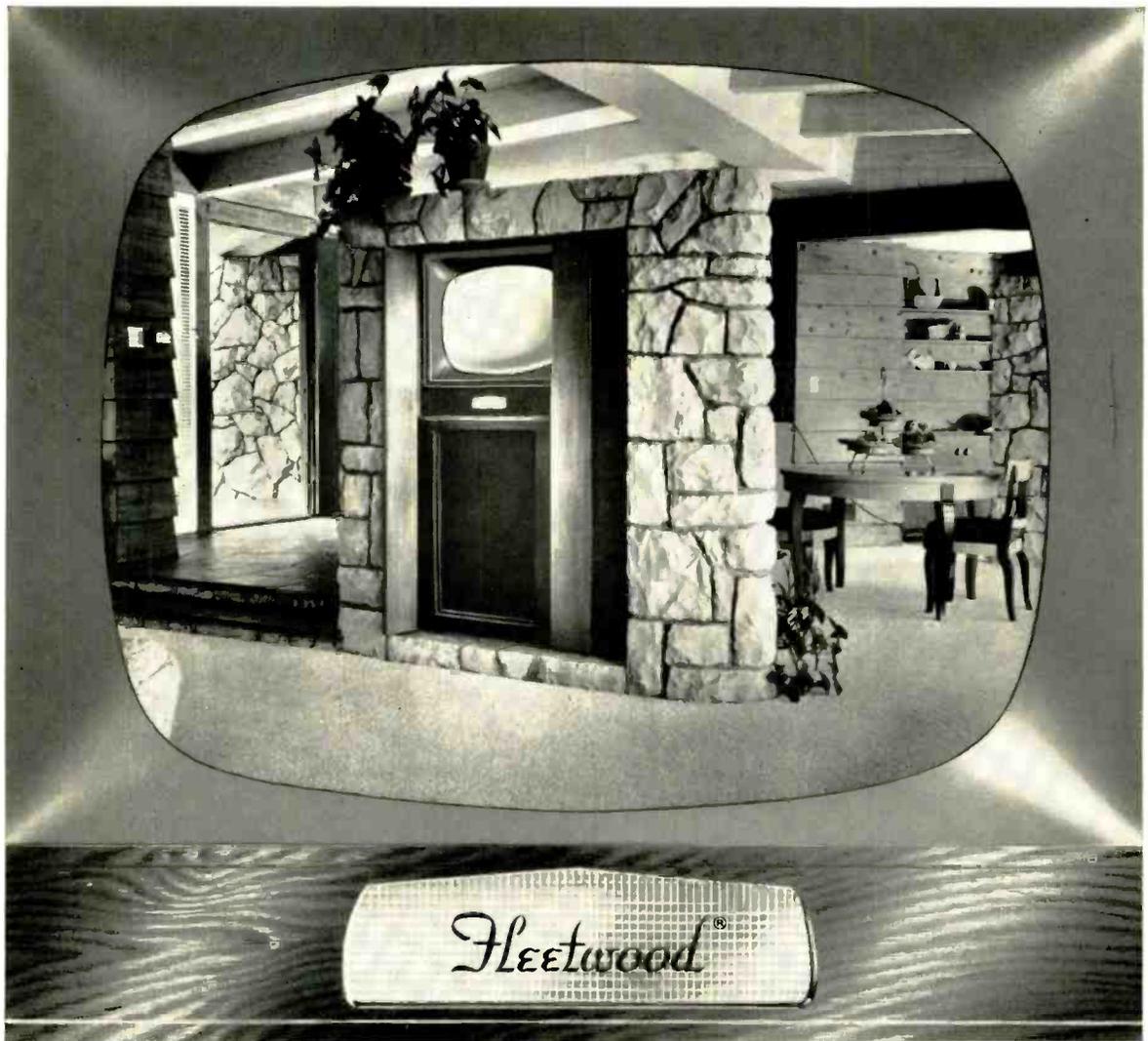
ORDER TODAY

Be sure to order
copies to give as
Christmas gifts
for your music-
loving friends.

The Wyeth Press
Great Barrington, Mass.

I enclose \$ for which please send me, as soon as available, copies of the new RECORDS IN REVIEW at the special prepublication price of \$4.45 each. (No C.O.D.s or charge orders, please.) Foreign orders sent at buyer's risk. Add 55¢ per book for postage on foreign orders except Canadian.

NAME
ADDRESS



...Television That Is Something MORE!

TRULY in tune with high fidelity, Fleetwood Custom Television is the *only television receiver made to complement your high fidelity system and match its quality.* With Fleetwood, you get distortion-free audio outputs that not only complete your sound system, but also make a noticeable difference in television sound quality.

Anywhere you install Fleetwood — *it belongs beautifully!* In a wall, room divider, piece of valued heirloom furniture, bookcase — in the living room, den, kitchen, bedroom, recreation room — Fleetwood installations are unlimited!

Fleetwood's exclusive Definition Control tailors picture texture to suit individual taste — from soft and diffused to sharp and clear. Fleetwood's fully electronic remote control offers you not just channel selection and volume control — but contrast, brightness, volume, channel selection, fine tuning and Definition Control. (Non-remote models are also available.)

Fleetwood is the professional's choice — built to the same high quality standards as the broadcast monitors Fleetwood makes for the major networks. Have your dealer give you a demonstration, and discover television all over again!

Write today for a FREE booklet of installation ideas, complete information and the name of your nearest dealer.

Fleetwood® CUSTOM TELEVISION Crafted by CONRAC, INC., Department A, Glendora, California

Export Division: Frazer & Hansen, Ltd., 301 Clay St., San Francisco, Calif.

ARIZONA

AUDIO SPECIALISTS
333 East Camelback Road, Phoenix
Phone: AMherst 5-0447
NILES RADIO & TV CENTER
400 N. 4th Avenue, Tucson
Phone: MA 3-2537

CALIFORNIA

BERKELEY CUSTOM ELECTRONICS
2302 Roosevelt, Berkeley
Phone: THornwall 3-4180
AUDIO SALES CO.
1209 E. Belmont Ave., Fresno 1
Phone: AD 7-1401
NEWARK ELECTRIC COMPANY
4736 W. Century Blvd., Inglewood
Phone: ORegon 8-5344 ORchard 7-1127
UNIVERSAL DISTRIBUTORS, INC.
4642 W. Century Blvd., Inglewood 2
Phone: ORegon 85509 ORchard 45740
CALIFORNIA SOUND PRODUCTS, INC.
7264 Melrose Avenue, Los Angeles 46
Phone: WEbster 1-1557
CRENSHAW HI-FI CENTER
107 Santa Barbara Plaza, Los Angeles 8
Phone: AXminster 3-8201
**LOS ANGELES PORTABLE
RECORDING ENTERPRISES**
525 No. La Cienega Blvd., Los Angeles 48
Phone: OLeander 5-8664
MIDWAY ELECTRONIC SUPPLY CO.
2817 Crenshaw Blvd., Los Angeles 16
Phone: REpublic 1-2451
CUSTOM AUDIO
2650 Avon Street, Newport Beach
Phone: Liberty 8-8671
GENERAL ELECTRONICS
4156 Piedmont Ave., Oakland
Phone: OLYmpic 5-2711
DOW RADIO, INC.
1759 East Colorado Street, Pasadena 4
Phone: SY 3-1197 RYan 1-6683
SOUTH BAY ELECTRONICS
1907 S. Catalina Ave., Redondo Beach
Phone: Frontier 58215
HOLLYWOOD HI-FI
1839 E. Street, San Bernardino
Phone: 8-36101
HAL COX COMPANY
2598 Lombard Street, San Francisco 23
Phone: WEst 1-3134
MUSIC AND SOUND CO.
222 West Portal Ave., San Francisco 27
Phone: MOntrorse 4-2830
GRACIE'S RECORDS
304 West Third Street, Santa Ana
Phone: KI 3-2684
EMMONS AUDIO EQUIPMENT
12600 Ventura Blvd., Studio City
Phone: PO 1-2989

COLORADO

DEITS BROS.
119 E. Pikes Peak, Colorado Springs
Phone: Melrose 4-8037

CONNECTICUT

DAVID DEAN SMITH
262 Elm Street, New Haven 11
Phone: UNiversity 5-1101
GROVER'S RADIO SHOP
264 W. Main Street, Norwich
Phone: TU 7-0567
WESTLAB ELECTRONICS, INC.
1105 Main Street, Stamford
Phone: FIREside 8-6459
AUDIO WORKSHOP, INC.
1 South Main Street, West Hartford 7
Phone: ADams 3-5041

DISTRICT OF COLUMBIA

SHRADER SOUND, INC.
2803 M Street, N.W., Washington 7
Phone: ADams 4-4730

GEORGIA

BAKER FIDELITY CORP.
1140 Peachtree St., N.E., Atlanta
Phone: TR 52156

ILLINOIS

ALLIED RADIO CORPORATION
100 N. Western Avenue, Chicago 80
Phone: HAYmarket 1-6800
ELECTRONIC EXPEDITERS, INC.
THE HI-FI CENTER
2909 West Devon Avenue, Chicago 45
Phone: RO 4-8640
NEWARK ELECTRIC COMPANY
223 W. Madison Street, Chicago 6
Phone: State 2-2950



Free booklet of *installation ideas available from your*
Fleetwood® dealer or write: Courac, Inc., Dept. A, Glendora, Cal.

ROCKFORD HI-FI
1118 Auburn Street, Rockford
Phone: 3-9169
THE RECORD HI-FI SHOP
Lewis Ave. Shopping Plaza, Waukegan
Phone: ON 2-4445

KANSAS

PHIL WOODBURY SOUND
1103 Commercial, Emporia
Phone: 20
PLAZA TELEVISION
1408 Huntoon, Topeka
Phone: 25007

KENTUCKY

J. M. HISLE AND ASSOCIATES
405 South Upper Street, Lexington
Phone: 2-7884

MARYLAND

HI-FI SHOP
153 No. Mechanic Street, Cumberland
Phone: PArkview 2-0050

MASSACHUSETTS

THE LISTENING POST, INC.
161 Newbury Street, Boston 16
Phone: COpley 7-7530
A & L SOUND CO.
47 Osgood Street, Methuen
Phone: MU 2-0178

MICHIGAN

**AUDIO SUPPLY LABORATORIES
"HI-FI CENTER"**
214 South State Street, Ann Arbor
Phone: NOrmandy 2-7767
K. L. A. LABORATORIES, INC.
7422 Woodward Avenue, Detroit 2
Phone: TRinity 4-1100
R. L. KARN'S ELECTRONICS
910 E. Fulton Street, Grand Rapids 3
Phone: Glendale 8-5869

MINNESOTA

THE MINNESOTA ELECTRONICS CO.
816 LaSalle Ave., Minneapolis 2
Phone: FE 3-0778

MISSOURI

THE HIGH FIDELITY SHOWROOM, INC.
6383 Clayton Road, St. Louis 17
Phone: PArkview 1-6500

NEW HAMPSHIRE

EVANS RADIO, INC.
P.O. Box 312, Route 3A, Bow Junction, Concord
Phone: CA 5-3358

NEW JERSEY

**RADIO ELECTRIC SERVICE CO.
OF NEW JERSEY INC.**
513 Cooper Street, Camden 2
Phone: WOODlawn 4-2830

HI-FI HAVEN
28 Easton Ave., New Brunswick
Phone: CH 9-5130
CASEY HI FI INSTALLATION CORP.
856 Lincoln Place, Teaneck
Phone: TE 6-4200

NEW YORK

NEWMARK & LEWIS, INC.
43 Main Street, Hempstead, L. I.
Phone: IVanhoe 1-6890
PEERLESS RADIO DISTRIBUTORS, INC.
92-32 Merrick Road, Jamaica, L. I. 33
Phone: REpublic 9-6080
HOUSE OF HI-FI
605 Plandome Road, Manhasset, L. I.
Phone: MA 7-1376
ARROW ELECTRONICS, INC.
525 Jericho Turnpike, Mineola
Phone: Ploneer 6-8686
ARROW ELECTRONICS, INC.
65 Cortlandt Street, New York 7
Phone: Dlgby 9-4714
ASCO SOUND CORPORATION
115 West 45th St. (Third Floor), New York 36
Phone: Judson 2-1750

HI-FI HQ

Open Evenings
150 East 46th Street, New York 17
Phone: PLaza 5-2650

LEONARD RADIO, INC.

"AUDIO MART"
69 Cortlandt Street, New York 7
Phone: CO 7-0315

TERMINAL RADIO CORPORATION

85 Cortlandt Street, New York 7
Phone: WOrth 4-3311

CONCERT-CRAFT, INC.

P. O. 66, Brandywine Station, Schenectady 4
Phone: FR 2-8989

W. G. BROWN SOUND EQUIPMENT CORP.

521-27 E. Washington St., Syracuse 2
Phone: 2-8979

WESTLAB ELECTRONICS, INC.

2475 Central Avenue, Yonkers
Phone: SPencer 9-6400

OHIO

AUDIO CRAFT CO.
2915 Prospect Avenue, Cleveland 15
Phone: CHerry 1-5560

COUNTERPOINT

20971 Westgate (Westgate Shopping Center)
Cleveland 26
Phone: ED 1-6448

CUSTOM CLASSICS

13421 Euclid Avenue, East Cleveland 12
Phone: GL 1-0256

PIONEER ELECTRONIC SUPPLY CO.

2115 Prospect, Cleveland 15
Phone: SU 1-9410

DAYTON SOUND ASSOCIATES

1357 Philadelphia Drive, Dayton 6
Phone: RA 5844

RICHARD J. SAUER

CUSTOM ELECTRONICS, INC.
1000 South Main Street, Dayton 9
Phone: ADams 3158

R. S. T. LABS

14511 Granger Road, Maple Heights
Phone: MOntrorse 2-3213

OKLAHOMA

THOMSON SOUND SYSTEMS

423 So. Webster, Norman
Phone: JEFFerson 4-8745

SOUND UNLIMITED

3745 South Peoria, Tulsa 5
Phone: Riverside 2-4308

PENNSYLVANIA

AUDIO LABORATORIES, INC.
808 Mohican Street, Bethlehem
Phone: UNiversity 7-3909

ALMO RADIO CO.

913 Arch Street, Philadelphia 7
Phone: WA 2-5918

TEN CATE ASSOCIATES

6128 Morton Street, Philadelphia 44
Phone: GERMantown 8-5448

RADER & FASIG, INC.

704 Walnut Street, Reading
Phone: 4-7831

RHODE ISLAND

GERTZ, INCORPORATED
257 Adelaide Ave., Providence 7
Phone: STuart 1-4200

TEXAS

GULF COAST ELECTRONICS

1110 Winbern Street, Houston 4
Phone: JACKson 8-1551

WRYE COMPANY, LTD.

2410 W. Alabama, Houston 6
Phone: JA 3-7874

WASHINGTON

HOUSE OF HI-FIDELITY

20TH CENTURY SALES, INC.
1021 W. First Ave., Spokane 4
Phone: MA 4-0801

WISCONSIN

HI-FI HOUSE

523 East Silver Spring Drive, Milwaukee 17
Phone: EDgewood 2-1700

THE HI-FI CENTER, INC.

4236 West Capitol Drive, Milwaukee 16
Phone: UPTown 1-2113

Garrard models change. Garrard ideals do not. Meaningful new features are added. Time-proven features are carefully retained. Gadgets, for the sake of gadgetry, are sternly rejected. The all-important fact to remember is that thirty-five years of experience in designing, testing, and building fine record players, guide us in offering you the present Garrard models.

Garrard

**WORLD'S FINEST
RECORD PLAYING
EQUIPMENT**



**B. I. C.
ENDORSED
QUALITY**

*There's a Garrard for
every high fidelity system*



**Model 301 PROFESSIONAL
TRANSCRIPTION TURNTABLE**
Each speed variable!
Each unit with its own
performance test report. \$89.00



**Model RC98 4-SPEED SUPER
AUTO-MANUAL CHANGER**
Continuous + or - variable
control on all speeds. \$67.50



Model TPA/10 TRANSCRIPTION TONE ARM
—Professional performance.
—Jewel-like construction
and exceptional
versatility. \$24.50



**Model RC88 4-SPEED DELUXE
AUTO-MANUAL CHANGER**
Exclusive pusher platform
protects your records. \$54.50



**Model T Mark II
4-SPEED MANUAL PLAYER**
A superior unit for quality
budget systems. \$32.50



**Model RC121 4-SPEED MIXER
AUTO-MANUAL CHANGER**
Fine performance with economy
and compactness. \$42.50

GARRARD SALES CORPORATION, Dept. GS-27, PORT WASHINGTON, N. Y.

Who'll Pay the Fiddler?

WE LIVE in a heavily subsidized economy. Nearly every kind of productive endeavor in the United States receives some variety of Federal aid. Farmers get price supports. Manufacturers get protective tariffs. Airlines get mail contracts. Shipowners get a whole assortment of preferences. Laborers—at desks and ditches—get unemployment insurance. Oil well operators get tax forgiveness, in benign consideration of the exhaustibility of their strikes. Livestock raisers get grazing rights on public lands. Builders get various guarantees. Truckers get highways. Scientists get research grants. Electric companies get water power. Artists get. . . .

Artists get nothing.

This has been pointed out before, of course, usually more in tones of sorrow than of urgency. Hereafter, I am almost sure, it is going to be pointed out with increasing frequency and with some expectancy of action. There is a complex of reasons for this.

One reason is discussed in a lively and highly readable book by Abram Chasins, published last month by Alfred A. Knopf. Chasins calls his book *Speaking of Pianists*, because he is a pianist himself. But he is also a fine, peppery writer (with a gift for delivering a good scolding and making you like it), and he does not speak only of pianists: by extension he speaks of all performing artists. The main point he makes, in his chapter about government aid for the arts, has to do with the United States' function of leadership in a world divided by ideological war. Belatedly, as Mr. Chasins puts it, this nation has learned (the hard way) that artists can rush in where statesmen fear to tread. Gifts of food and loans of money cannot by themselves win friends; the recipients still may harbor the feeling that they are being bought. The donor nation must show at the same time that it has a heart and a soul, and this it can do most easily—and best—through its arts. Fortunately for us, the Soviet Union has been somewhat purblind and laggardly in this progress. We too are very much behind, but we have made a start. The State Department, through the American National Theater and Academy (ANTA) as contracting agent, now will pay some of the expenses of selected performing artists who want to tour abroad to prove the state of our culture. Not that the Department takes this very seriously. Chasins cites the case of five American musicians who donated their services to a good will tour of West Germany, which ended in a truly triumphal appearance with the Berlin Philharmonic. The next day, at a party, they met a number of American government people stationed locally, all of whom asked politely how the musicians happened to be in Germany and what they were doing in Berlin!

The stepchild status of this aid to the arts is confirmed by its tiny size and peculiar limitations. The whole United

States appropriation for support to the arts last year was only a little more than \$2,000,000, which in turn was a little less than a twentieth of the amount Canadians (of whom there are only 15,000,000) devoted to the same purpose. Further, aid was limited to activities carried on *outside* the United States. By the people in our government, the arts quite plainly are viewed as a kind of esoteric propaganda, which they mistrust and cannot understand. The idea that they could in any sense be considered a staple of domestic diet, necessary to the health of a national culture, has not yet penetrated.

It will. You and I know it must, in time, because it is born of fact. However, you and I represent a sort of vanguard in this area (or I should not be writing on this page and you would not be reading it). The slowness of the advance may distress us—indeed, it ought to, since that is part of the whole process—but it should not surprise us. American civilization has idiosyncracies. Its origins are mainly European, but it, itself, is not. It develops in its own way and its own time.

The original settlers here were mostly Protestant, of puritan or pietist designation, in flight from privilege, inclined toward egalitarianism. Their attitudes were preserved by the rapidity of their spread across a free continent: rurality stabilizes philosophy. The arts in Europe had been the perquisites of privilege, so in the early New England churches there was no room for organs, or for murals. Rurality continued to dominate our properties; in American legend the urbanite, the banker, the European was always the villain. Wealth developed, and with it, inevitably, art developed, but in a sort of secret way. The businessman could help pay for opera, but he had to portray himself as sleeping through performances. Attentiveness, in this instance, would not have been a homely virtue, and in a society where farmers and mechanics vote your taxes, your virtues had best be homely ones. Politicians, of course, were (and still are) even more timid. Devoting public funds to insuring a supply of good cellists would have seemed insanity, a couple of decades ago, and probably it would have been.

Times have changed, *very* rapidly. Suddenly we are no longer a rural nation, even in our thinking. The farmer's daughter can talk quite seriously about taking up ballet, and nobody laughs, or frowns. And I have a feeling that a legislator could speak up, also quite seriously, to suggest that good cellists were just as needful to the nation as good electronics technicians, and that no one would laugh. Perhaps I am speaking prematurely. But the electronic instruments we (the restricted "we," again) are most interested in wouldn't be much use, would they, if we ran out of cellists? Any more than our automobiles would be if we ran out of highways. So what do we do about it? J.M.C.



The Natural History of the Orchestra

by **NORMAN PICKERING**

MOLIÈRE once called opera the most expensive of all noises. Perhaps it is, but the symphony orchestra of today is not far behind. Advances in high-quality recording have greatly stimulated public demand for symphonic music, yet the economic situation of even our leading symphony orchestras remains precarious. As a practical institution measured in the usual terms, the symphony orchestra is not successful, despite an ever-growing audience and literature. A guess as to the probable future development of symphonic music naturally leads us first into a review of the past.

It is to be assumed that very early in the development of musical instruments, players began to appreciate the pleasures of group musical activ-

ity. The earliest historical references to the concerted use of musical instruments date from the early fourteenth century, though there was never any clear distinction made between voices and instruments. No scores of music for instruments survive from that period, and it is fairly certain that separate parts for instruments were unknown. The primitive construction of the instruments made it impossible for them to perform anything but the simplest melodies, and even those must have been woefully out of tune. Lists of musical instruments owned by several royal courts are still in existence, but many of the names, such as rebec and cornemuse, sound foreign to our ears. Those names which do coincide with nomenclature for modern instruments, such as trumpet and flute, refer to devices which bore very little resemblance to their modern counterparts. Only the trombone and drums are acoustically equivalent to their medieval ancestors.

By the year 1500 orchestras had become quite common and were used as a matter of course on every festive occasion. There was no clear distinction, as we know it



The author, a pioneer in modern audio development, now a manufacturer of precision timing devices, is also an accomplished musician. He has played French horn with a major orchestra, and both horn and viola with various leading chamber-music groups.

today, between an orchestra and a band. From the instrumentation apparently used, the sound must have been much more predominantly that of the wind instruments than is the sound of the modern orchestra, based on strings. The inventory of Henry VIII for 1547 lists sixty-four stringed instruments and 215 wind instruments. There is no indication of the proportions in which they were used when played together. Further, there was absolutely no standardization of instrumentation; the same part was likely to be used for strings, winds, or voices. Doubling of parts must have been regular practice, for safety's sake as much as anything.

It must be stressed that the early orchestras and bands gathered around a keyboard instrument, very much as an impromptu group of players may do today. The conductor, if he could be dignified by such a title, was invariably at the keyboard and often improvised the music as he went along. Later it became the practice, when "composed" music became more common, for the keyboard player to jot down the line of the music as a figured bass—a sort

of shorthand notation. There are several references in the literature of the time to counterpoint *alla mente*, the performance of individual variations on a tune given out by the leader of the group—a practice almost identical with that we find today in accomplished dance orchestras.

Little by little, the strings settled into the position of dominance they now enjoy. Violins, violas, and cellos replaced the viols, a family of which only the bass member is still active. The group of strings is now practically invariant, experimental efforts of some composers notwithstanding.

The winds, on the other hand, never have become standardized to a like extent. Indeed, one of the great difficulties in surmising how orchestras of the past have sounded lies in connecting the names of the wind instruments with the instruments themselves. Few early specimens are in playable condition today. Mouthpieces and reeds have been lost, and there is no possible way to reconstruct them with any exactitude. Moreover, though instruments were modified, the names of their prototypes remained in use, so that over the centuries their inconsistencies in nomenclature gradually became an impassable barrier to the historian.

It is obvious that the basic structure of the orchestra derived from the natural division of the human voice—soprano, alto, tenor, bass. Orchestrally the division has not always been made exactly in this way, nor has the highest voice always been the most important, but the essential excellence of the quartet was established in antiquity. As instrumentalists improved their techniques and instrument makers improved the tools, the forces separating instrumental music from vocal music increased greatly. The compass of instrumental sounds began to exceed that of the voices in both directions and the execution of florid passages became possible even for average players. Invention was common; new sounds were attempted by the more accomplished players; and, of the endless variety of such sounds, those survived which pleased the listener. With every such advance in technique came the usual cry of "corruption," "vulgarity," and the other epithets still used to describe innovations.

It is perfectly obvious that an extension of the ability of an instrument to make sounds has no necessary relationship to its ability to communicate aesthetic pleasure. Great composers have been required in each generation to formalize and direct the aimless discoveries of instrumental tinkerers, elevating what was trivial and commonplace to the very pinnacle of artistic accomplishment. It must be emphasized that the truly great composers have always been very much more concerned with the thematic content of their material than with the exact manner in which it was presented. Great art has never lived on effect; without superb structure no musical composition can have more

than surface appeal. Mozart's symphonies remain grand when performed by four hands on a piano; the lush texture of the greatest symphony orchestra cannot make an art work out of dinner music.

The less-than-great composers have consistently attempted to substitute skill in orchestration for real merit in musical ideas, and have managed to impress most of the people most of the time. It is possible that a majority of the listeners never progress beyond sheer sensuous pleasure in orchestral sound. This is as it always has been, since the historians tell us that it was occasional practice as early as the sixteenth and seventeenth centuries to use extraneous sound effects in conjunction with orchestral music. Some curious absurdities survive. There are scores which require cannons and bombs, as well as wind machines, imitations of animal sounds, and other such devices to please the popular taste. In this respect composition has not changed in four centuries—Strauss uses the wind machine in *Don Quixote*; Respighi calls for a recording of night-ingales in *The Pines of Rome*.

The greatness of the classical symphonic composers lies in their arrangement of the chaotic elements of the orchestra into a strict order. An essential step in this process was the consideration of order within order, so that music could be composed with regard to the player and his instrument. This may seem exceedingly naïve, but it represented an enormous advance in the development of our modern orchestral style. For the first time music began to appear which was indigenous to the instrument for which it was composed, and the characteristic personalities of the instruments began to emerge. Bach, in his concertos and solo sonatas, Mozart and Haydn, in their instrumental music, forced the adoption of a highly evolved and relatively standard instrumental technique. This in turn made possible the formation of orchestras with a consistent ability to perform what was required of them.

Of course, change did not stop. Some of the oddities of the eighteenth and early nineteenth century remind us constantly that such music is performed today on instruments substantially different from those for which the music was composed. It is not at all certain that a modern performance of a classical orchestral work conveys to the listener what the composer heard. In some cases the differences can be established and corrected, as by reducing the size of the string group, but a reversion to the crude, early forms of wind instruments would probably not be considered an improvement by contemporary symphony audiences, let alone the wind players themselves.

The real puzzle for the musical historian lies in the fact that many compositions of early periods are almost unplayable on today's improved instruments! Bach's florid trumpet and flute passages, for instance, are more than a match for any but the finest players of today. One cannot help wondering if such music actually was performed at all—as written—in his day, or if so, how it possibly could have evoked pleasure, in view of the then-prevailing instrumental standards. The intonation *must* have been

poor most of the time. Yet Mozart's letters express pleasure at the playing of orchestras in Leipzig and Paris, and surely a person of his sensitivity and genius would have been offended at bad intonation. We can only conclude that first-class players were enormously accomplished and capable of compensating for the inherent acoustical aberrations of their instruments. For the average player it must have been difficult enough merely to play the notes; intonation or beauty of expression could not have occupied much of his concern.

It is provocative to speculate on the limitations of the classical orchestra and their effect on the work of the great classical composers. There is some merit in the assumption that the greater the difficulties overcome, the greater the value of the art work produced. The fact that horns and trumpets were restricted to a dozen notes or so, all in the same key, was patently a challenge to Mozart, Haydn, Beethoven, and their contemporaries. The charm of their orchestra-

tion resides largely in the consummate skill with which they turned these disadvantages into triumphs of instrumental expression. The personalities of the individual instruments emerge clearly defined and always consistent. Like the great dramatic figures in literature, they are never made to utter a line or a word which is out of character.

This "impedance concept" in artistic creation is most attractive to contemplate. It might explain why the very greatest music is not—speaking generally—that written for the symphony orchestra, and why the string quartet, piano, and violin have brought forth some of the most splendid compositions and performances. This is the sort of statement which generates great balls of fire in any musical discussion, but one which appears to bear up fairly well under critical attack. Very complex utterances produced by simple means delight the connoisseur far more than ideas communicated through unlimited means.

On the basis of this theory, the next step in orchestral development must be considered more than an evolutionary one. The co-operation of composers, executants, and instrument makers produced a situation, before the middle of the nineteenth century, in which every melodic orchestral instrument had a complete chromatic scale of at least two and a half octaves. Not every instrumentalist equipped himself at once with the new instruments, however. In orchestral playing, more than in most trades, tradition is deeply rooted, and the many years of practice on a familiar instrument make radical changes almost impossible. It takes a couple of generations for the new instruments and techniques to take hold, and even then many good ideas die for lack of trial and support.

In the 1830s came Hector Berlioz, to force upon the entire world of the symphony orchestra a new way of thinking, and to initiate the universal adoption of chromatic instruments. Although for the past hundred years this revolution has generally been considered a blessing to orchestral music, like all other revolutions it destroyed a great deal of what was good in the earlier heritage. Composers, freed from the restrictions of the old days, began



to rely more upon the effect of tone color and instrumental virtuosity than on the basic structure and thematic development of their music to impress their audiences. Impress them they did, since the stunning splendor of the latter-day symphony orchestra was overwhelming even when uttering banalities.

This does not advance the thesis that popular taste in the classical era was any better than popular taste ever has been; it merely suggests that the orchestra, like most other achievements of mankind, lost something of its essential excellence when its technical capabilities multiplied so rapidly. Through this period there remained reactionary composers, tied firmly to the past but quite capable of understanding the new. Mendelssohn, Schumann, and Brahms in no way stretched the boundaries of orchestral technique, yet fully explored all the circumscribed area. It was the Berlioz-Wagner-Strauss line of succession that forced the development of advanced techniques, carried to such incredible heights in the orchestrations of Stravinsky.

We stand now but a little way back from the edge of another opening chasm, which appears to be even wider and deeper than the one bridged in the past century. The electronic age, with the microphone and tape recorder, has presented us with tools so powerful that contemplation of the possible developments leads the imaginative intellect through "caverns measureless to man." Applications of audio techniques to conventional music production suggest themselves on all sides. The very nature of the communicative process has changed already. Orchestras now reach many more people through their recordings than they do in live performances, although there is hardly any resemblance between the effect of personal contact with the orchestra and that of its preserved sound issuing from loudspeakers. Psychological factors too complex to consider here make the social aspects of concert hall attendance an important item in the enjoyment or nonenjoyment of live performances and there are many today who aver a *preference* for recordings.

Some may feel, with sublime confidence in the audio engineers, that it will not be long before complete and perfect re-creation of orchestral sound in the home is possible. Yet there are among the most knowledgeable audio experts those who assert that facsimile reproduction of orchestral sound outside the concert hall will always be an impossibility, since an orchestra and its acoustical environment are one. Still another group worries far less about the degree to which nuances of tone color are transmitted than about the success with which musical thought is conveyed to the listener. As Howard Hanson once remarked, some sound systems merely remind the listener of music — but sometimes this is all that is required. In fact, a really cultivated musical mind derives much pleasure from the "auralization" of a printed score. Leaving out the extreme cases, we may conclude that the bulk of the listening audience will always derive pleasure from reasonably well-reproduced performances of the orchestral literature. And

the growth of this audience is bound to affect music's future one way or another.

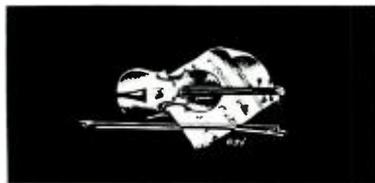
LET US examine the economics of record making. There is more than a little name worshiping in the field of serious music, just as in jazz or baseball. Some artists, composers, and orchestras "sell"; others do not. In the case of an orchestra, much of this prestige must be won on the live concert stage. A record buyer who never has heard the Vienna Philharmonic Orchestra still takes assurance from its name on a label. A company that "borrows" the V.P.O. to record it under a pseudonym always takes pains to "leak" its real identity. It is doubtful, thus, whether any effort to make full use of electronic techniques to reduce the cost of making symphonic recordings would be commercially successful, though the artistic and acoustical results might be all that were desired. A reduction in the number of players could most certainly be compensated for in the microphone techniques, and in many cases would result in a clarity of execution superior to what we get now. Permanent orchestras formed solely for recording purposes could develop instrumental techniques not applicable to the concert hall. Loudness balance would be a different and easier problem than in the concert hall, and judicious rescoring would clarify the musical line in some instances. Some such attempts have been made by Stokowski and others, though in general the methods used have not produced optimum results and the recordings so made have not been impressively successful commercially. So — as of now — the established artist or organization remains the prime source of most recorded music.

It is of interest, however, to observe what recording already has done for the literature of music. There is no doubt, for instance, that the more learned musical audience is becoming increasingly aware of the rich treasures in pre-Bach music. Further, such music, which demands little in the way of instrumental resources for satisfactory performance, fares very well indeed during the recording and reproduction process. For this small segment of the listening audience, therefore, recording in its present state is eminently satisfying and, quite paradoxically, has caused a revival of ancient music which had been written off as a total

loss by our grandfathers. Musically speaking, this is probably the greatest contribution of modern recording.

On the other hand, with regard to recorded performances of the "standard" orchestral repertoire, there is a lamentable overproduction of the acknowledged masterworks. It takes some time in the case of the really great works, but enough repeated hearings of any one piece of music will produce sickening boredom as inevitably as happens with any other too-often-repeated sensation. This is one of the truly unfortunate results of recording, although the harm is done not to the work, as some critics have insisted, but to the listener.

Continued on page 144



LOUIS MELANCON



As Violetta in La Traviata.

RENATA TEBALDI

Portrait of a model Prima Donna

by FRANCIS ROBINSON

WHEN THE HISTORY of this generation in America finally is written—Auden and Bernstein call it “the age of anxiety” but others of us are willing to let it go merely as “the age of inconvenience”—some graduate student in sociology is going to have a wonderful time. He is going to turn in a hell of a thesis on the phenomena of a pair of our biggest draws in the theater (which for our purposes here means also the movies) and serious music. They are Ingrid Bergman and Renata Tebaldi, and in some ways they are strikingly similar. Each radiates the same high health and spirits. Both have that scrubbed look. With no stuffiness or self-consciousness whatever, they appeal to our so-called better natures.

Miss Bergman burst upon us in the years immediately preceding World War II. One overcome reporter compared her to a Swedish snowfall. Much was made of her aura of cleanliness. “The Palmolive Garbo,” a famous Hollywood producer described her. “The way they carry on,” a jaundiced New York critic observed, “you would think no other actress ever took a bath.” Her fans, as the public has a way of doing, spoke the final word. “She is,” they chorused, “so natural.” Where did that leave the mascara-ed stars of yesteryear? Since when did a successful actress get that way by being “natural?”

May we, for a moment, work around the glorious voice, the patrician style, long enough to say this is precisely the hold Renata Tebaldi exerts on the public. To continue:

“To the average male, Bergman is a restful sight,” wrote the Hollywood correspondent of *The New York Times* when Ingrid’s name was illuminating three first-run Broadway marquees simultaneously—about the time, incidentally, that Miss Tebaldi was coming out in Italy. He went on to rhapsodize over “the rounded forearms, made for cradling children, kneading dough, or doing a day’s washing.” “She is,” he concluded, “Hollywood’s closest approximation of the girl ‘like mother used to be’—assuming, of course, that mother was quite a girl.”

This effusion came to mind during Miss Tebaldi’s first weeks at the Metropolitan. She was to sing for Mrs. William Randolph Hearst’s annual Free Milk Fund benefit. As usual, one of the wee beneficiaries of Mrs. Hearst’s pet charity was trundled down to the opera house for pictures with the prima donna at rehearsal. Usually the diminutive model is, if anything, more bored than the diva by these exercises, but this time the little one screamed bloody murder. The air was blue with his cries. When all else failed and it looked as though the sitting would end in chaos, Miss Tebaldi took over. Gathering the reluctant subject to her beautiful breast, she murmured a few quieting words. The baby must have been Italian (at that point Miss Tebaldi couldn’t even order two soft-boiled eggs in English), for the wailing ceased. It would be going too far to say that peace reigned, but at least the desired photographs got taken.

Miss Tebaldi has this self-same soothing effect on an audience—that is, until the last notes of an aria or the

end of an act or the final curtain. Then pandemonium breaks loose. At her second performance last season, a *Tosca* with Jussi Bjoerling, she and the tenor broke the known house record for curtain calls. Nobody is around to say how many Caruso used to take, Flagstad and Melchior may have garnered more; but in this generation no other artist has kept the customers around so long.

It also might be said that the performance broke the house box-office record at so-called regular prices—bringing in just two dollars short of \$20,000. In fairness it must be added this was an open or nonsubscription performance when the house is scaled a little higher: and it was not the first *Tosca* of the season, so the full press list (thirty pairs on first performances, only half that number on succeeding ones) had not been pulled. Notwithstanding, it was still a remarkable financial success.

In this country alone Tebaldi has sold as of last March 588,689 records. London Records estimates that the United States accounts for about forty-five per cent of the world market. Thus probably she can quite safely be credited with membership in the million record club. She was signed by London Decca in 1947 though an option for her services existed from the year before. A few 78s were made at that time. Her first major recording session, however, took place in 1949 in Victoria Hall, Geneva. The product of those takes (LL-142) is still available and has never slipped from the best-seller list. There have been three more solo recitals, including the wonderful collection of songs (any library without *La Promessa* and *Lungi dal caro bene* is not complete), a disc of duets with Del Monaco, last season's concert with Simionato and Bastianini from the stage of the Chicago Opera House, and ten complete operas. There is another solo operatic recital to be issued soon, and last summer for London she recorded *Andrea Chénier*, with Del Monaco and Bastianini. Her *Cavalleria rusticana* with Bjoerling is to be issued by RCA Victor. Tebaldi herself is, however, not notably a discophile. She has no outstanding preference among recorded artists, and she hasn't time for phonographic antiquities. Her conceptions are her own.

Renata Tebaldi was born in Pesaro, Rossini's birthplace, which may be one reason she sings "*Selva opaca*" from *William Tell* more beautifully than anyone else in the world today. It may also account somewhat for her sure musicianship. The soil and air are different in that part of the world; apparently there is magic in the flat stretch of country through which the Po flows leisurely toward the Adriatic. Surely there must be something more than accident in the fact that Toscanini and Verdi and Stradivarius, not to mention any number of fine singers, all come from within a few miles of one another.

Tebaldi's father was a cellist in the opera houses of Pesaro and Parma. Her mother, who is her constant companion, is also musical though she never has been a professional. Renata grew up at Langhirano, near Parma, and like Galli-Curci was headed toward a career as a pianist. For six years she studied at the keyboard before it was discovered she had a voice. Her first singing masters were Campo Galliani and Giuseppe Pais. At eighteen she entered Parma Conservatory, the alma mater of Toscanini,

who was to play such an important role in her artistic life. She studied three years with Carmen Melis, the Sardinian soprano, who had performed with the Chicago Opera Company and who, for HMV, sang the title role in the first full-length recording of *Tosca*.

In 1944 the Parma Conservatory was bombed and had to close. Tebaldi left without receiving her diploma. On May 23 of that year she made her debut at Rovigo as Helen in *Mefistofele*. Her big break came in the spring of 1946 when she was summoned from Brescia to sing before Toscanini, who was preparing a concert for the opening of the rebuilt Scala.

"I sang '*La mamma morta*' from *Andrea Chénier* and then the Maestro let me sing the whole last act of *Otello*. He said, '*Brava, brava*,' and told his son Walter to take my name and address," she recalls. Of six artists chosen to sing at the reopening of La Scala, Tebaldi was the only new one. She did excerpts from Rossini's *Mosè*, including the prayer.

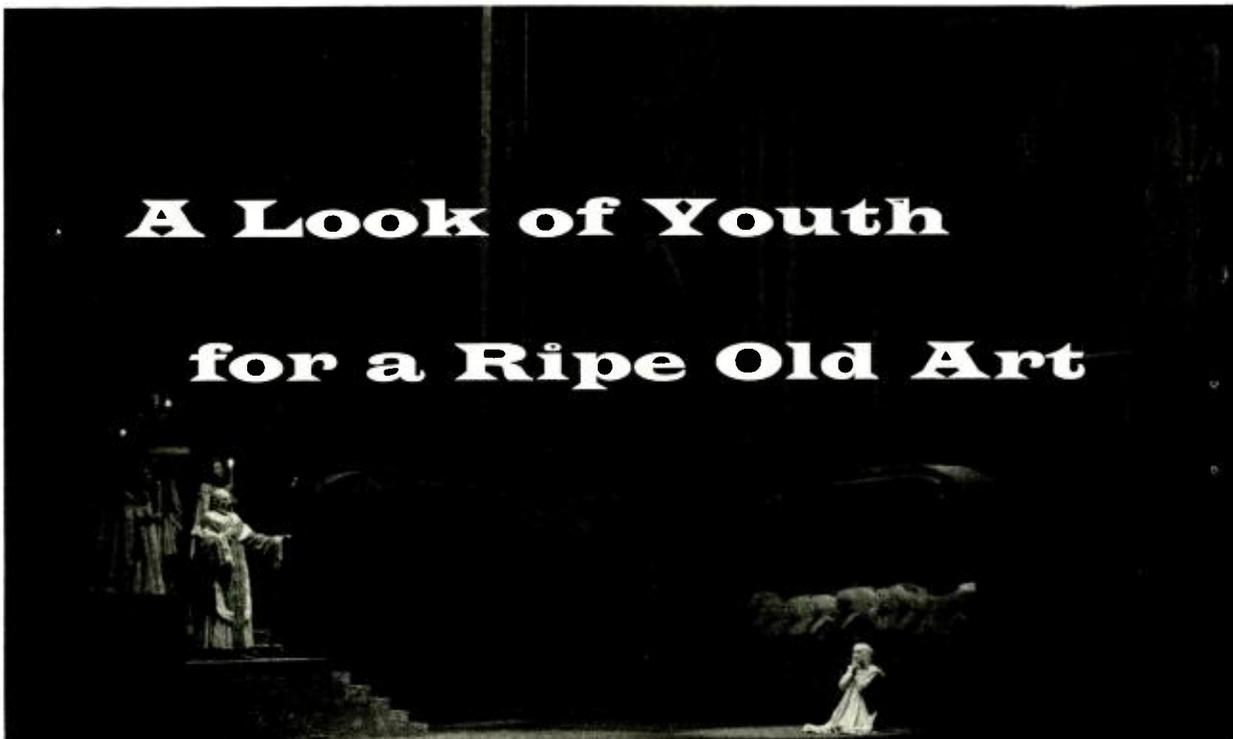
Engagements followed in Naples, Trieste, Barcelona, Rio de Janeiro, Sao Paulo, and Buenos Aires, and more in Milan. Under Tullio Serafin she sang *Die Meistersinger* at La Scala and journeyed with the troupe to Edinburgh and London for performances of the Verdi *Requiem* and *Otello* at the Festival and Covent Garden. Twice she had the honor of opening the season at La Scala, first as Desdemona and later in the title role of Catalani's *La Wally*. In Naples she is, if anything, more popular than in Milan and it was there, during the Verdi celebration of 1951, that she sang the first performance anywhere in more than a century of *Giovanna d'Arco*. In this little known work she also appeared with the San Carlo company in Paris. Other such rare items in the Tebaldi repertoire are Rossini's *L'Assedio di Cortina* and Spontini's *Olympia*, which she sang at the Florence Festivals of 1948 and 1949; Handel's *Giulio Cesare*, which she performed in the old Roman theater at Pompeii; Casavola's *Salammbô*, sung in Rome; Spontini's *Fernando Cortez*; and Verdi's *Simon Boccanegra*.

Tebaldi's first American Continued on page 150



SEGE LEBLANG
A rehearsal for Verdi's *Otello*, with Fritz Stiedry conducting.

A Look of Youth for a Ripe Old Art



Scala production of Prokofiev's *Angel of Fire*, with settings by Luciano Damiani and costumes by Ezio Frigerio.

by William Weaver

Traditionally, on Italy's opera stages, the singer was boss, and focus of all attention. In the last decade, however, directors and designers have been moving in, to transform an art that was vocal into one that is visual as well.

“OF COURSE Tebaldi was in good form, but I couldn't stand that running brook in the last act,” a Roman critic remarked, leaving a performance of *La forza del destino* a couple of seasons ago. Not only was his criticism perfectly accurate (the brook seemed made of old newspapers and it rustled), but what's more, it is an index of the importance now given to production here, by both critics and the general public as well. No longer are mediocre sets greeted by polite applause; especially since the war, Italian audiences have developed a taste for good scenery and sensitive direction.

The arguments that rage here (as elsewhere) over the respective merits of Callas and Tebaldi are no more fierce than those over La Scala's new staging of *La traviata* or *La sonnambula*. As it happens, both of these productions are the work of Luchino Visconti, Italy's most brilliant and controversial director, the dean—though at fifty, he looks far too young for that title—of a new and intriguing generation of directors and designers who are currently having an enormous impact on opera in its historic homeland.

Pre-war productions still survive, here and there, in Italy, and from them, as from old photographs, one can form a fairly clear idea of what opera looked like before the recent change. Most of the sets were of the familiar, serviceable “realistic” school, the kind we were used to in New York, simple and unoffensive. There also existed some arty productions, where Futurist painters daubed “colorful” backdrops or arranged pseudo-Appia simpli-

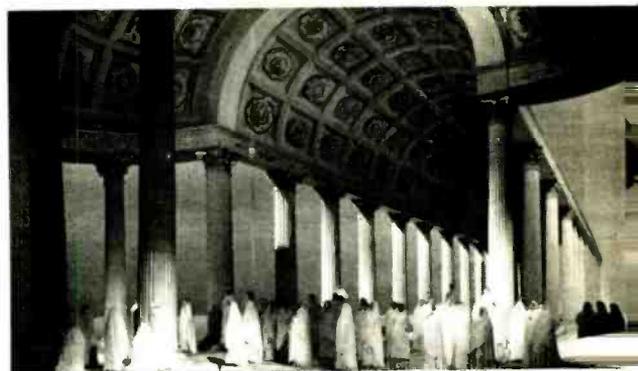
fications, which may have had artistic value in themselves but bore little relationship to the operas whose effect they were intended to enhance.

Visconti has paced the change. Although he has had a considerable career in the theater, it was only recently that he turned to directing opera. His production of *La vestale* at La Scala in 1954 at once revealed his aims, and it has set the tone for a number of subsequent important productions. Parenthetically, many directors coming to opera from the "straight" theater try to impose a kind of false realism upon a medium which by its very nature cannot be realistic; as if embarrassed by the fact that the characters are singing instead of speaking, these directors fill the stage with frantic supers, keep the unwieldy chorus on the move, invent constant business for the singers (giving them things to toy with during their main airs), and so on. In *La vestale*, the heroic music was accompanied by a minimum of distracting stage movement. The chorus was disposed in pleasing, unregimented groups. The singers stood still during their big airs, or confined themselves to a few simple, classic gestures. The result was a performance really moving in both literal and figurative senses of the word.

The fact is that Visconti—like the best of his colleagues in Italy today—regards opera as opera, a form with its own unique requirements and problems, to be resolved *operatically*. What is right for *La vestale* would be wrong for *La traviata*; and in fact for the latter, Visconti worked out a production entirely different from that for Spontini's opera. Miracle of miracles, the two party scenes actually looked like real parties, the guests appeared to be having fun, and the heroic, almost static Callas of *La vestale* became a volatile, brilliant, quicksilver Violetta. Similarly, *La sonnambula* and the recent revival of Donizetti's *Anna Bolena* had each its own tone, appropriate to the peculiar nature of the work.

Not the least among Visconti's talents is his gift for discovering talent in others. His encouragement and example have helped enormously in creating this group of young men, most of them in their late twenties or early thirties, who are effecting a quiet but glorious revolution in Italian opera houses. For *La vestale*, Visconti selected as his designer Pietro Zuffi, who created a noble setting, inspired not by ancient Rome, but by the neo-classicism of Spontini's contemporaries Canova and David. In *La sonnambula*, Piero Tosi, a young Florentine designer, evoked a pastoral, post-card Switzerland, as tender and lovely as the Bellini music it framed. At least two of Visconti's former assistant directors have become important directors in their own right, notably Franco Enriquez and Franco Zeffirelli (who is also his own designer).

Since *La sonnambula*, Tosi has dedicated himself primarily to the legitimate theater (where he designed a breath-taking *Uncle Vanya*), but Pietro Zuffi has gone on to do a number of things for the major Italian opera houses, and also has worked outside Italy. He is particularly good at "grand" opera, and has designed sets for a number of Gluck works, as well as for *Aida*, which opened La Scala's season last year. La Scala also borrowed his sets for Handel's *Giulio Cesare* from the Rome opera, with virtually the same cast that had sung there. The opera was well received both in Rome and Milan; typical of Zuffi's work, the



Four sets at La Scala. Above: *La vestale*, with settings and costumes by Pietro Zuffi.



La traviata—*Flora's house*—directed by Visconti, sets and costumes by Lila de Nobile.



La sonnambula, also directed by Luchino Visconti, with sets and costumes by Piero Tosi.



Il Turco in Italia: Franco Zeffirelli both directed and designed settings and costumes.

production adheres to the spirit of the music. The sets have less to do with Republican Rome than they have with Italian Baroque: gilded armor lies in elegant heaps, as if arranged by Bernini, and the costumes are imposing—though not cumbersome—in blending shades of dull gold and beige, with an occasional splash of noble purple.

Since his work with Visconti, Zuffi has been associated most frequently with Franco Enriquez, a twenty-nine-year-old Florentine, who began his directing career as an assistant to Visconti in the legitimate theater. Endowed with a keen musical sense, Enriquez also worked with Carl Ebert in Glyndebourne and with Herbert Graf during Florence's *maggio musicale*. He also was the first director called upon by Italian TV to direct operas for the tiny screen, producing a number of remarkable, TV-sized conceptions. For the most part, his work in the major Italian opera houses has been equally successful; he has a gift for tasteful staging of standard works, and his production of Puccini's *Manon Lescaut* for La Scala is a masterpiece of tact—a quality that even good directors often lack. He also has worked at the Piccola Scala, staging there Falla's charming *El Retablo de Maese Pedro* (with sets by the Scala's house designer, Nicola Benois) and the world première of Riccardo Malipiero's comic one-acter *La donna è mobile* (set by a new designer, Franco Rognoni).

Another scene of Enriquez's activities is Naples' charming little Teatro di Corte, the theater in the royal palace of the Bourbons, where he staged Rossini's *Il Turco in Italia* in 1955. The designer for this production was twenty-six-year-old Pierluigi Pizzi, who in the last five or six years has had a phenomenal career in the Italian theater. His first opera production, in 1952, was a *Don Giovanni* for Genoa's Teatro Carlo Felice (a small and not wealthy theater which has been especially bold about engaging young people). Since then he has worked considerably in Genoa, Bologna, Naples, Rome, and last season, at La Scala, where he designed an attractive pastel *Il signor bruschino*. Pizzi's work is notable for its grace and wit, and he is especially at home in the comic operas of the eighteenth and nineteenth century. Both the Teatro di Corte and the Piccola Scala were created with the idea of reviving neglected works from that rich period of Italian opera, and Pizzi—who set a sprightly black-and-white *La serva padrona* and an airy *La locandiera*, by Auletta (both staged by Enriquez)—has been an important element in this valuable series.

Franco Zeffirelli, also very young, is another designer with a gift for re-creating the elegant and carefree mood of the great Italian masters of *opera buffa*. His *La Scala Turco in Italia* (with Callas), which he directed as well as designed, revealed a delicately tinted Naples, reproduced from that city's famous nineteenth-century *gouaches*; and his last year's production of Piccinni's *La Cecchina, ossia la buona figliuola* at the Piccola Scala was an entrancing re-creation of an eighteenth-century theater, with visible floor boards, painted wings and backdrops, and costumes inspired by the paintings of Longhi.

Also as a director, Zeffirelli's forte is the reproduction of turn-of-the-nineteenth-century style. Singers clasp hands and face the public; the quintets and sextets are sung

unashamedly, as action stops for the music to take over. The result always seems correct and delightful. In addition to *Il Turco in Italia* and *La Cecchina*, Zeffirelli has done a Tuscan pastoral *L'Elisir d'amore* at la Scala, and has worked in Naples, Palermo, and Genoa, where he staged a radically austere *Rigoletto* (with the American Anna Moffo as Gilda) last season.

In Italy's legitimate theater a great fixed star is the Piccolo Teatro di Milano, led, directed, inspired by Trieste-born Giorgio Strehler. Every season Strehler offers half a dozen exemplary productions, ranging from Thornton Wilder to Goldini to *The Threepenny Opera*. In recent years, he too has been led to try his hand at opera, and again, a knowledge of music—plus unerring taste and stagecraft—has produced excellent results (he is coming this season to the Met). He brought his set designer, Luciano Damiani, and his costume designer, Ezio Frigerio, with him to Venice a couple of years ago, and there, for the Festival of Contemporary Music, he mounted Prokofiev's almost impossibly difficult *The Angel of Fire*, a kind of wild, neo-Gothic work, involving—among many other things—a final scene where a whole nunnery full of nuns is possessed by the devil. The result was a triumph, and the production was transported bodily to La Scala last year, where its success was repeated. In the meanwhile Strehler, with Damiani and Frigerio, had been chosen to produce *Il matrimonio segreto*, which inaugurated the Piccola Scala season two years ago. Again, this work which had been immensely popular for a half a century, then neglected for an even longer period, came back into its own, thanks to sensitive mounting and unobtrusive but perfect direction.

Visconti and Strehler are the big names in Italy, and Zeffirelli, Pizzi, Enriquez are not far behind them. And every season there are new arrivals: a young Milanese, Danilo Donati, created a night-club atmosphere for Maninno's *Vivi* at the San Carlo this year; for several seasons Salvatore Fiume has designed original, neo-primitive surroundings for various operas, showing promise if not complete fulfillment; Rognoni blossomed out this year at the Piccola Scala; and Luigi Squarzina, another legitimate-theater man in his thirties, staged a memorable production of Cherubini's *Gli Abenceragi* at this year's *maggio musicale* in Florence.

One never dares talk of a golden age in Italy. Those who speak with respect of Gigli and Caruso are silenced by scholars who tell them of the feats of Tamagno or Nourrit or Lablache. Perhaps today's divas are not the equals of those of the last century, but whoever reads much about nineteenth-century opera discovers at least one thing: production, staging, scenery was for the most part a haphazard business. If a composer were a man of the theater, as Verdi was, he could control happenings on stage; but if he weren't or happened not to be present, the singers did pretty much as they pleased. Italian opera today is a better integrated affair, every element is made to count, and the eye is often given as much pleasure as the ear. You can't say that Italian directors and designers are giving Italian opera a new life—opera is always alive here—but unquestionably they are giving it a new youth.

GOING STEREO

Though he modestly calls himself an amateur in matters audio-electronic, Mr. Burstein is coauthor of a forthcoming Gernsback book, Elements of Tape Recorder Circuits. Here he delves into the ways and means of achieving home stereo — while avoiding pauperism.

by **HERMAN BURSTEIN**

SALES OF STEREO EQUIPMENT for home use are substantial in number already, and are currently accelerating. I don't believe that this lively interest in stereo sound should be discouraged—as a matter of fact, the interest is the justification for this article—but I do think that a few precautionary words should be said to anyone who is considering "going stereo."

Probably every jury test comparing stereo with monaural techniques (the latter including spaced speakers and added reverberation) has disclosed a number of listeners, usually a minority, who did *not* find stereo the more satisfactory. Possibly the musical tastes of such dissenters have been formed by the phonograph rather than by live listening. But whatever the reason, it is a probability rather than an utter certainty of adequate reward that presents itself to the prospective stereophile. Nonetheless, his chances are good.

Through years of practice some people have disciplined themselves to listen past the music for every whit of distortion and extraneous sound. Such had best not count on stereo to end their perplexities, because, after all, stereo is an illusion, easily ruptured by an infinite capacity for taking things apart. The listener with his ear to the music rather than to the blemishes, however, is most likely to find that going stereo amply justifies the expense and effort.

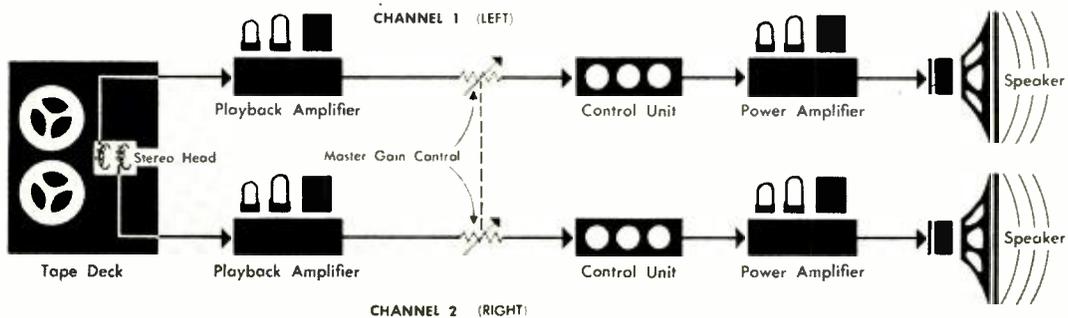
If stereo is to span much of the considerable gap between

similitude and verisimilitude, proportional care must be exercised in the selection, installation, and operation of equipment. And the successful installation is not likely to be a marked improvement under all circumstances. Depending upon the program material and the engineering behind it, the stereo sensation that is obtained can vary to a considerable degree.

TAPE leads radio and phonograph discs by far as a source of stereo program material, although the latter two are not without promise.

Several radio stations with both FM and AM transmitters use these as media for stereo broadcasts, though commonly these occupy only a few hours a week. In relatively rare instances separate FM stations have co-operated in a stereo broadcast. Radio's best prospect seems to be via multiplex transmission, which enables a single FM station to put two (or more) channels on the air. Of course, special receiving equipment is needed. FM multiplex is already in commercial use, but mainly as a vehicle for selling background music on the second channel to restaurants, hotels, and stores. As stereo reproduction grows in appeal, multiplex conceivably may be drafted into its service, perhaps on a pay-as-you-listen basis.

Stereo can be reproduced by phonograph records in at least three ways, although none has yet achieved large-scale use. One method employs a dual set of grooves, requiring two cartridges that must be positioned side by side with extreme care. Other methods rely on a single groove. One of these utilizes an ultrasonic frequency as the carrier



Elements of a two-channel, tape-fed stereophonic system. What are identified as playback amplifiers are sometimes called tape preamplifiers.

for the second channel, and additional electronic equipment is needed in playback to extract the audio information from the carrier. In another single-groove technique, the groove is modulated vertically as well as laterally, and in playback a single stylus drives the equivalent of two cartridges, one responding to vertical and the other to lateral motion. The last method seems to have the most promise, and, in fact, is the basis for the disc stereo system recently developed by Sugden in Britain.

Tape, utilizing the upper and lower tracks for the two stereo channels, has proven so far to be the most practical means of bringing stereo to the public. The stereo tape catalogue is impressive now and growing rapidly. Indeed, current sales of stereo tape are outrunning those of monaural recorded tape, with some major outlets reporting ratios as high as one hundred to one. At least one major producer of recorded tape has abandoned monaural and is concentrating entirely on stereo.

It seems, at least for the time being, that tape has found its particular niche in high fidelity: not as a competitor of the monaural phonograph record, but as the medium for stereo sound. Judging by many signs, including reports that virtually all manufacturers of tape recorders plan to make stereo units soon, if they are not doing so already, it is likely that tape will remain the principal stereo medium for a long time. Yet one should not discount the possibility that stereo on disc may eventually challenge the present supremacy of tape. Such advantages as economy and ease of handling and storage belong to disc records, and particularly in a growing market for stereo, the incentive is strong for record manufacturers to overcome the remain-

ing technical hurdles. Only time will tell us about this.

THE PROSPECTIVE STEREOPHILE may well inquire how much closer stereo takes him toward the goal of "natural sound." To a certain point, stereo and monaural take the same path. In each instance the semblance of reality is augmented by a high signal-to-noise ratio, a reverbation period similar to the original, and a playback level at the listener's ear approximating that of the original, regardless of the acoustic power generated by the source.

What does stereo add? The most prominent attribute of stereo, though not necessarily the most important, is directionality: the location of sounds at left, center, or right; at front or back; and even up or down. To many, a vital quality is dimension, both in breadth and depth (although some of this, particularly breadth, can be achieved by using spaced speakers with a monaural source). A number of experts hold that the chief contribution is greater definition—better differentiation among instruments or voices. For example, stereo makes sharper the distinction between a cello and a violin, and it separates a solo instrument more clearly from the orchestral background.

Some further contend that stereo lends a sweeter, fuller, more effortless quality to music; others point out that stereo breaks up studio and listening room resonances. Through more accurate reproduction of the original reverberation patterns, stereo may give the illusion of greater room size or spaciousness. Withal, it is difficult to enumerate precisely the advantages of stereo over monaural and to rank them in importance. The order of importance varies with the listener and the program material. But it may be said



Various arrangements of speakers for stereo listening, differing with types of rooms. The setup at the far left is no longer much used.

that under proper conditions the advantages of stereo permit a great advance toward "natural sound."

The modest audiophile can bring stereo into his home for less than \$200 and possibly for under \$100. On the other hand, it is possible to invest \$1,000 or \$2,000 without being rightfully accused of excessive expenditure for the value received.

Since the average stereophile, as yet, is preoccupied with playback rather than recording, only the playback aspect is treated here. I supply a block diagram of the elements of a stereo tape playback system. It will serve either to guide in the assembly of a complete stereo system piece by piece, or to show the additional components needed to convert a monaural into a stereophonic installation. Possibly some readers may prefer to purchase a completely integrated system, including speakers.

Several of the integrated stereo tape systems now available, comprising two or three units, are shown in the illustrations, along with one which contains all the components, including speakers (and radio-phonograph as well), in a single cabinet. The latter, of course, limits experimentation by the user in speaker placement. On the other hand, the speaker placement in good consoles reflects expert judgment and experimentation on the part of their manufacturers.

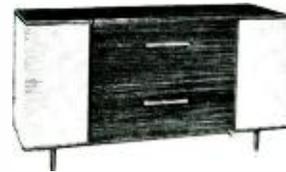
Now for the budget, and let us start with a low one. The venture into stereo may be launched for well under \$100 if you have a monaural tape machine. You may find that the recorder manufacturer sells a stereo adapter for playback, consisting of a stereo head and a second-channel playback preamplifier, which amplifies the minute voltage generated by the head to a suitable level for a power amplifier, and provides the required equalization. Such, for example, is true of Pentron, V-M, and Revere. Other recorder manufacturers may be expected to come out with their own conversion kits before very long. There is also at least one universal adapter, made by Dactron. This too consists of a stereo head, which clamps onto virtually any tape recorded in outboard fashion, and a playback preamplifier, in this case transistorized. If you want only a stereo playback head (and intend to build your own second-channel preamplifier), heads are available separately from Shure, Brush, and Dynamu, but because of the multiplicity of recorder head mounting arrangements, it may take some finagling with brackets and bushing to get the head installed in the right place. Some of the stereo-head manufacturers can supply, on request, complete conversion kits for adding their heads to specific recorders — so before buying a head, check with all the head manufacturers to see whether or not one of them makes a kit for your recorder.

One channel of this budget stereo system can be fed, as in monaural use, into the tape machine's audio amplifier and speaker, which are included in virtually every moderate-priced unit. As for the second channel, you can use your monaural high-fidelity system, if you have one; alternatively, a table-top radio or

Continued on page 156



Ampex A-121



Fisher Executive



Bogen ST-10



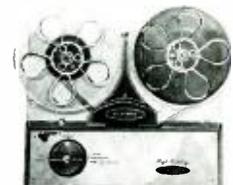
Bell 3DTG



Pentron CA-15



Viking FF-75



Pentron TM



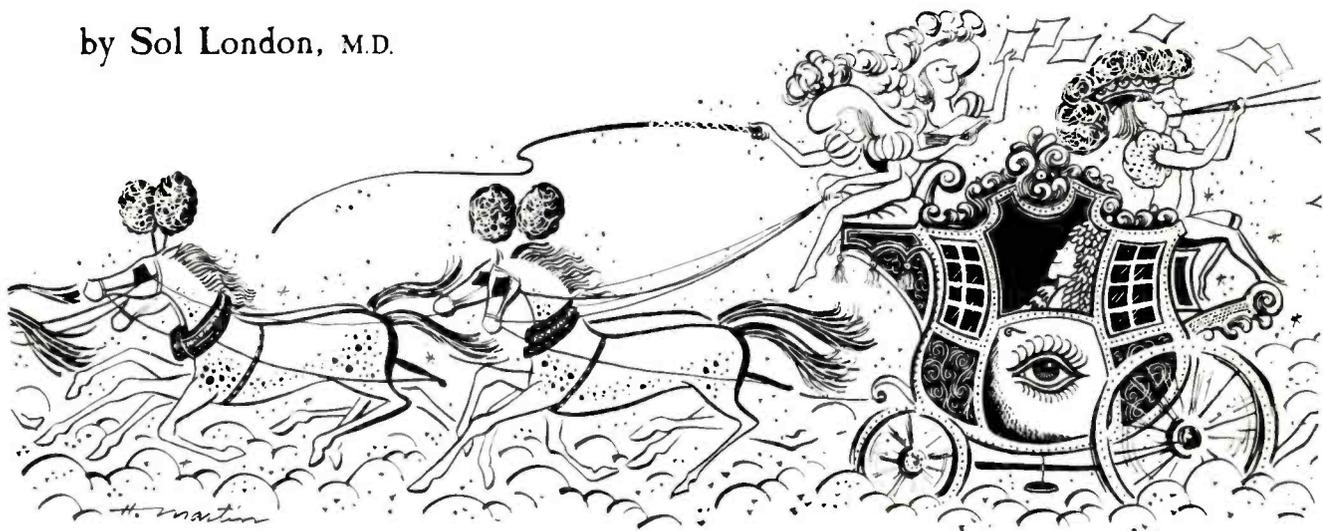
RCA Victor 8STP2



Berlant-Concertone 29-7

At right are items of stereo equipment for all purposes. They range from complete reproducers to simple tape playback deck.

by Sol London, M.D.



The Audacious Oculist

This is a defense of a rogue—a most remarkable rogue, a medical rogue dead almost 200 years and charged by history with being instrumental in the deaths of two celebrated contemporaries, one a certain Kapellmeister of the Leipziger Thomasschule named Johann Sebastian Bach, and the other a certain corpulent favorite of the first two English Georges named Georg Friedrich Handel.

Here is a challenge no loyal, fully Hippocratized physician should resist. It has been issued, among others, by an Edward MacDowell, Robert Carter Professor of Music at Columbia University between 1896 and 1904, who, in a lecture on music of the classical period, pedantically stated: "Bach and Handel had but two things in common: blindness and the doctor that killed them." The accused is John Taylor, M.D., known also as the Chevalier. Make no mistake, he was a scoundrel, but also a consummate artist with the dedication of a well-tempered Madison Avenue executive and the ingenuity of an accomplished con man. But this does not establish his indefensibility. Other physicians before me have attempted to defend him, but all have blanched with mixed distaste and awe at his methods and have evaded answering the principal question: did he kill Handel and Bach?

Eighteenth-century Europe, despite its vaunted rationalism, was as fertile a theater for an assiduous con man as any era in history. The Chevalier Taylor did nothing more than capitalize on his talents in a verdant field. Trained as a surgeon by accepted eighteenth-century academic standards, he found himself drawn to the eye and its diseases and adopted the established methods of his competitors, itin-

erant quacks who ranged the European countryside hawking their wares like carnival barkers. Dr. Taylor, however, offered his public more than mere carnie hucksterism.

His Greek gift was the extraordinary charm pathognomic of the alcoholic and the hypomanic. The odor of alcohol is not detectable in his spoor, but the mark of the hypomanic—the grandiose individual who functions in continual high gear, a few steps from a fullblown manic state—is everywhere. His autobiography, an excellent clinical example, is an expansive three-volume affair published in 1761 and grandiloquently entitled *The History of the Adventures and Travels of the Chevalier John Taylor, Ophthalmiatre—Pontifical, Imperial, and Royal*, in which he inflates every minutia to an exploit of heroic proportions. He was, he tells us, besides being the greatest living oculist, the greatest writer, poet, linguist, orator, historian, traveler, raconteur, and—certainly not the least important—lover; all who criticized him were motivated by nothing more than jealousy and envy.

His road company was a squadron of retainers in a magnificent entourage consisting of two elegant coaches-and-six, each surmounted by five liveried footmen and bearing on its four sides a large painted eye staring at a messianic Latin motto printed beneath it: "*Qui visum, vitam dat*" ("Who gives sight, gives life"). The Great Man himself was always dressed in the most sartorially exquisite of blacks. The grandfather of all perukes perched atop a prominently-nosed classic head riding a tall lithe body. His advent always was heralded by a barrage of handbills, posters, newspaper ads, and planted newspaper



A doctor's defense of the Chevalier Taylor, quack extraordinary, who has been thought guilty of the deaths of two of history's greatest men of music.

articles, all calculated to demolish the most stubborn resistance. The pitch was carefully aimed at women and the local gentry — always with telling effect, for eager queues never were long in forming.

His surgery was a gala public performance, the audience being treated to a glib commentary by the Chevalier illuminated by the flash of gold instruments and punctuated with sonorous words like *victorious* and *miraculous*. Mock surgery was a specialty of the house and on one occasion was performed *en masse*. When his visit to Berlin in 1750 was interrupted by Frederick the Great's edict of banishment, the Chevalier canvassed all his noble patients, performing his ghost surgery at each stop, and then informed them of his banishment, warning that their vision depended on a rendezvous with him in Dresden, safe from the Hohenzollern talons. He left Berlin early the next morning; a few hours later the Saxon border guards stood gaping at the passage of a long train of Prussian carriages, each with one or more noble personages wearing assorted eye patches.

His usual procedure, however, involved a technique for which con men of all generations are eternally in his debt. After surgery his unvaried instructions were not to remove the dressings for at least six days, yet his schedule rarely called for more than a four-day stand in one town. When the dressings were finally removed, so was the Chevalier, by a distance sufficient to preclude his facing responsibility for his therapy.

These harlequinades aroused heated protests, to be sure, largely from the medical profession but also from the laity, particularly from his razor-witted English contemporaries.

Dr. Samuel Johnson (per Boswell) castigated him; Hogarth included him in the painting called *Consultation of Physicians*, in which he placed him in the company of the two greatest quacks of the century; he was starred in a London ballad-opera called *The Operator* as Dr. Hurry, the prototype of all quacks. Yet these peerless wits notwithstanding, Taylor's public apparently lionized him. His appointment as oculist to George II of England is a matter of record. His endorsement by Pope Benedict XIV is well documented. There is less well-authenticated evidence of similar endorsements by such dignitaries as the Archduchess Elizabeth, daughter of Augustus III of Poland; the Doge of Venice; the Duke of Mecklenburg; the "illustrious Lady Nariskin of the Imperial Family of Russia"; the "Sophy of Persia." The only discordant voice in this great paean of royal adulation was that of the aforesaid Frederick.

In his autobiography the Chevalier enumerates certain curious extramedical accomplishments. He had, for instance, "seen three Queens of Spain, all living at the same time"; witnessed "an Auto de Fé"; been "present at the Marriage of the Doge of Venice to the Adriatic Sea"; smuggled curious young noblemen into nunneries and convents, where he had a vast clientele. He had bearded the elite among lovers in their own preserves by publishing a treatise, in Italian, on *The Art of Making Love with Success*, wherein he states with artless simplicity that "the Lady is not living this Side of Forty, but on fixing my Eyes upon her, I cannot read her very Soul." An anonymous correspondent from Dresden, however, sheds this light on the fabulous Englishman's technique. The Chevalier once gave a ball in that city during which he "changed his Shirt and Peruke twenty times," taught a bevy of excited females the "English contre-dance," and then disappeared without paying the bill.

Had John Taylor not been so thoroughly equal parts of huckster, charlatan, and con man, he might have contributed greatly to the young science of ophthalmic medicine. Some of his contemporaries have unabashedly praised his skill; and recent impartial appraisals of his work by modern ophthalmologists, based on his forty-five medical publications, have disclosed that he was a doctor of no mean ability. His theories on the physiology of vision were astonishingly modern, revealing a power of original conceptual thinking. His approach to the surgical treatment of cataract was basically sound, and he disdained, at least in print, the extractive operations then in use, preferring the manipulative procedure known as couching. He also was one of the first to realize that squint could be treated by nonsurgical methods.

What turned a promising doctor into an unscrupulous showman would provide interesting grist for the psychiatric mill if all the facts were known. The Chevalier was born, although many in eighteenth-century England disputed the fact, in Norwich on August 16, 1703, of a family of divines and physicians, the second of five generations of medical John Taylors. The future Chevalier entered medicine through the preceptorship of his father, an able surgeon, and a course of study at St. Thomas' Hospital in Norwich. After a short fling at general practice he applied himself to the eye, but his adoption of the oculist's methods did

not sit well with the medical profession of Norwich and they invited him, not too politely, to leave. Thus launched, in 1727, on a peripatetic career, he thereafter roamed Great Britain and the Continent until his retirement sometime in the year 1768.

July 1749 found him in Holland. A newspaper item from the Hague, dated August 18, 1749, details his presentation to the Princess of Orange and an operation "whereby a Blind man had been fitted with an artificial Eye by the Chevalier Taylor with the aid of which he could subsequently see and even read." In September an item appears from Amsterdam reporting that the Chevalier had cured 440 people of blindness but carrying a simultaneous warning from the city's physicians that these claims had either been purchased or based on nonexistent patients. So the trail of controversy wound through Utrecht, Brussels, and Maastricht, where it stopped. In late October 1749, a report from Cologne, warbling that the Chevalier had cured 4000 blind people annually and explaining Dutch animosity towards him on the grounds of a jealous medical citizenry, indicated his having crossed into Germany. Similar lavish accolades followed him from other German cities until he reached Leipzig on March 27, 1750. There, awaiting him with anxiety, was the Herr Kapellmeister of the Thomasschule, Johann Sebastian Bach.

In May 1749 Bach had suffered a stroke, which had seriously interfered with the composition of the *Art of the Fugue*. Although his vision had begun to fail, apparently he had sought no medical aid until, excited by the reports of the approaching Chevalier, his friends had finally convinced him that Taylor was his only hope. Bach had resisted these friends most stubbornly before he ultimately complied—a fact Taylor must have known, for he took considerable pains in preparing the composer. The operation took place on March 30, 1750. Its exact nature is unknown, but the Chevalier apparently attempted to treat a cataract, probably by surgical extraction, and found that he was dealing with a *gutta serena* instead, the term used in his day for blindness caused by disease of the optic nerve or the retina. The only clue lies in the single reference in *Adventures* to either Bach or Handel: "I have seen a vast variety of singular animals such as dromedaries, camels, etc., and particularly in Leipsic, where a celebrated master of music, who already arrived to his 88th [sic] year, received his sight by my hands; it is with this very man that the famous Handel was first educated, and with whom I once thought to have the same success, having all circumstance in his favour, motions of the pupil, light, etc., but, upon drawing the curtain, we found the bottom defective, from a paralytic disorder."

Handel is known, from reliable contemporary sources, to have had a cataract and from the Chevalier's obscure wording it seems logical to assume that his original diagnosis in Bach's case was the same. However, he indicates that the operative findings were those of a paralytic disorder presumably resulting from the stroke suffered ten months previously. It is strange that a surgeon who usually documented each case in detail should have failed to describe his surgery in this instance, crediting the suspicions of many physicians and musicologists that Taylor

was explaining away both his misdiagnosis and mistreatment of Bach in *post facto* argument. It is stranger yet that he should fail to identify Bach by name, make him older than he actually was (sixty-five), mistakenly call him Handel's teacher, and relegate him to the curio category of camels and dromedaries, as if by destroying Bach's identity, he likewise was destroying his own errors.

Bach's sight was restored following the operation, and there was general rejoicing for several days until it abruptly failed again. Taylor, who for once had neglected to follow his usual four-day schedule, was consequently trapped in Leipzig. He reoperated on Bach between April 4 and 8 (type of surgery again unknown) and then left hurriedly for Potsdam. Bach remained partially blind. He deteriorated gradually until July 18 when, struck by another cerebral hemorrhage, he lapsed into a coma complicated by a high fever and died on July 28.

Whatever culpability Taylor bears for the composer's maltreatment, he certainly was *not* responsible for Bach's death. The type of cerebral hemorrhage that killed Bach is that found in severe hypertension and would have occurred regardless of his ocular therapy. His failing vision was probably due to the retinal hemorrhages so commonly found in this disease, the diagnosis of which was unknown in Taylor's day. The ophthalmoscope, which reveals such pathology, was still a hundred years in the future. The Chevalier's due responsibility lies either in a wrong diagnosis or in deliberate mistreatment for a fat fee. Since Taylor must have had a plethora of experience with cataract, the inevitable conclusion is that Bach was the victim of a sharper's avarice.

The news of Bach's death found Taylor in Carlsbad and there is evidence that he left the city for Denmark rather hurriedly. The next eight years saw him traveling through Sweden, Poland, Russia, Bohemia, Italy, and Belgium until his return to London in 1758. That summer he repaired to Tunbridge Wells, which he had frequently used for a summer practice in past years, and that same summer the great Georg Friedrich Handel also turned his steps towards Tunbridge Wells.

Handel was first struck with failing vision of his left eye on February 13, 1751, while completing the first act of *Jephtba*, his last oratorio, and noted the fact on the manuscript of his score. Ten days later he made another note to the effect that his vision had improved and that he was able to resume composition but, as Romain Rolland has pointed out, the music of the oratorio's second act is no longer joyous and ebullient, but subdued and weighted with apprehension. By the end of the year his vision had deteriorated markedly and he was operated on by Dr. Sharpe, an eminent London surgeon. The operation was briefly successful. In November 1752 he was couched by Dr. William Bramfield, surgeon to the Prince of Wales. Vision returned temporarily but within nine months had regressed to its original state. Handel struggled with this infirmity for the next six years until, as a last resort and at the insistence of friends, he turned to the Chevalier Taylor for help. Why Handel took this step is debatable. He was an obstinate, practical man accustomed to weighing each step carefully. He

Continued on page 163



NEW

ALTEC

speaker systems

...matchless design for faithful sound reproduction and exciting appearance

ALTEC LANSING speaker systems combine selected high and low frequency speakers designed to work together with a specific dividing network, all engineered by ALTEC for perfect mechanical compatibility. These components are set in phase computed bass reflex cabinets of extremely heavy construction, braced and blocked so no part of the enclosure can vibrate and absorb any speaker energy. Thick fibreglas panels provide the proper padding and absorption of back waves.

The expensive, hand finished solid hardwood exteriors have been designed with the finest taste to complement the decor of any room.

The result of ALTEC's painstaking design of both the outside and inside of their beautiful speaker systems is breathtaking excitement in sight and sound.

Have the pleasure of listening to an ALTEC speaker system at your dealer's. If your ear is in tune, you'll take ALTEC home.



830A LAGUNA SYSTEM

This is without qualification the finest residential speaker system in the world. Its comparatively low price can only be achieved through the use of a small number of outstanding components rather than a multiplicity of speakers of lesser quality. The Laguna has a guaranteed frequency response from 30 to 22,000 cycles without any peaks, false bass, treble rise or other misleading frequency accentuations. Internally this corner system consists of a matched pair of massive 15" 803A bass speakers, and 802 high frequency driver mounted on the 511B horn and five hundred cycle 500D dividing network.

Available in walnut, blonde, or mahogany hardwood cabinets (Shipped completely assembled). Price: \$585.00



831A CAPISTRANO SYSTEM

Incorporating one 15" 803A bass speaker, an 800E dividing network and an 802 driver with the 811B horn the Capistrano has a guaranteed range from 35 to 22,000 cycles. The graceful, delicate styling of the enclosure is as outstanding visually as the performance is outstanding audibly. The Capistrano is equally appealing to the decorator and the audiophile.

Available in walnut, blonde, or mahogany hardwood cabinets (Shipped completely assembled). Price: \$381.00

Other complete ALTEC speaker systems available from \$120.00.



Write for free catalogue

ALTEC LANSING CORPORATION, Dept. H11-A
1515 So. Manchester Avenue, Anaheim, Calif.
161 Sixth Avenue, New York, N. Y.

TUNERS, PREAMPLIFIERS, AMPLIFIERS, SPEAKERS, SPEAKER SYSTEMS, ENCLOSURES

12-6

This
is where
the music
begins



Furniture By JENS RISOM DESIGN INC., N. Y.

* New Transcription-Type Tone Arm Makes Collaro World's First True High Fidelity Changer

Because the record player is so critical in a fine music system, you cannot afford to compromise with quality. Your loudspeaker may reproduce 20 to 20,000 cps; your amplifier may put out 50 watts of undistorted power—but the music begins at the record player. That's why today's high fidelity systems require the all new Collaro changer with the revolutionary transcription-type tone arm.

The new arm is one-piece, counter-balanced and will take any standard cartridge. Resonances are below the audible level. Between the top and bottom of a stack of records there's a difference of less than 1 gram in the tracking weight as compared with 4 to 8 grams on conventional changers. This insures better performance for your precious records and longer life for your expensive styli.

It's worth noting that Collaro quality is so well recognized that leading American manufacturers of fine console units incorporate Collaro into their instruments in order to achieve the best possible performance in a record player. Among these manufacturers are Magnavox, Stromberg-Carlson and Altec-Lansing. In addition to the transcription-type arm, the Collaro Continental features:

Four speeds, manual switch that permits playing single record or portion of a record; jam proof mechanism, hold the arm in mid-cycle and it won't jam; automatic intermix, plays 7", 10"

or 12" records in any order; automatic shut-off after last record has been played; wow and flutter specifications, 1/4 (0.25%) RMS at 33 1/3 RPM, superior to any changer in the world; muting switch and pop filter to eliminate extraneous noises; extra heavy duty 4-pole induction motor; heavy rim-weighted, balanced turntable for fly wheel action; removable heavy rubber turntable mat; pre-wiring for easy installation; attractive two tone color scheme to fit any decor; factory custom-testing for wow, flutter, stylus pressure and correct set-down position. Reflecting their custom English craftsmanship Collaro changers are tropicalized to operate under adverse weather and humidity conditions. The base, in blond or mahogany, is optional at slightly extra cost and the Collaro mounts easily and quickly on a pre-cut mounting board or base.

When you buy your Collaro, you're buying professional quality equipment at a record changer price. Collaro prices start at \$37.50. The Continental, featured above, is \$16.50. (Prices are slightly higher west of the Mississippi.)



FREE: Colorful new catalog, containing guide on building record library plus complete Collaro line.

WRITE TO DEPT. H-011
ROCKBAR CORPORATION
MAMARONECK, N. Y.

Rockbar is the American sales representative for Collaro Ltd. and other fine companies.

by  ROLAND GELATT
music makers

STEREO DISCS were much in evidence early in October while the New York High Fidelity Show was in progress, though they were not actually on display at the show itself. Down by the docks on West Twenty-fifth Street at the headquarters of London Records, the long anticipated stereo disc developed in England under the direction of Arthur Haddy was finally unveiled to representatives of the record and equipment industries and to members of the press. And at one of the sessions of the Audio Engineering Society held in conjunction with the show, the Westrex stereo disc (mentioned here in August) was demonstrated to several hundred interested and highly informed listeners.

The London disc is of the combined vertical and lateral modulation variety—one channel engraved on the bottom of the groove, the other on the sides—and plays up to twenty-eight minutes per side. It is "compatible" in that the special 3.5 gram pickup designed for it can be employed equally well with regular monaural discs. However, an ordinary monaural pickup cannot be used on London's stereo disc without grave damage to the vertical groove modulations. The demonstration confirmed earlier reports that Decca-London has been building up a formidable backlog of stereo tapings. Aside from the usual run of stereo high jinks such as airplane take-offs, marching bands, and railway platform sounds (what a contrast there is, by the way, between the refined clatter of a British train and the massive rumble of an American one!), the record held snatches from Ansermet's complete *Fire Bird*, Campoli's Tchaikovsky Violin Concerto and Curzon's *Emperor*, Kubelik's *New World* Symphony, and the yet-to-be-released Act III of *Die Walküre*.

The stereo disc developed by Westrex (part of the Bell Telephone complex) employs a so-called "45-45 system." That is to say, the two channels still are engraved at right angles to each

other, but the axis of their interaction is tilted, so to speak, so that both work at 45 degrees from the record surface. This is hard to visualize, but it works. Playing time is "the same as a normal LP"; the grooving is 225 to the inch. Westrex claims that its record is "compatible" in two directions; the pickup designed to play the stereo disc can also play monaural discs, while the stereo disc can be played without harm by an ordinary pickup (but of course will yield only monaural sound when played with monaural equipment). To date Westrex has done no stereo recording; its demonstration disc was merely a transfer from Capitol's *Introduction to Stereo* tape.

So much for the basic details of the two stereo discs. It would be premature and foolhardy to attempt an assessment of their merits at this time. The demonstrations were heard in different rooms, on different equipment, and with different speaker placements. During the next months, both systems will undergo thorough testing by engineers of the large record companies, and they will undoubtedly be able to make some pertinent comparisons. I gather that no stereo disc will be put

determined to avoid anything resembling another War of the Speeds.

It may well be that the industry's choice will ultimately alight on a system other than the London or the Westrex. A. R. Sugden's vertical-lateral stereo disc is still in the running. And there are hints that Ampex and Columbia may also have something to show one of these days in the stereo disc department.

London and Westrex have proved beyond any doubt that stereo sound can be successfully engraved within a single disc groove. Their demonstrations also showed, I believe, that the stereo disc is not yet the equal of stereo tape. The stereo disc's potential advantage over stereo tape is its ease of handling and its low cost of manufacture (eventually a stereo disc should cost no more than a conventional LP). Only time will tell whether stereo discs will achieve the quality of stereo tapes, and whether stereo tapes can be sufficiently lowered in cost to compete with discs. I suspect that it will be two years at least before we begin to get the answers. Meanwhile, nobody need hesitate about investing in stereo tape equipment. As of now, tape is the stereo medium *par excellence*. And it may very well end up being the champ.

A GLIMPSE into the potentialities of stereo opera recording was offered by Westminster-Sonotape a few weeks before the High Fidelity Show with a pre-release demonstration of a taping, made last summer in Vienna, of Douglas Moore's "folk opera" *The Devil and Daniel Webster*. Technically, Concert Hall can claim priority as the first stereo opera producer hereabouts, by virtue of its *Bobème* issued a year ago. But that disappointing cantata-style recording made meager use of the medium; the singers were too prominently miked vis-à-vis the orchestra and too obviously restricted to a single

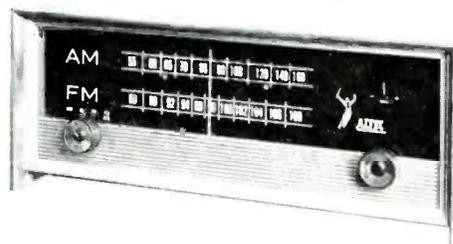


into commercial production until the entire record industry agrees on one common system. Everybody seems

Continued on page 63

THE ALTEC

306A AM-FM TUNER



*"...the most sensitive tuner ever tested"**

The ALTEC LANSING 306A features an exceptionally large six gang tuning condenser which is fully shielded and mounted directly to the chassis for perfect grounding, a dry rectifier for long stable life, complete isolation between transformers and power mains and a chassis layout which reduces coupling between circuits to a minimum that easily meets F.C.C. radiation requirements. The FM section features a Foster-Seeley (Armstrong) detector, a "cascode" low noise RF stage, a triode low noise mixer stage, AFC and two limiter stages.

The AM section features three IF transformers with optimized coupling for flat pass band and maximum noise rejection. This use of specially designed and over-coupled IF transformers provides maximum band width with extremely sharp skirt attenuation for maximum fidelity.

These features, careful chassis layout and intensive testing and alignment account for the superior performance of this tuner. Examine the 306A closely. Compare its performance critically. You will see why it is considered the world's finest tuner for sensitivity, selectivity, stability and long life. Like all ALTEC products its performance specifications are guaranteed. Price: (less cabinet), \$198.00. Walnut, Blonde or Mahogany Cabinet, \$18.00. *According to one of nation's leading testing laboratories.

THE ALTEC 305A AM TUNER



The 305A has been designed specifically for use in those areas where FM reception is not available or for use with the 306A for stereo broadcast reception. It provides the maximum possible quality from AM broadcasting through the utilization of a special circuit which provides the greatest possible band width. Many AM tuners have both broad and narrow band selection but the broad band position invariably has so little skirt attenuation that it is virtually unusable. The 305A uses ALTEC developed and produced IF transformers of an unusual design which permits them to be over-coupled to provide extremely sharp skirt attenuation. This sharp attenuation provides the greatest usable band width for maximum fidelity, and strong noise rejection for quiet operation and freedom from station interaction. Price: (less cabinet), \$99.00. Walnut, Blonde or Mahogany Cabinet, \$18.00.



ALTEC
LANSING CORPORATION

Write for free catalogue

ALTEC LANSING CORPORATION, Dept. H11-B
1515 So. Manchester Avenue, Anaheim, Calif.
161 Sixth Avenue, New York 13, N.Y.

12-7

channel. Westminster's tape was of altogether higher quality and deserves recognition as the first truly effective stereo opera recording to be demonstrated here.

Its most newsworthy aspect is its sense of stage action. There is nothing static about this *Devil and Daniel Webster*; its dramatis personae are deployed across the stage and move about freely according to the dictates of the libretto. Occasionally I found that the effort to follow stage business by ear alone distracted attention from the music, but all in all the device of stereo movement in opera recording made a strong impact on first impression. We shall all have to judge whether it grows wearisome after repeated hearings. The demonstration certainly established the less sensational features of stereo opera. No monaural recording has ever captured opera house quality so authentically—the sense of a voice filling a large auditorium, and at the same time of its coming from behind the orchestra.

Westminster has made the best case possible for Moore's self-consciously folksy opera. The cast is composed of young Americans currently serving their operatic apprenticeships with Central European opera companies, and an accomplished lot they are, particularly the soprano Doris Young, who has been gathering praise in Germany for her portrayal of the Marschallin in *Der Rosenkavalier*. She is a singer to watch.

NO MUSICAL EXPERIENCE is so well remembered as the one that widens horizons, that speaks to the listener in a fascinatingly new creative language. I shall never forget an evening in Chicago twenty years ago when I was invited to a small studio in Kimball Hall to hear a private recital of contemporary piano music. I was then a freshman at college and had, I suspect, run across the names of Bartók, Berg, Krenek, Sessions, Schoenberg, and Webern in books. But they were merely names. Then suddenly in one fell swoop they all came to life. Although some time elapsed before I learned to swim comfortably in the difficult currents of atonal music, the recital at least got me immersed, and it proved to be an important way station in my musical education.

I remember leaving the studio with a feeling of abundant respect for the pianist, a recently arrived emigré from Central Europe named Edward Steuer-



Schoenberg: new LPs from Columbia.

mann. He played the entire program from memory, an accomplishment that seemed to me utterly flabbergasting. Just to listen to such uncompromisingly avant-garde music was troublesome enough; to perform it was a feat; but to commit it to memory bordered on the superhuman. Afterwards I learned that Steuermann was one of Arnold Schoenberg's earliest disciples and had been chosen to give the first performances of nearly all Schoenberg's piano works.

Today, in his mid-sixties, Edward Steuermann is one of the respected elders of the twelve-tone movement, a *doyen* indeed. He finds the role both odd and amusing. When I spoke with him recently in his New York apartment, he had just returned from a festival of contemporary music at Darmstadt. "You know," he said, "all the most advanced young composers were there. The talk was of serial music and electronic music and acoustical mathematics. Terribly progressive. Why, people there looked on me as if I were . . ."—and he searched his mind for the name of an ultraconservative nineteenth-century pedagogue—" . . . as if I were Carl Reinecke."

This month Columbia Records will issue the complete piano music of Schoenberg on one LP, performed—needless to say—by Mr. Steuermann. A less discophilic musician there could not be. "I keep telling my students at the Juilliard School not to listen to records so much," he admits. "I tell them it's better to learn about music from music than from records. When I was a boy in Lwów, my family regularly received new piano scores by mail from a dealer in Vienna. With my mother and sister I played four-hand arrangements of all the modern music we could get—Strauss, Mahler, Reger, Debussy. It was a very satisfactory introduction."

Until his late teens Steuermann studied in Lwów (or Lemberg, as the Polish city was then called) with Vilém Kurz, a highly esteemed Czech

teacher. Then, like so many other young musicians of that era, he gravitated to Berlin and the orbit of Ferruccio Busoni. "With Busoni," Steuermann recalls, "there was much good talk but little else. He would serve his pupils coffee every Thursday afternoon in his home. Very agreeable; not very useful." Steuermann did manage to play some of his own compositions for the busy man. Busoni listened approvingly but offered no helpful advice, whereupon Steuermann enrolled in the composition class of Engelbert Humperdinck. After three "terribly boring" months with the composer of *Hänsel und Gretel*, the turning point in Steuermann's musical career was at hand.

"I was sitting with Busoni and some other students in a Berlin café. It was a meeting place for musicians. Busoni recognized an acquaintance of his at a nearby table. 'Here is the man you should study composition with,' he said, and he took me over and introduced me to Arnold Schoenberg. As soon as we had shaken hands, Schoenberg took out a little black engagement book and asked me when I could come to see him."

Steuermann was immediately drawn into the inner circle of Schoenbergians and soon became known as the composer's "official" pianist. Some of Schoenberg's music was "a little bewildering at first," Steuermann acknowledges, but not for long. He was basically sympathetic to the idiom. After an eight-hand performance of the *Five Pieces for Orchestra*, Op. 16, in which he took part, Steuermann formed an unwavering conviction that Schoenberg was a great composer. Ever since then he has been playing the part of a valuable disciple.

THANKS TO that onetime composer Goddard Lieberson, Columbia Records does not find meeting the demands of a mass market incompatible with occasional sorties into adventurous repertoire. Along with the piano music, Columbia is also issuing this month Schoenberg's opera *Moses und Aron*, an uncompleted work dating from 1932, which made a tremendous impression on those who witnessed its first staged performance in Zurich last June. Even Hindemith, who is situated far away from the twelve-tone school, is reported to have termed it a masterpiece. Carl Michael Steinberg will tell us about the opera and its recorded performance in a subsequent issue.

Scorpio  **N**ovember

Richard Strauss Opera

DER ROSENKAVALIER

Herbert von Karajan conducts
Philharmonia Orch.
and Chorus

The 'DREAM PERFORMANCE' for which record collectors have been waiting . . .

4 records

Note: Handsome German-English illustrated libretto with new English translation by Walter Legge.

The Great Cast

Elisabeth Schwarzkopf • *Marschallin*
Otto Edelmann • *Baron Ochs*
Christa Ludwig • *Octavian*
Teresa Stich-Randall • *Sophie*
Eberhard Waechter • *Faninal*
Ljuba Welitsch • *Ducuna*
Nicolaj Gedda • *Italian Singer*
Paul Kuen • *Valzacchi*
Kerstin Meyer • *Annina*

Angel Album 3563 D/L 35492-3-4-5)

Orchestral

BEECHAM conducts BIZET

L'Arlesienne Suites 1 and 2 • Overture, Patrie

Royal Philharmonic Angel 35460

PAVLOVA'S FAVORITE BALLETS

The perfect gift for balletomanes!

Music of the immortal ballerina's famous dances including *The Swan* (Saint-Saëns), *Glow Worm Gavotte* (Lincke), *Autumn Leaves* (Chopin), *Russian Dance* and *Sleeping Beauty Adagio* (Tchaikovsky), *Bacchanale* (Glazounov).

Efrem Kurtz, conductor Philharmonia Angel 35544

MARKEVITCH conducts

TCHAIKOVSKY SYMPHONY NO. 4

Orchestre National de la Radiodiffusion Française Angel 35446

BARTOK: THE MIRACULOUS MANDARIN

STRAVINSKY: FIREBIRD and FIREWORKS

Fernando Previtali, conductor Royal Philharmonic

Angel 35550

GUIDO CANTELLI (April 27, 1920 - Nov. 24, 1956)

One year ago Guido Cantelli died in an air crash en route to New York from Milan. The world of music lost a conductor of brilliance, depth and integrity, destined for greatness. The two albums now released for the first time in this country were recorded in London with the Philharmonia Orchestra for "His Master's Voice." Angel hopes that these recordings, and others to come, will keep alive his musicianship for those who knew him, and preserve it for those who had not the chance to hear him.

SCHUBERT: 'Unfinished' Symphony

MENDELSSOHN: 'Italian' Symphony

Angel 35524

DEBUSSY: Afternoon of a Faun • Nuages and Fêtes

RAVEL: Daphnis et Chloé, Suite No. 2

Pavane pour une Infante Défunte Angel 35525

"He is a portion of the loveliness
Which once he made more lovely." (Adonais, Shelley)

Violin

GIOCONDA DE VITO and EDWIN FISCHER

Brahms Sonatas for Violin and Piano
No. 1 in G, Op. 78; No. 3 in D minor, Op. 108

Distinguished performances. "The G major is Brahms at the very top of his form . . . In this performance the whole sonata sounds quite meltingly beautiful." *The Gramophone*, London

Angel 35523

MICHAEL RABIN plays

Bruch Scottish Fantasy

Wieniawski Violin Concerto No. 1 in F Sharp Minor

1st recording of the Wieniawski Concerto No. 1

Sir Adrian Boult, conductor Philharmonia Angel 35484

Piano

EMIL GILELS plays BEETHOVEN 'EMPEROR' CONCERTO

Leopold Ludwig, conductor Philharmonia Angel 35476

Note: The great Russian pianist returns for his 2nd American tour Jan. 1958. *Reminder*: He has also recorded the Beethoven Concerto No. 3 for Angel—with the Paris Conservatoire Orchestra and Cluytens. (35131)

ERNST VON DOHNANYI: COMPOSER-PIANIST

Piano Concerto No. 2 • Variations on a Nursery Tune

The distinguished Hungarian composer (who lives in Florida) was 80 years young July 27, 1957. Here he is piano soloist in definitive performances of his Piano Concerto 2 and his popular Variations with the tune everybody knows . . .

Sir Adrian Boult, conductor Royal Philharmonic Angel 35538

Choral • Oratorio • Organ

MOZART (Church Music)

Vesperae Solennes de Confessore, K.339 (1780)

Exsultate, Jubilate, K.165 (Motet for Soprano, 1773)

Offertory, Benedictus sit Deus, K.117 (1769)

Soloists: Erna Berger, soprano; Marga Höffgen, contralto; Horst Wilhelm, tenor; Ferdinand Frantz, bass, Chorus of St. Hedwig's Cathedral, Berlin Philharmonic, Karl Forster, conductor.

Angel 35409

ORATORIO ARIAS sung by

LOIS MARSHALL, Soprano

Handel: Jephtha, Solomon, Samson, Judas Maccabaeus

Haydn: The Seasons, The Creation • Mendelssohn: Elijah

London Symphony Orchestra, Anthony Bernard, conductor

Hubert Dawkes, organ (notes with texts) Angel 35531

EDOUARD COMMETTE plays CESAR FRANCK on the

Cathedral Organ of Saint Jean de Lyon, France

Pièce Héroïque • Three Chorales

No. 1 in E major, No. 2 in B minor, No. 3 in A minor

Angel 35369

Elizabethan Music • Portuguese 'Blues'

SHAKESPEARE SONGS AND LUTE SOLOS

ALFRED DELLER, Counter-Tenor

DESMOND DUPRE, Lute

Songs from *As You Like It*, *Othello*, *Twelfth Night*, *Measure for Measure*, *The Tempest*, *Henry V*, *Merry Wives of Windsor* . . .

Angel Library Series 45016

AMALIA RODRIGUES sings

FADO AND FLAMENCO FAVORITES

Amalia is internationally famous, the "foremost entertainer of Portugal." *Fado* is the fascinating Portuguese form of the blues; Amalia is the "Fado Queen." 12 songs (selected from previously released 10-inch recordings) include the popular *Uma Casa Portuguesa*, *Coimbra (April in Portugal)*, numbers from the film *Lovers' Net*, flamenco songs from the gypsy caves of Granada.

Angel Blue Label 65039



"ARISTOCRATS OF HIGH FIDELITY"

Angel Classical 12-inch Records: List Prices
35,000 Series - Standard Package: \$3.48
Gala Factory-Sealed Package: \$4.98
45,000 Series - Library Edition: \$3.98
Light Music on Blue Label (12-inch)
65,000 Series: \$3.98

Records in Review



Reviewed by

PAUL AFFELDER

NATHAN BRODER

C. G. BURKE

RAY ERICSON

ALFRED FRANKENSTEIN

PHILIP C. GERACI

JOAN GRIFFITHS

ROY H. HOOPES, JR.

DAVID JOHNSON

ROBERT CHARLES MARSH

EDWARD L. RANDAL

HAROLD C. SCHONBERG

MURRAY SCHUMACH

CARL MICHAEL STEINBERG

JOHN S. WILSON

Classical Music	65	Folk Music	90
Advertising Index	66	Fi Man's Fancy	91
Recitals and Miscellany	82	Music Between	93
Spoken Word	88	Best of Jazz	94

CLASSICAL

BEETHOVEN: *Sonatas for Violin and Piano: No. 7, in C, Op. 30, No. 2; No. 10, in G, Op. 96*

Arthur Grumiaux, violin; Clara Haskil, piano.
EPIC LC 3381, 12-in. \$3.98.

New versions of these works, the Op. 30, No. 2 especially, are not out of order. If, as it appears, this is the first release in a series that will eventually give us a complete edition by these artists, one's satisfaction is compounded.

A synthesis of the outlook of a Belgian violinist and a Rumanian pianist, the result is neither the French Beethoven, nor the Russian Beethoven of competitive discs but the persuasively Beethovenian Beethoven many prefer.

The best description of these performances is simply to call them fully communicative. Virtuosity is present, but never in the foreground. Of first importance to both performers is an honest and effective statement of the wide range of content one finds in these two works, and in this they are completely successful. R.C.M.

BEETHOVEN: *Symphony No. 3, in E flat, Op. 55 ("Eroica")*

Cleveland Orchestra, George Szell, cond.
EPIC LC 3385, 12-in. \$3.98.

The top three among the current editions of this symphony are the Klemperer on Angel and the Jochum and Markevitch, both on Decca. Each has unusual merits, none are perfect, and there would be little point in the arbitrary selection of one as the best.

In terms of performance, the new Szell version does not suffer from serious defects but from comparison of the excellent with

the superlative. Interpretatively it adheres closer to the letter of the score than even the Toscanini, but the Toscanini is only one of several recordings that surpass it in fire and drive. The pulse of the music as played here is more schooled than spontaneous, the scherzo in particular having a dry, calculated quality that gives it a pale cast when set beside the energy of the Markevitch. On the other hand, Szell's consistency in tempos, apart from a tendency to increase speed in contrapuntal passages, is praiseworthy.

It is the recording that really places this set in a secondary place. An unnerving combination of usually-too-lead and sometimes-too-resonant, the lack of force in the climaxes, the poor definition in the low registers, and the general lack of fine detail are impressive liabilities when the competition is so intense. I suspect that a very confined recording has been dressed up with artificial resonance, and I doubt if many will find the results to their liking. R.C.M.

BEETHOVEN: *Works for Cello and Piano*

Sonatas: No. 1 in F, Op. 5, No. 1; No. 2 in G minor, Op. 5, No. 2; No. 3 in A, Op. 69; No. 4 in C, Op. 102, No. 1; No. 5 in D, Op. 102, No. 2. Variations: *On a Theme from Handel's "Judas Maccabean"; On "Ein Mädchen welche Liebe fuhlen"; On "Bei Mannern welche Liebe fuhlen."*

Zara Nelsova, cello; Artur Balsam, piano.
LONDON LLA 52, Three 12-in. \$11.94.

This is the fourth complete edition of Beethoven's sonatas and variations for cello and piano, the others being the Casals-Serkin set on Columbia, the Piatigorsky-Solomon versions on RCA Victor, and a now-withdrawn Allegro set. The five sonatas also have been recorded complete by Janos Starker for Period and Antonio Janigro for Westminster.

In these works, as one comes to expect from Beethoven, the role of the piano is

not merely that of an accompanist. The final three sonatas in particular give equal place to both instruments, and the famed Fournier-Schnabel editions of these works, available for a time on RCA Victor LCT 1124, revealed what two musicians of the highest rank could produce in such a collaboration. Here too Mme. Nelsova and Mr. Balsam exhibit a common point of view which leads to performances that are interpretatively consistent. Balsam's playing can match Nelsova's in force when required, or slip gracefully into a supporting role when Beethoven makes such a disposition of forces the more effective.

Nelsova's principal assets are a fine technique and a tone that is silken and polished to an extraordinary degree. Aided by Balsam's firm support and by excellent recording, she makes a very good case for herself. Her aim, however, seems to be to win us with the refinement, indeed the sheer gorgeousness, of her playing, and to this end she sacrifices strong plasticity in line and phrase and any degree of intensity which might introduce roughness or moments of less elegant tone. The result is frequently too suave and bloodless to probe very deeply into the late works, where a lustrous surface cannot communicate what lies beneath. The authority of the Casals performances, then, remains to recommend them. R.C.M.

BELLINI: *La sonnambula*

Maria Meneghini Callas (s), Amina; Eugenia Ratti (s), Lisa; Fiorenza Cossotto (ms), Teresa; Nicola Monti (t), Elvino; Franco Ricciardi (t), a Notary; Nicola Zaccaria (bs), Count Rodolfo; Giuseppe Morresi (bs), Alessio, Chorus and Orchestra of Teatro alla Scala (Milan), Norberto Mola, chorus master, Antonino Votto, cond.

ANGEL 3568, Three 12-in. (5 sides), \$14.94 (or \$10.44).

La sonnambula is the most successful of Angel's three Bellini ventures. In the pre-

viously issued *Norma* and *I Puritani*, Callas — herself not invariably at her best — stood among singers who were the victims of miscasting; this time she is supported by a well-chosen group of her peers, and Votto provides vigorous leadership for the whole group. That Callas nevertheless emerges as a kind of star is due to Bellini's having given to the occupant of the title role alone the opportunity of supplementing beautiful singing with imaginative characterization. Where the other parts can be fully realized on taste and technique alone, that of Amina needs the further gift of dramatic insight. This gift is Callas' to bestow, and she gives so generously and with such moving effect that for minutes at a time we forget that her voice here is a little thin and generally wobbles above G, that except for some fabulous chromatic scales the passage work is not elegantly performed, and that the numerous high E flats (mostly Callas' not Bellini's!) are quite ugly.

Sonnambula is an opera *semi-seria*, a pathetic drama with a happy ending. The sleepwalker of the title is a young Swiss girl who, on one of her noctambulations, strays into the local Gasthaus and into a room occupied by a visiting Count. The Count is a gentleman, but even so the girl's reputation is compromised and only at the last minute does she regain her fiancé's affection. The book is by Felice Romani, who was the librettist for Bellini's two other masterpieces, and whose poetry is of a gravity and sweetness equal to that of Bellini's music. Amina's aria "*Ah! non credea mirarti!*" and the great quintet "*D'un pensiero, d'un accento*" are, of course, celebrated examples of Bellini's lyricism — lyricism *in excelsis*, as Francis Toye puts it — but they are far from standing alone in a score which from first note to last is of a ravishing *dolcezza*.

Nicola Monti sings most creditably in the role of the doubting fiancé, Elvino, but his voice tends toward a disagreeable whiteness on high, forceful notes. Nicola Zaccaria, the honorable Count, makes a distinguished contribution to the performance; and Eugenia Ratti, as the girl to whom Elvino's affections are temporarily directed, sings well, well enough that I thoroughly regret the omission of her charming aria "*De' lieti auguri*." Entirely new to me is the name of Fiorenza Cosotto, who performs the small part of Amina's foster mother; her mezzo-soprano voice is of exceptional beauty and she uses it with flawless control and taste.

Cuts include a quartet in the second act. The loss is less in the ensemble itself than in the remarkable modulations in its introductory passage. From time to time the vocal parts are dolled up with the customary "singing-teachers' improvements," most of them harmless enough, but including also some violations of aesthetic and common sense. But when all is considered the recording is one whose virtues vastly outweigh its flaws. C.M.S.

BERGSMÄ: *Gold and the Señor Comandante* — See Kennan: *Three Pieces for Orchestra*.

BERLIOZ: *Benvenuto Cellini: Overture; Le Roi Lear: Overture, Op. 4; Le Carnaval Romain: Overture, Op. 9; Le*

Corsaire: Overture, Op. 21; Béatrice et Bénédict: Overture

Orchestre du Théâtre National de l'Opéra (Paris), André Cluytens, cond.
ANGEL 35435. 12-in. \$4.98 (or \$3.48).

This record is the only one in the catalogue containing Berlioz' five best and justifiably most popular overtures. It may lack some of the sweep and tension to be heard on the Wolff (London) and Beecham (Columbia) collections, with which it should be compared, but the musical contents may weigh in its favor. In addition, Cluytens, who is often wont to round off edges, is exceptionally forceful in his presentations here, at the same time never neglecting the many ingratiatingly lyrical passages in the music. Performances and sound are first-rate. P.A.

BLOCH: *Sonata for Violin and Piano, No. 2 ("Poème Mystique")*

†Grieg: *Sonata for Violin and Piano, No. 2, in G, Op. 13*

Jascha Heifetz, violin; Brooks Smith, piano.
RCA VICTOR LM 2089. 12-in. \$3.98.

Rafael Druian and John Simms have previously recorded Bloch's Second Sonata (for Mercury), but they are no match for the more polished and intense combination of Heifetz and Smith. In this score there is great affirmation of faith, expressed in tones that are both noble and dramatic. Heifetz and Smith bring out these qualities to the fullest extent; they also manage to build one of the most bloodtingling climaxes I have ever heard from a violin-piano duo.

Whereas the Bloch has appeared on microgroove before, this marks the LP debut for the Grieg, which Heifetz recorded many years ago on 78 rpm. This

utterly captivating, highly melodic sonata makes an admirable companion for the more concentrated, one-movement Bloch work. Full of Norwegian folk flavor, it sings freely from beginning to end, and allows the violinist to display some of his most ravishing tone. Why this charming sonata has been so consistently neglected remains a mystery. P.A.

BRAHMS: *Lieder*

Wie Melodien zieht es: Sonntag; Minnelied; Komm bald; Wir wandelten; Wie bist du, meine Königin; Sapphische Ode; Botschaft; Sommerabend; Mondenschein; Ständchen; O wüsst' ich doch den Weg zurück; Auf dem Kirchhofe; Heimkehr; In Waldeseinsamkeit; Wenn du nur zuweilen lächelst; Verrat.

Hans Hotter, baritone; Gerald Moore, piano.

ANGEL 35497. 12-in. \$4.98 (or \$3.48).

The seventeen songs included here are not only among the most popular Brahms wrote, they also cover a wide chronological spread (1854-1889) and an impressive lyric and dramatic gambit. Hotter has not spared himself demanding songs in this recital, and on the whole he comes off very well. His voice is not any longer that rich and beautiful instrument it was when I first heard it (singing the baritone solo in the *German Requiem* with a vocal splendor that made me fairly want to weep for sheer pleasure). In recent years the voice has become nasal, a quality disconcertingly prominent on this disc. Phrases are often poorly controlled, too, because of a rather maddening necessity to take in air in the midst of them.

On the other hand, Hotter's artistry has suffered no change. He can project the romantic landscape of *Wir wandelten*; and the restrained passion of the *Sapphic Ode* as can few other baritones going. There is a kind of nice precision, curiously pleasing, about the way he accents a phrase: the delicious melodic line of such a song as *Wie melodien zieht es mir* has a simple, appealing directness as he sings it. He is incapable of sentimentality, yet he is not incapable of passion. I have heard many of these songs sung more beautifully, but none of them with greater intelligence or integrity.

Gerald Moore's accompaniments are, as always, something more than accompaniments. Once I felt that the two artists were not quite able to compromise their differences about a song; Moore evidently thinks that *Ständchen* is a gayer piece than does Hotter. And Moore wins out. But for the most part they get on excellently well together. The sound is impeccable. D.J.

BRAHMS: *Sonatas for Violin and Piano, No. 2, in A, Op. 100; No. 3, in D minor, Op. 109*

Ruggiero Ricci, violin; Julius Katchen, piano.

LONDON LL 1569. 12-in. \$3.98.

Mischa Elman, violin; Joseph Seiger, piano.
LONDON LL 1630. 12-in. \$3.98.

It is London's policy to present its musicians in appropriate repertoire and the devil with duplications. Here that policy is

ADVERTISING INDEX

Angel Records	64
Audio Fidelity Records	73, 81
Capitol Records	87
Columbia Records	75
Concord Record Corp.	88
Decca Records	79
Elektra Records	98
Epic Records	71
Esoteric and Counterpoint Records ..	95
Expériences Anonymes	91
Folkways Records and Service Corp.	86
Leslie Creations	98
Livingston Electronic Corp.	97
London Records	70, 86, 88, 92
Louisville Philharmonic Society ..	84
Lyricord Discs, Inc.	95
Mercury Records	69
Montilla	78
Nuclear Products Co.	91
Period Music Co.	95
RCA Victor Division	83, 94
Record Market	98
Record Review Index	98
Schwann, W.	94
Sonotape Corp.	89
Urania Records	80
Vanguard Recording Society, Inc.	76
Vox Productions, Inc.	85
WFB Productions, Inc.	95
Westminster Recording Co.	77
Word Records, Inc.	91

pushed to its extreme with the simultaneous release of two of its violinists in the same two Brahms sonatas. Out of curiosity I put a stop watch to the two versions of both sonatas. In the A major, Ricci takes 19'41" (we'll omit fifths of seconds), Elman, 20'59". In the D minor it is Ricci coming home at 19'56", Elman at 21'10". Elman is thus a little slower in both works, and he seems much slower than he in fact is. His big, thick style sounds clumsy here, and his constant interest in bringing out melodic lines and his own magnificent tone at the expense of other elements of the music does not make for the purest style imaginable. I prefer Ricci, despite some reservations about overvibrato and an occasional sluggishness. He works very well, however, with the efficient Katchen, who seems to enjoy his role as a chamber-music player. At their best, the two young musicians provide superior playing. If I intended purchasing the Brahms violin sonatas, though, I would certainly pay equivalent attention to the Goldberg-Balsam collaboration (Decca), to the Stern-Zakin (Columbia) and, in the first two sonatas, to Kogan-Mitnik (Angel). For Ricci and Elman primarily stress the violin, the others primarily stress the music. H.C.S.

BRAHMS: Symphony No. 2, in D, Op. 73

Berlin Philharmonic Orchestra, Karl Böhm, cond.
DECCA DL 9933. 12-in. \$3.98.

The most gracious and lyrical of the four Brahms symphonies here receives a performance that has many solid virtues, but grace and lyricism are not among them. Böhm and his orchestra approach the music slowly and solemnly, swinging incense, as it were. They take the first movement more deliberately than most orchestras do, the second movement even more deliberately, and the third movement, supposed to be an *Allegretto gracioso*, is positively mournful. A vigorous finale cannot redeem these goings-on. Undoubtedly the playing is serious, and the intentions of all concerned are honorable to the utmost—but this is a Brahms carefully posed for posterity in marble; and he can be flesh and blood. H.C.S.

CHOPIN: Piano Music

Mazurkas: in C, Op. 33, No. 3; in D, Op. 30, No. 3; in B flat minor, Op. 24, No. 4; Waltz, in A flat, Op. 34, No. 1; Ballade, in G minor, Op. 23; Etudes: in A minor; in E; in G flat; in F; in A flat, Op. 10, Nos. 2, 3, 5, 8, and 10; Etudes: in A flat; in F minor; in F; in G sharp minor; in C sharp minor; in D flat; in G flat; in A minor, Op. 25, Nos. 1, 2, 3, 6, 7, 8, 9, and 11.

Wilhelm Backhaus, piano.
LONDON LL 1556. 12-in. \$3.98.

There is the Slavic way of playing Chopin—with much rubato, a juicy tone, considerable freedom, and all kinds of color devices. Hofmann, Rosenthal, and Rubinstein represent three great exponents of this school. There is the French way—tonally brilliant, elegant, metrically quite regular, coloristically quite restricted. In our day, Casadesu and Darré represent this style. And then there is the German way

—square, methodical, as rhythmically regular as the French and considerably heavier. Has there ever been a German pianist who achieved international fame as a Chopinist? Chopin and the Teutonic temperament do not seem to mix.

Backhaus is no stranger to the Polish composer. He was the very first to record all of the Etudes; that set was made around 1927. Later on he recorded other Chopin works. But never, I think, has he shown any real identification with the quality of spontaneity and quasi-improvisation that is one of Chopin's greatest charms. Backhaus has everything too well planned. As an executant he is almost in a class by himself, yet his magnificent finger work here sounds square. Even when, as in the A flat Waltz, Backhaus toys with the meter, the results manage to appear stolid; and some of his

ideas, such as his phrasing in the opening of the Ballade, can only be described as eccentric. To be fair, these eccentricities do not occur too often. If you want a dignified, clear, unhurried and unperfumed Chopin, here it is. But the Slavic way will remain the choice of most aficionados. H.C.S.

**CORRETTE: Concerto for Three Flutes and Orchestra, in G, Op. 3, No. 6—
See Couperin: L'Apothéose de Lully.**

**COUPERIN: L'Apothéose de Lully
+Corrette: Concerto for Three Flutes and Orchestra, in G, Op. 3, No. 6**

Lucien Lavallotte, André Sagnier, Georges Boo, flutes; Hewitt Chamber Orchestra, Maurice Hewitt, cond.
EPIC LC 3383. 12-in. \$3.98.

Mélisande Among the Giants

IN CONCLUDING his contribution to the handsome brochure accompanying this set, Emile Vuillermoz says "By making this work of the theater penetrate into the intimacy of the home, the long-playing record is once again going to fulfill its noble mission, which consists of dissipating misunderstandings, enlightening consciousnesses, and even sometimes correcting miscarriages of justice." I am not quite sure what Vuillermoz means by all this—perhaps he is merely being cosmic, as befits an elder statesman—but his remark is subject to one interpretation with which I heartily agree: records make it possible for one to hear *Pelléas et Mélisande* without having to look at it. The brochure contains numerous photographs of stage sets for Debussy's masterpiece, and, old or new, they are uniformly appalling. No stage designer can cope with this work, but on hearing records and following them with a score or libretto, one can imagine one's own *mise en scène*—or not bother to do so.

The musical and imaginative satisfactions provided by the present version are especially high. It is the best recording of the three now in the catalogues; in fact, I doubt if the sound of Debussy's orchestra has ever been so beautifully captured on discs, and the balance between voices and orchestra is equally without a flaw.

"*Vous êtes un géant*," says Mélisande to Golaud in the first act, and the statement is especially apt in this context. Victoria de los Angeles' Mélisande is very rich and subtle in tone, and her interpretation of Mélisande's music is highly skilled and sympathetic; but somehow the leading lady tends to get lost among the much bigger vocal figures of the men.

Souzay's Golaud is especially big. Souzay here sounds more like a bass than baritone, but the weight of his voice does not overpower the music, and he projects the most varied and dramatically believable character in the opera. In fact, he makes Golaud the central figure, and he strikingly reveals Golaud's descent from Boris Godunov. Jansen's Pelléas is properly lyrical and supple, but this singer falls often into a *parlando* style wherein long notes are not given their full value, and the singing quality of his music is thereby somewhat



ANGEL RECORDS
De los Angeles and Souzay.

diminished. The other vocal giant of the cast is Froumenty, the Arkel. His voice is immense, and his singing reveals the old king as a true philosopher rather than a sententious bore. Collard is a first-rate Geneviève, and Ogeas a very successful Yniold.

Cluytens attains a perfect balance among the symphonic, dramatic, and atmospheric qualities of the score. His interpretation is not quite so dramatic as the one recorded by Fournier nor so atmospheric as the one Ansermet has put on discs but strikes a balance between the two and adds an elegance and color of its own. In the subterranean vault scene of the third act he uses echo mikes to throw an eerie color around the voices, not necessary, but not overdone.

The set is provided not only with the above-mentioned brochure but with a libretto in French and English which, rather strangely, contains a few lines of Maeterlinck's play which Debussy did not set to music and omits an occasional word or phrase that he did set.

ALFRED FRANKENSTEIN

DEBUSSY: Pelléas et Mélisande

Victoria de los Angeles (s), Mélisande; Françoise Ogeas (s), Yniold; Jeannine Collard (ms), Geneviève; Jacques Jansen (b), Pelléas; Gerard Souzay (b), Golaud; Jean Vieuille (b), Médecin; Pierre Froumenty (bs), Arkel. Chœurs Raymond St. Paul; Orchestre de la Radiodiffusion Française, André Cluytens, cond.
ANGEL 354-8/80. Three 12-in. \$15.94.

Although Couperin does not seem to have had orchestral performance in mind for his tribute to the memory of Lully, the present tasteful transcription (by Louis Saguer) appears to do no violence to the spirit of the original; and in some respects it realizes the implications of the music better than the two to four players envisaged by Couperin could. It is a noble work, and not the least of its attractions are the occasional piquant bits of tone painting, such as the "Flight of Mercury" and the "Subterranean Commotion" caused by Lully's rivals. The concerto by Michel Corrette (1709-1795), published when he was only nineteen, struck me as pleasant enough but deficient in musical vitamins. Performance and recording excellent. N.B.

FALLA: Homenajes
+Villa-Lobos: *The Surprise Box*

Rome Symphony Orchestra, Juan José Castro, cond.
RCA VICTOR LM 2143. 12-in. \$3.98.

The second recording to be issued of *Homenajes* proves to be the one we have been needing for some time. Excelling the Halfter set in both clarity and brightness of sound, and sensitivity and force of performance, this new edition now enables Falla's last score to make a bid for popularity and hold its own with the many acceptable versions of his earlier works.

The Villa-Lobos, apparently here presented in a first recording, is a sort of Brazilian *Nutcracker* composed as a ballet *divertissement* for children. They are not the only ones likely to find its tunes and rhythms a lot of fun. R.C.M.

FAURE: Sonata for Violin and Piano,
No. 1, in A, Op. 13
+Franck: *Sonata for Violin and Piano,*
in A

Mischa Elman, violin; Joseph Seiger, piano.
LONDON LL 1628. 12-in. \$3.98.

As an interpreter, Elman can be a sensitive stylist or a rank eccentric. Both facets of his musical personality are revealed here. He plays the Fauré with fine polish and rare musicianship, then does an about-face and takes all sorts of liberties in tempo and phrasing with the Franck. The latter work is not ruined by this treatment, but it certainly would have fared much better had it been approached in the same balanced fashion as the Fauré. Seiger, who maintains a somewhat more conservative attitude through both sonatas, proves a felicitous collaborator. The sound is faithful and well balanced. P.A.

FRANCK: Sonata for Violin and Piano,
in A—See Fauré: *Sonata for Violin*
and Piano, No. 1, in A, Op. 13.

FRESCOBALDI: "The Art of Frescobaldi"

Gustav Leonhardt, organ and harpsichord.
VANGUARD BG 568. 12-in. \$4.98.

Of the six pieces performed here on the organ, three are also included in the Archive disc devoted to Frescobaldi, where they are played, interestingly enough, on the same instrument, the organ of the "Silver Chapel" at Innsbruck. It seems in

many respects to be a fine old organ, but some of its pipes "chiff" too strongly in the lovely Toccata for the Elevation heard on both discs. Generally speaking, Leonhardt's tempos are considerably brisker than Müller's on Archive, an advantage in the other two pieces—toccatas built over long-held tones in the bass—that both discs have in common. Even with Leonhardt's livelier tempos, the sections based on a single tone are so extended that one feels a sense of almost physical relief when the bass, and consequently the harmony, at last changes.

The works played on the harpsichord include a remarkable set of variations called *Cento Partite sopra Passacagli* which, so far as I am aware, is not otherwise available on microgroove. All of these compositions are well played. N.B.

GERSHWIN: Concerto for Piano and
Orchestra, in F: Rhapsody in Blue

Eugene List, piano; Eastman-Rochester Symphony Orchestra, Howard Hanson, cond.
MERCURY MG 50138. 12-in. \$3.98.

Along with its predecessor, the *Rhapsody in Blue*, Gershwin's Concerto in F was a significant trail blazer in the realm of symphonic jazz; in my opinion, no work in this genre has ever equaled or surpassed it. The performances here of both works veer toward the "classical" side without sacrificing any of the jazz elements. There may be a certain chasteness in their approach, yet there is little or no real inhibition. Extreme clarity of articulation, especially in the piano part, as well as plenty of spirit, are the distinguishing characteristics. Since Mercury has provided generally clean, well-balanced sonics, this felicitous coupling can take a high place among the numerous disc versions of these popular works. P.A.

GLIERE: Quartet No. 4, Op. 83—See
Miskovsky: *Quartet No. 13, in A*
minor, Op. 86.

GLIERE: Symphony No. 3 in B minor,
Op. 42 ("Ilya Murometz")

Philadelphia Orchestra, Eugene Ormandy, cond.
COLUMBIA ML 5189. 12-in. \$3.98.

Ilya Murometz is a four-movement tone-poem symphony depicting the exciting events in the life of the tenth-century legendary Russian hero whose name it bears. Ilya was a combination of Arthurian knight, Paul Bunyan, and Superman. In order to convey a musical portrait of such a giant, the late Reinhold Glière composed a score of gigantic proportions. The orchestra is large, the tone painting broad, and the symphony (without cuts) runs to something like an hour and twenty minutes. Its only complete disc performance remains that by Scherchen for Westminster, which occupies three record sides.

Ormandy seems to have done less cutting than his competitors; he manages to include about fifty-five minutes' worth on this disc, and to fill it with as much tonal splendor and dynamism as I have heard from any interpreter. This is the sort of music in which the Philadelphians revel—they made the first recording with Stokowski

some fifteen years ago—and they play it to the hilt. The Columbia engineers have abetted them nobly. P.A.

GRIEG: Sonata for Violin and Piano,
No. 2, in G, Op. 13—See Bloch:
Sonata for Violin and Piano, No. 2
("Poème Mystique").

HOLST: The Planets

Los Angeles Philharmonic Orchestra, Leopold Stokowski, cond.
CAPITOL P 8389. 12-in. \$3.98.

Something of the quality of this music can be gleaned, I think, from the directions which appear in the score underneath the vocal parts of the last section (Neptune): "The chorus is to be placed in an adjoining room, the door of which is to be left open until the last bar of the piece, when it is to be slowly and silently closed. The chorus, the door, and any Sub-Conductors that may be found necessary, are to be well screened from the audience." The idea is a clever one, and the music is clever music, but the charlatan lurks in the background. The score is replete with calculated effects and contrived surprises, and it doesn't wear well. I remember with nostalgia how dazzled I was by the shimmering harp and whooping horns when I heard Boulton and the BBC Symphony recording about ten years ago. Now, it seems, the only part of the music which has retained its interest for me as *music* is the pompous but irresistible *andante maestoso* of the "Jupiter" section.

As an essay in orchestral sound, however, the *Planets* is still capable of casting its spell. The huge orchestra (six horns, six timpani, ten percussion gadgets) is deployed with a clarity and simplicity that is in itself a kind of genius. It's true that there are a great many doublings which look tautological on the page, as with Berlioz, but they justify themselves in performance. Or at least Leopold Stokowski justifies them in this performance. This disc is as near perfect a job of conducting as can well be imagined: listen to the immaculate unison passages for the entire string body, the perfectly matched dialogue of solo violin and solo oboe ("Mercury"), the wonderful precision of harp and celesta arpeggios, the weight and balance of the open fifths in the brasses ("Saturn"), the weird harp harmonics. There is not a careless nor an ill-considered measure in the entire performance.

The engineers have caught the spirit and given the record a perfect setting, capable of mirroring the slightest nuances and of doing justice to the biggest climaxes. By far the best *Planets* available. D.J.

KENNAN: Three Pieces for Orchestra
+Bergsma: *Gold and the Señor Com-*
mandante
+Rogers: *Once upon a Time*

Eastman-Rochester Symphony Orchestra,
Howard Hanson, cond.
MERCURY MG 50147. 12-in. \$3.98.

Kent Kennan's *Three Pieces* includes a march, a nocturne, and an impression of the market square in Rome known as the Campo dei Fiori—music of no special

Continued on page 70

inspired performances, flawless recording technique...

Mercury LIVING PRESENCE *is the measure of perfection*

NEW RECORD RELEASES:

BARBER SYMPHONY NO. 1; OVERTURE TO "THE SCHOOL FOR SCANDAL"; ADAGIO FOR STRINGS; ESSAY FOR ORCHESTRA. EASTMAN-ROCHESTER ORCHESTRA. HANSON. MG30148

OFFENBACH GAÎTE PARISIENNE; STRAUSS GRADUATION BALL. MINNEAPOLIS ORCHESTRA, DORATI. MG30152

ROSSINI OVERTURES. LA GAZZA LADRA; LA SCALA DI SETA; LA CENERENTOLA; BARBER OF SEVILLE; L'ITALIANA IN ALGERI; IL SIGNOR BRUSCHINO. MINNEAPOLIS ORCHESTRA, DORATI. MG30139

HANSON SONG OF DEMOCRACY; ELEGY; LANE FOUR SONGS. EASTMAN-ROCHESTER ORCHESTRA, EASTMAN SCHOOL OF MUSIC CHORUS. HANSON. MG50150

MENDELSSOHN SYMPHONY NO. 3 IN A MINOR ("SCOTCH"); FINGAL'S CAVE OVERTURE. LONDON SYMPHONY, DORATI. MG30123

SCHUMANN SYMPHONY NO. 3 IN E-FLAT ("RHENISH"). DETROIT ORCHESTRA. PARAY. MG30133

NEW STEREOPHONIC TAPE RELEASES:

BORODIN POLOVETSIAN DANCES. LONDON SYMPHONY AND CHORUS; TCHAIKOVSKY CAPRICCIO ITALIEN. MINNEAPOLIS ORCHESTRA, DORATI. MBS 3-7

DEBUSSY PRELUDE TO "THE AFTERNOON OF A FAUN"; IBERIA. DETROIT ORCHESTRA, PARAY. MBS 3-8

GERSHWIN CONCERTO IN F. EUGENE LIST, PIANIST. EASTMAN-ROCHESTER ORCHESTRA, HANSON. MDS 3-9

BARTÓK VIOLIN CONCERTO. YEHUDI MENUHIN, VIOLINIST. MINNEAPOLIS ORCHESTRA, DORATI. MFS 3-10

HI-FI A LA ESPAÑOLA. EASTMAN-ROCHESTER "POPS" ORCHESTRA, FREDERICK FENNEL. MAS 3-11

ELGAR ENIGMA VARIATIONS. HALLE ORCHESTRA, SIR JOHN BARBIROLLI. MCS 3-12



HIGH FIDELITY
OLYMPIAN
LIVING PRESENCE

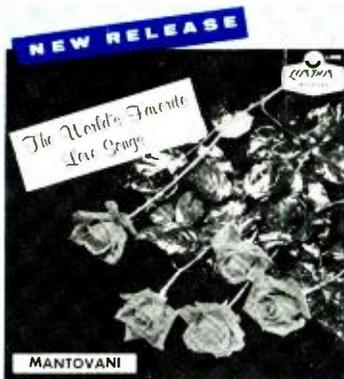


CHAIR DESIGNED BY PAUL McCOBB

MANTOVANI

HIGH FIDELITY

at its enjoyable best



And This Is My Beloved; At Dawning; Drink To Me Only With Thine Eyes; I Give My Heart; Night And Day; I Love Thee (Ich Liebe Dich); Parlez-Moi D'Amour; Hear My Song, Violetta; My Love Is Like A Red, Red Rose; My Old Dutch; Can't Help Lovin' Dat Man; The Story Of Tina; For You Alone; Yours Is My Heart Alone.

LL1748 \$3.98

ALL TIME FAVORITES

Mantovani Film Encores

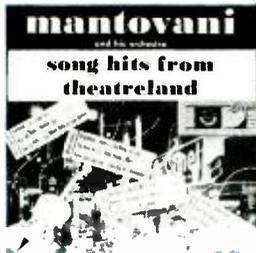


Intermezzo; Three Coins In The Fountain; Laura; High Noon; September Song; Hi-Lili, Hi-Lo; and 6 others.

LL1700 \$3.98

If I Loved You; Wunderbar; I've Never Been In Love Before; Hello Young Lovers; Strangers in Paradise; C'est Magnifique; and 6 others.

LL1219 \$3.98



mantovani
and his orchestra
**song hits from
theatreland**

Celeste Aida; One Fine Day; Caro nome; Softly Awakes My Heart; M'Appari; Musetta's Waltz Song and 6 others.

LL1331 \$3.98



LONDON
RECORDS

539 WEST 25TH STREET NEW YORK 1, N. Y.



originality, but pleasant and deftly made. One of the things they surely must sell in the Campo dei Fiori is second-hand records of Stravinsky's *Petrouchka*.

Gold and the Señor Commandante, one of William Bergsma's earliest works, is a baller about life in Spanish California. Its mood is one of happy caricature, but the music is short-breathed and immature, and its issuance in recorded form at this time will not forward Bergsma's career very notably.

The most distinguished thing here is the work by Bernard Rogers, a set of five fairytale pieces which resemble those of Ravel in the integrity, simplicity, and mastery of means which they display. Rogers is a sinfully neglected composer. As always with Howard Hanson and the Eastman-Rochester Orchestra, the performances are authoritative to the last degree and the recording unimpeachable. A.F.

LALO: *Symphonie espagnole, Op. 21*
Vieuxtemps: *Concerto for Violin and Orchestra, No. 4, in D minor, Op. 31*

Zino Francescatti, violin; New York Philharmonic-Symphony Orchestra, Dimitri Mitropoulos, cond. (in the Lalo); Philadelphia Orchestra, Eugene Ormandy, cond. (in the Vieuxtemps).

COLUMBIA ML 5184, 12-in. \$3.98.

Two staples of the nineteenth-century violin concerto repertoire are soundly and, in the case of the soloist, sweetly performed. Suavity, together with technical virtuosity, has always characterized Francescatti's playing, but it is not often that they are captured on microgroove with such fidelity. In recent years, too, the violinist has developed more perceptive musical insight, also evident even in these two light concertos. What makes this disc additionally valuable is the fact that it contains the only currently available recording of the Vieuxtemps Fourth Concerto, a most attractive and frequently brilliant work, admirably set forth. There is plenty of competition for top honors among the numerous versions of the Lalo—Grumiaux, Heifetz, Milstein, and Stern, to mention four—and Francescatti certainly merits consideration. As usual, he omits the third movement, the *Intermezzo*, which is included only in the discs by Oistrakh, Campoli, Stern, and Menuhin. Mitropoulos and Ormandy are both in fine fettle as accompanists. P.A.

MAHLER: *Das Lied von Der Erde; Lieder eines Jährenden Gesellen*

Nan Merriman, mezzo; Ernst Häfliger, tenor (in *Das Lied*); Concertgebouw Orchestra of Amsterdam, Eduard van Beinum, cond.

EPIC SC 6023, Two 12-in. \$7.96.

Merriman's version of the *Songs of a Wayfarer* is the best in the current catalogue. Nor is her contribution to *Das Lied* to be slighted—it is certainly more forceful than that of Häfliger—although the total effect of both recordings is disappointing.

The fault lies primarily with the engineers, who have simply failed to put all of the music on the tape. Admittedly the Concertgebouw, where I assume this was made, is a hall with an open-platform stage and no real point of sonic focus, but other work done there has not left instrumental

detail submerged in grey masses of murky sound "off mike." The mandolin part, for example, cannot be heard at all, although it is audible in the Walter edition.

Moreover, balance slips in a number of places where it should have been watched with care. Two bars after number 9 of *Der Abschied* in the Boosey and Hawkes score, a footnote by Mahler specifically indicates that the singer must respect his *pp* and "not obscure" the accompanying solo flute. As it comes from the record, Miss Merriman does exactly what Mahler forbids.

What results is a sympathetic performance, generally well paced and well played as one would expect from Van Beinum, but no real competition for the Walter set on London R.C.M.

MENDELSSOHN: *Elijah, Op. 70*

Elsie Morison, soprano; Marjorie Thomas, contralto; Richard Lewis, tenor; John Cameron, baritone; Huddersfield Choral Society; Liverpool Philharmonic Orchestra, Sir Malcolm Sargent, cond.

ANGEL 3558 C, Three 12-in. \$14.98.

Sargent led the same choral society and orchestra some eighteen years ago, when *Elijah* had its première recorded performance on sixteen bulky 78s. I regretted to see that splendid old set withdrawn, for it possessed in Harold Williams an inspired interpreter of the title role, and in Isobel Baillie a soprano voice of great beauty and sweetness. The soloists in this new recording are distinctly inferior, and it is an empty endeavor to comfort oneself with the vastly superior recorded sound. *Elijah*, more perhaps than any of Handel's oratorios, depends upon the dramatic aptness of its soloists. John Cameron has evidently made a study of Williams' approach to the part of the prophet, but he rarely equals his model. One need only compare his placid delivery of the words "call him louder," which Elijah mockingly directs to the Baal worshipers, with the inspired derision of Williams' interpretation to understand the difference in approach. For Williams *Elijah* was music drama. For Cameron it is oratorio, and if one is willing to accept it as such (neither Mendelssohn nor Bernard Shaw was), his is a quite satisfactory performance.

For an English soprano who specializes in oratorio—frequently English sopranos have no choice in the matter—Elsie Morison sings with unwonted passion but not without a certain dependence upon sharp head-tones, from which Isobel Baillie was entirely free. The contralto is thoroughly unmemorable and the tenor, Richard Lewis, is a fine artist who has been using his voice too much—it sounds tired and worn.

The orchestral and choral forces are much better than the soloists, however. Under Sargent's direction the Liverpool Philharmonic plays like a major symphony orchestra. Only when the wood-wind and brass choirs come into separate prominence, as in the chorus "And then shall your light," can a distinction be made between the Liverpudlians and their sole competitor on microgroove, the London Philharmonic: the virtuoso sheen of rising trumpets and horns, so evident in the

Continued on page 72

EPIC

HIGH FIDELITY
HIT
OF
THE
MONTH

LIMITED TIME OFFER

\$2.98

VAN BEINUM ANNIVERSARY CELEBRATION

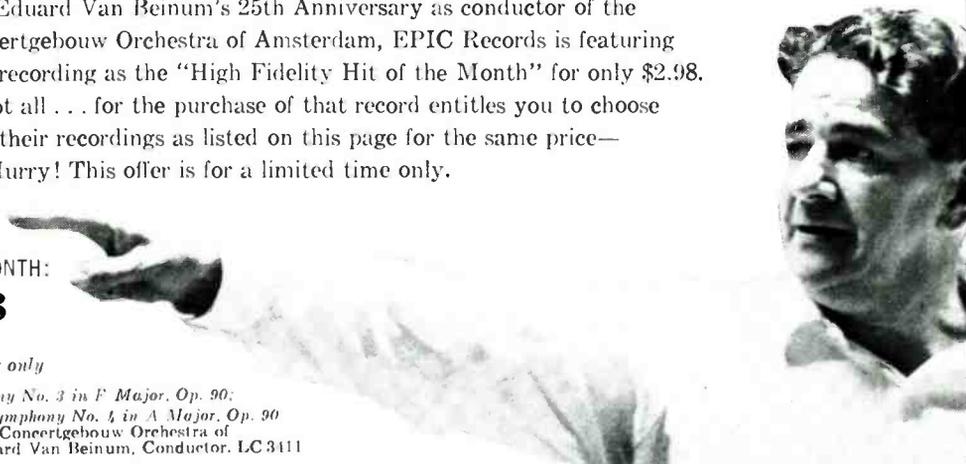
Celebrating Eduard Van Beinum's 25th Anniversary as conductor of the famous Concertgebouw Orchestra of Amsterdam, EPIC Records is featuring their newest recording as the "High Fidelity Hit of the Month" for only \$2.98. But that's not all . . . for the purchase of that record entitles you to choose any or all of their recordings as listed on this page for the same price—only \$2.98. Hurry! This offer is for a limited time only.

HIT OF THE MONTH:

\$2.98

during November only

BRAHMS: *Symphony No. 3 in F Major, Op. 90.*
MENDELSSOHN: *Symphony No. 4 in A Major, Op. 90*
(*"Italian"*)—the Concertgebouw Orchestra of Amsterdam, Eduard Van Beinum, Conductor. LC 3111



ANY OR ALL OF THESE SPLENDID RECORDINGS \$2.98 EACH (for a limited time only)
WHEN YOU BUY THE EPIC "HIGH FIDELITY HIT OF THE MONTH" FOR NOV.—Also \$2.98
(for a limited time)

RIMSKY-KORSAKOV: *Scheherazade, Op. 35.*
LC 3300

STRAVINSKY: *Firebird Suite;* **KODALY:** *Háry János Suite.* LC 3290

BRAHMS: *Symphony No. 2 in D Major, Op. 73.* LC 3098

DEBUSSY: *Images (Set III for Orchestra).*
LC 3147

MAHLER: *Das Lied Von Der Erde (The Song of the Earth); MAHLER: Lieder eines Fuhrernden Gesellen (Songs of a Wayfarer)*—Nan Merriman, mezzo-soprano; Ernst Haffinger, tenor. SC 6023—2 12"

BARTOK: *Music for Strings, Percussion and Celesta;* **STRAVINSKY:** *Song of the Nightingale.* LC 3274

MOZART: *Serenade No. 9 in D Major, K. 320, "Poshorna"; MOZART: Symphony No. 29 in A Major, K. 201.* LC 3354

BACH: *Orchestra Suites Nos. 1 in C Major, 2 in B Minor*—Hubert Barwahser, flutist. LC 3194

BACH: *Orchestra Suites Nos. 3 in D Major, 4 in D Major.* LC 3332

BACH: *Suites for Orchestra (complete).*
SC 6024—2 12"

BRUCKNER: *Symphony No. 9 in D Minor.*
LC 3401

BRUCKNER: *Symphony No. 8 in C Minor;*
SCHUBERT: *Symphony No. 3 in D Major.*
SC 6011—2 12"

PIJPER: *Concerto for Piano and Orchestra*
with Hans Henkemans, pianist; **PIJPER:** *Six Epigrams;* **HENKEMANS:** *Concerto for Violin and Orchestra* with Theo Olof, violinist.
LC 3093

Eduard Van Beinum and the Concertgebouw Orchestra of Amsterdam record exclusively for EPIC Records.

Keep your eye peeled for the sensational new Irving Berlin album "Let Me Sing and I'm Happy"—available soon at your EPIC Records dealer . . . \$4.98 (LN 3408)

A PRODUCT OF CBS

© "Epic" Marcus Reg. "CBS" T.M.



greater orchestra, is beyond their powers. They settle for good, sensible, oratorical trumpetings.

The chorus is, of course, a great one — perhaps England's best. Their range is remarkable: from the sybaritic "Baal, we cry to thee," surely the jolliest piece in all oratorio, through the whirling of "The waters gather, they rush along" (a kind of apotheosis of the Mendelssohnian scherzo), to the subdued "Behold, God the Lord passed by," which comes like an icy wind from their whispering lips.

This *Eliab* is, on the whole, preferable to its rival issued by London Records. If the orchestra is not quite so good, Sargent's reading is far more idiomatic than that of Krips, the chorus is easily better, and the soloists not materially worse. In both the Angel and London albums the sound is excellent. D.J.

MIASKOVSKY: *Quartet No. 13, in A minor, Op. 86*

†Glière: *Quartet No. 4, Op. 83*

Beethoven Quartet.

WESTMINSTER XWN 18423. 12-in. \$3.98.

"I'd never have thought of Miaskovsky," said my wife when I started to play this record and she tried to identify the style of the music. Mrs. F. is not alone; *nobody* thinks of Miaskovsky any more, and that is too bad, because he was one of the best of the Soviet composers. His Quartet No. 13 sounds like Dvořák with a few false notes; it is fluent, tuneful, folkloric, and extremely well made in a generally traditional style. As to the Glière on the other side, I agree with Alvin Bauman, who provides the jacket notes: he says nothing at all about it. The performances are excellent and the recording indicates that Russia has finally caught up with the procession. A.F.

MILHAUD: *Concerto for Cello and Orchestra, No. 1* — See Prokofiev: *Concerto for Cello and Orchestra, in E minor, Op. 58*.

MOZART: *Concertos for Piano and Orchestra: in F, K. 413; in D minor, K. 466*

Sondra Bianca, piano; Philharmonia Orchestra of Hamburg, Hans-Jürgen Walthert, cond.

M-G-M E 3564. 12-in. \$3.98.

Miss Bianca plays in clean and musicianly fashion, and she is beautifully recorded. The orchestra, however, is lacking in nuance and rather dry in tone. But the chief fault in the great D minor Concerto, as in many Mozart piano concerto recordings, is the timidity of the wood winds. This is particularly noticeable in the Rondo, where, for example, the piano is heard very clearly playing simple broken chords while the thematic material, played by flute, oboe, and bassoon in octaves, is only a dim blur in the remote distance. The problem is less acute in the F major Concerto, where the winds have a minor role. Here the first and last movements are nicely done, but the Larghetto is lacking in poetry. N.B.

MOZART: *Concertos for Piano and Orchestra: in G, K. 453; in C, K. 503*

Denis Matthews, piano; London Mozart Players, Harry Blech, cond.

CAPITOL P 18048. 12-in. \$3.98.

Denis Matthews' view of these masterworks seems in general to be gentle and poetic, the gentleness never deteriorating to spinelessness nor the poetry to sentimentality. He is bold enough to add ornaments in the slow movement of the C major Concerto, a practice that was most likely indulged in by Mozart himself. And the deftness and delicacy of the phrasing, on the part of both pianist and orchestra, make the two finales especially delightful.

There is, however, one aspect of the recording that obstructs wholehearted commendation. One of Mozart's innovations in the piano concerto was the independence he granted to the wind instruments. The passages in the later concertos in which the winds have the important material while the piano spins decorations around it not only were something completely new in music but they still remain among the most breathtakingly beautiful portions of those works. It is in just such passages that the present recording falls down. Especially in K. 453 the piano is too loud in relation to the winds, so that one hears the commentary but not — or at least not clearly enough — what is being commented upon. The excellent recent Serkin coupling of the same works sins in this respect too, but not as much. N.B.

MOZART: *Concerto for Violin and Orchestra, No. 3, in G, K. 216*

†Prokofiev: *Concerto for Violin and Orchestra, No. 2, in G minor, Op. 63*

Leonid Kogan, violin; Philharmonia Orchestra, Otto Ackermann, cond. (in the Mozart); London Symphony Orchestra, Basil Cameron, cond. (in the Prokofiev). ANGEL 35344. 12-in. \$4.98 (or \$3.48).

On a magic night in Carnegie Hall years ago the muted violins began the heavenly Adagio of the Mozart concerto over the murmuring pulsations of the middle strings, and then the solo violin took up the melody and poured forth its hushed, ecstatic reverie with an eloquence that transmuted all life, for the moment, into sheer poetry. It was Fritz Kreisler playing. Every performance of the work that I have heard since has had to face the competition of that vivid memory.

Mr. Kogan plays very well indeed. His only trouble is that he is not Fritz Kreisler — at least, not yet. Just the same, he does a first-class job with the Prokofiev, which is better recorded than was his performance of the same work with a Soviet orchestra. It is the orchestral contribution that is weak here, in the same sense that the soloist is permitted to outweigh the ensemble even when the latter's role is more important. It is not always clear what is theme and what is countermelody; and in the finale the muted trumpets are perfect gentlemen, commenting so discreetly as to be practically inaudible when they should be snarling nastily. N.B.

MOZART: *Symphony No. 41, in C, K. 551 ("Jupiter"); Divertimento No. 2, in D, K. 131*

Royal Philharmonic Orchestra, Sir Thomas Beecham, cond.

ANGEL 35459. 12-in. \$4.98 (or \$3.48).

The marked deliberation of the first three movements of the symphony is clearly intended to provide a maximum of contrast to the darting glints of the fuguing finale. The relentlessly slow pace, in conjunction with a sharp decision of beat, gives a sense of withheld power and manifest majesty fitted to the nickname. Sir Thomas made this general style known in 1950, in a Columbia recording (still good in sound) wherein the prestige of the conductor encouraged him to bedraggle majesty by the insertion of some lamentable whims of tempo. The present record is a rebuke to the callow Beecham of the former disc, and is one of the most effective of the phonograph's *Jupiters*, largely because of the tempos noted above, but also because of the deep, solid strength of the orchestral texture, woven into a tight unity of color and proportion appropriate to the fortitude of the music.

Without reproduction at large volume, the record, like most of the full-lunged versions of this symphony, will be spoiled of much of its effect. However large volume may induce some violin stridency into an essentially compact sound and listeners are urged to adjust their amplifier's controls carefully before grumbling.

The first minuet is omitted from the divertimento for unstated reasons. Sir Thomas in a previous version for HMV balked at it then, and his consistency of reluctance does not necessarily appeal to collectors. All the other recordings — of which the best, Westminster 18261, alone remains in the catalogues — include the minuet with its three trios. Against this disadvantage Sir Thomas leads his carefully prepared orchestra in a performance of the utmost suavity and refinement, not likely to be surpassed in its kind, but a good deal less infectious than the direct and lively Scholz performance on the Westminster record cited. In the Beecham version the capriciousness of the divertimento is depreciated in a reticent display of the odd scoring, which stipulates four horns and two parts for violas, vividly apparent on the Scholz disc, made by a smaller ensemble in a more intimate kind of recording.

It is the *Jupiter* which matters.

C. G. BURKE

PROKOFIEV: *Concerto for Cello and Orchestra, in E minor, Op. 58*

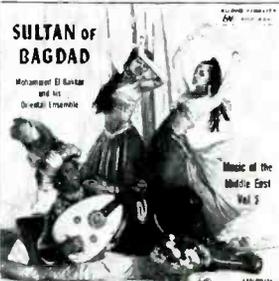
†Milhaud: *Concerto for Cello and Orchestra, No. 1*

Janos Starker, cello; Philharmonia Orchestra, Walter Susskind, cond.

ANGEL 35418. 12-in. \$4.98 (or \$3.48).

Modern cello concertos are seldom performed and even less frequently recorded, and this disc is especially welcome for that reason. The Prokofiev is a huge, sprawling, highly episodic piece, with rather less emphasis on virtuoso display than one expects of a concerto by this composer, but with his customary naïve lyricism and grotesquerie. The Milhaud is as tightly organized as the Prokofiev is loose. It is almost completely described by its tempo indications: *Nouçbalant, Grave, Joyeux*. One should add, however, that the *Grave* is a truly profound slow movement and that

Continued on page 74

<p>ON BOURBON STREET WITH THE <i>phenomenal</i> DUKES OF DIXIELAND Vol. 4—Memories of Bourbon Street! The most popular requests of the patrons of THE FAMOUS DOOR from 1950 thru '55. Includes New Orleans Function, St. James Infirmary, etc. AFLP 1860</p>	 <p>ON BOURBON STREET WITH THE... DUKES OF DIXIELAND VOLUME 4 A STUDY IN HIGH FIDELITY SOUND</p> <p>YOU HAVE TO HEAR IT TO BELIEVE IT!</p>	<p>SULTAN OF BAGDAD — Mohammed El-Bakkar and the Oriental Ensemble take you to Bagdad — the city of intrigue . . . mystery . . . and romance — with exciting, sensuous Music of the Middle East. Volume 2 AFLP 1834</p>	 <p>SULTAN of BAGDAD Mohammed El-Bakkar and his Oriental Ensemble Music of the Middle East Vol. 2</p>
 <p>BULLRING! MUSIC OF THE BULL FIGHT — LA FIESTA BRAVA! Vol. 4</p>	<p>BULLRING! — La Fiesta Brava! Vol. 4 — Exciting traditional music from an afternoon at the Bullfights. Luxuriously packaged with four color illustrated book of Bullfight scenes. AFLP 1835</p>	 <p>Linda's Player Piano Linda Carillon Berry and her Player Piano A STUDY IN HIGH FIDELITY SOUND</p>	<p>LINDA'S PLAYER PIANO A charming little girl at her Player Piano. Old-Time favorites as played (or pumped) by Linda Carillon Berry. Includes: Alexanders Ragtime Band, South Rampart Street Parade, etc. AFLP 1846</p>
<p>RAILROAD SOUNDS . . . Steam and Diesel — Lend an ear to some of the most thundering, earth-shaking sounds ever recorded! Here, in dazzling Hi-Fi, are the romantic, nostalgic sounds of the railroads of yesteryear—Sounds of a Vanishing Era! AFLP 1843</p>	 <p>RAILROAD SOUNDS The Sounds of a Vanishing Era STEAM AND DIESEL A STUDY IN HIGH FIDELITY SOUND</p>	<p>TROPICAL CRUISE — A "potpourri" of Latin tempos to fill your sunbeam days . . . your star-filled nights, played by Pedro Garcia and the Del Prado Orchestra. Includes: Quireme Mucho, Rico Mambo and Begin the Beguine, etc. AFLP 1841</p>	 <p>TROPICAL CRUISE A STUDY IN HIGH FIDELITY SOUND</p>

AUDIO FIDELITY

the highest quality records ever made!

Whether you're a musical connoisseur, hi-fi expert or you just plain enjoy good music . . . AUDIO FIDELITY TFRR® brings you unsurpassed sound reproduction — with startling clarity and brilliance, purest definition, widest dynamic and frequency ranges

Here are some of the most earth-shaking sounds and musical effects ever recorded! . . . and the Fi is *fantastically* high! *These* are not just records . . . each is a wonderful emotional experience.

recorded in brilliant High Fidelity Sound . . . \$5.95 each 12 inch LP



AUDIO FIDELITY INC.
770 ELEVENTH AVENUE • NEW YORK 19, N. Y. • CIRCLE 7-5533

*total frequency range recordings

<p>LEON BERRY ON THE GIANT WURLITZER PIPE ORGAN Vol. 2—Favorite "Pop" standards on the most brilliant Theatre Organ in the Western Hemisphere. AFLP 1829</p>	 <p>GIANT WURLITZER PIPE ORGAN LEON BERRY</p>	<p>AMERICAN MILITARY MARCHES — Let's go to a parade! America's most famous marches brilliantly and excitingly performed by the BANDA TAURINA. AFLP 1836</p>	 <p>AMERICAN MILITARY MARCHES BANDA TAURINA A STUDY IN HIGH FIDELITY SOUND</p>
---	---	--	---

he *Joyeux*, according to the composer, was inspired by a visit to Italy and is a *saltarello*. If Debussy could write a *Tarentelle Styrienne*, this is a *saltarello brasileiro*. Performances of both works are brilliant, and the recording is first-class. A.F.

PROKOFIEV: *Concerto for Violin and Orchestra, No. 2, in G minor, Op. 63* — See Mozart: *Concerto for Violin and Orchestra, No. 3, in G, K. 216*.

PROKOFIEV: *Romeo and Juliet: Suite* †Schoenberg: *Verklärte Nacht, Op. 4*

NBC Symphony Orchestra (in the Prokofiev); Leopold Stokowski and his Orchestra (in the Schoenberg); Leopold Stokowski, cond.

RCA VICTOR LM 2117. 12-in. \$3.98.

About two years ago Stokowski brought out a two-record set devoted to the tragedy of Romeo and Juliet as interpreted by three composers; it contained excerpts from Prokofiev's ballet, the *Love Scene* from the symphony by Berlioz, and the overture-fantasia by Tchaikovsky. This has been withdrawn, but the Prokofiev side has been reissued here, and for that we may rejoice.

Stokowski made his own suite from the three that exist, emphasizing the romantic, impassioned, ecstatic aspects of the score. These he plays with an absolutely incandescent lyricism, urgency, and richness, and the recording is one of the most nearly perfect things ever to issue from Victor's presses. This is far and away the finest version of Prokofiev's *Romeo and Juliet* music that has ever been made, and one of Stokowski's interpretative masterpieces.

The *Verklärte Nacht* on the other side is a considerably older recording originally issued with Vaughan Williams' *Fantasia on a theme by Tallis*. The performance is a bit lush, but so is the piece, at least in its version for string orchestra. If one wants *Verklärte Nacht*, the original version, for string sextet, is the one to buy. It has been recorded for Capitol by the Hollywood Quartet and associates. A.F.

RACHMANINOFF: *Symphony No. 2, in E minor, Op. 27*

Detroit Symphony Orchestra, Paul Paray, cond.

MERCURY MG 50142. 12-in. \$3.98.

Interpretatively this is the best Second Symphony on the market. Paray has given the score an attention at once scholarly and perceptive, and his men respond to his leadership with an enthusiasm that must be bred as much out of love as out of good drilling. They put all their hearts into the great, swelling love music of the slow movement (Tristan and Isolde grown young and innocent) and all their considerable technical resources into the finale, a mammoth toccata interrupted by a shifting, syncopated melody that is perhaps the loveliest Rachmaninoff ever penned. The strongest section of the Detroit Symphony is the wood-wind band: there are some inspired first-desk men here, including a clarinetist of the first magnitude (see the solo at the opening of the third movement).

But what unhappily prevents this from being a great recording is the engineering

—unhappily and ironically, for Mercury takes great pride in telling us all the technical secrets of the disc. Much of the sound has a dry, unreverberant quality; in the *tutti* the strings are thin, wiry, and put upon by the brasses and wood winds; detail in *forte* passages is often blurred so that in the finale, for instance, it is impossible to hear more than the first five or six notes of the descending wood-wind scales played against massed strings and brass; and finally the plucked double basses, which Rachmaninoff uses unrelentingly throughout the symphony, come out tubby and obtrusive. Some of the evils can be mitigated by a judicious fiddling with knobs, but who wants to fiddle with knobs in the midst of such music as this?

The perfect Second Symphony is yet to come: the new Boult version is thin-blooded, the Ormandy and Rodzinski are both inept in sound and art, and the Steinberg superior to them in sound only. With the sad miscarriage of the present version, perhaps the all-round most satisfactory edition is that of Sanderling and the Leningrad Philharmonic. D.J.

RICHTER: *Concerto for Piano with Violas, Cellos, and Basses*

†Surinach: *Concerto for Piano, Strings, and Cymbals*

William Massellos, piano; M-G-M String Orchestra, Carlos Surinach, cond. M-G-M E 3547. 12-in. \$3.98.

Recording companies often promote the careers of performing artists, but it is highly unusual to find one advancing the careers of composers, as M-G-M is doing with Marga Richter and Carlos Surinach. This is the fourth work by Miss Richter and the doventh by Surinach to appear under the M-G-M label; furthermore, both were commissioned by that concern.

Both are extremely attractive pieces. The Richter, one suspects, was inspired by the keyboard concertos of Bach, but it makes skillful and highly original use of the resonances afforded by its special combination. The Surinach is in Spanish folk style; it is a drier, more tough-textured version of Falla's *Nights in the Gardens of Spain*. Performances and recordings are first-class. A.F.

ROGERS: *Once upon a Time*—See Kennan: *Three Pieces for Orchestra*.



Greenberg introduces Salamone Rossi.

ROSSI: "*The Music of Salamone Rossi, Hebreo, of Mantua*"

New York Pro Musica, Noah Greenberg, dir.

COLUMBIA ML 5204. 12-in. \$3.98.

An unusually interesting composer is generously represented here, probably for the first time on records. Rossi, whose period of activity spans the turn from the sixteenth century to the seventeenth, is one of the earliest known Jewish composers of any consequence. His time was one of great change in music, and his own contributions, in the shape of new formal devices and procedures, are of some importance. Here we have four madrigals and four vocal duets with continuo (all with Italian texts), eight instrumental pieces (the last, a suite of dances), and six choral works with Hebrew texts. They all show Rossi to have been a highly skilled contrapuntist who was also fully capable of exploiting the expressive qualities of the chordal style. The Hebrew pieces, which comprise settings of psalms, prayers, and a wedding ode, are in the same general style as other Italian choral works of the time. The lovely Psalm 137, for example, a work that illustrates Rossi's mastery of the chordal style, could easily pass as a motet if its text were in Latin instead of Hebrew; similarly with the contrapuntal *Elohim Ushivenu*. As always with the New York Pro Musica, the performances seem to have been carefully and thoroughly prepared and are smoothly executed. The original texts and English translations are provided. N.B.

SCHOENBERG: *Verklärte Nacht, Op. 4* — See Prokofiev: *Romeo and Juliet: Suite*.

SCHUBERT: *Sonata for Violin and Piano, in A, Op. 162: Sonatinas for Violin and Piano, Op. 137: No. 1, in D; No. 3, in G minor*

Joseph Fuchs, violin; Artur Balsam, piano. DECCA DL 9922 12-in. \$3.98.

This is a delightful record. The sonatinas are not first-rate Schubert nor, really, is the somewhat bigger sonata (Schubert called it a "Duo") except perhaps for its first movement. But second-rate Schubert is better than first-rate almost-everybody-else. The tunes are all fresh and young and innocent. They get an essentially miniaturist treatment from Fuchs and Balsam, which suits them very well. Both instrumentalists carefully control the volume of sound they make, and neither lingers long over expression marks. Only once in a while, as in the Anlante of the G minor sonatina, is this unsentimental approach disappointing. For the most part their cool good taste is a delight to the ear.

The mechanics of the record are a little dry but, as with martinis, some consumers prefer them that way. D.J.

SCHUBERT: *Sonatina for Violin and Piano, in G minor, Op. 137, No. 3; Sonata for Violin and Piano, in A, Op. 162*

Rondo, in B minor, Op. 70 ("Rondo brilliant"); Fantasia, in C, Op. 159

Johanna Martzy, violin; Jean Antonietti, piano.

Continued on page 76

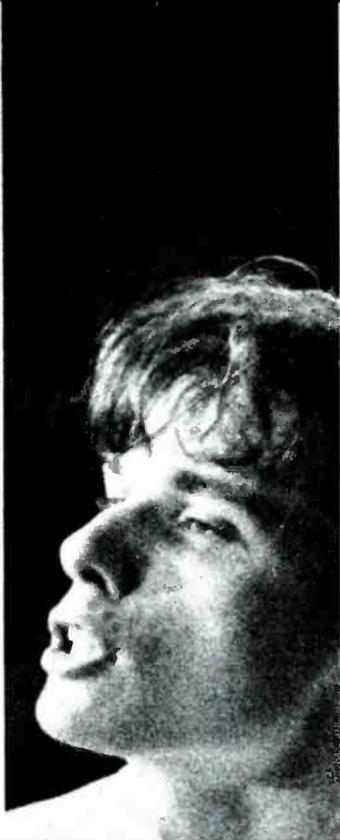


Photo: Bellman Archive

SOUNDS OF THE CIVIL WAR

If the sight of war is horrendous, its sounds can be strangely moving—especially if the war can give birth to such music as "The Battle Hymn of the Republic," "Tenting on the Old Camp Ground," and the bugle call "Taps." Here in a memorable new album called *The Union* are songs and sounds of the Northern cause, all superbly reproduced in as near authentic a manner as possible. Raymond Massey is not Lincoln, popular opinion to the contrary, but it is doubtful whether anyone else could deliver the Gettysburg Address with equal realism. Realistic too are the sounds of the 12-pound field pieces recorded at Bull Run. Like its companion piece *The Confederacy*, issued several years ago, *The Union* is magnificently packaged and includes a book in which many extraordinary and seldom seen Civil War photographs are reproduced.

THE UNION available soon. \$10.00



GOULD THE INCREDIBLE

24-year-old, Toronto-born pianist Glenn Gould has been heard only a few times in the U. S. and has made only two records. Yet he is probably the most talked about young artist in the country today. His eccentricities are legendary (at recording sessions he sits at the piano with his shoes off and an electric heater trained on him, soaks his hands in warm water for twenty minutes beforehand). Even more legendary is his playing—flawless, vital, deeply poetic, slightly incredible. You can hear it for yourself in this new album, Gould's first recordings with an orchestra. **BEETHOVEN:** Piano Concerto No. 2 in B-Flat Major; **BACH:** Piano Concerto No. 1 in D-Minor—Glenn Gould, pianist, with Leonard Bernstein conducting the Columbia Symphony Orchestra. ML 5211 \$2.98 (limited time only)



SRO AT THE WINTER GARDEN

Given a free choice of subjects from which to fashion a Broadway musical, it is unlikely that anyone except Jerome Robbins, Arthur Laurents, Stephen Sondheim and Leonard Bernstein would deliberately choose juvenile delinquency. Yet it is the conflict between a Puerto Rican "gang" on Manhattan's Upper West Side and their Yankee counterpart which is the concern of *West Side Story*, hailed by the critics as the best new show since *My Fair Lady*. It is an almost perfect musical. The score has the feeling of transplanted Puerto Rico, but the expression is pure Bernstein. The performance could not conceivably be improved upon, despite the fact that up to now, none of the actors, singers or dancers has been particularly well-known. Since the seating capacity of the Winter Garden Theatre allows for only 1,494 people per performance, this superb original cast recording may be as close as you'll get to *West Side Story* for some time, and unless we miss our guess, even it may be somewhat hard to get.

WEST SIDE STORY—Original Broadway Cast. OL 5230 \$4.98



THE DANCING SOUND

Back in 1953, when it was agreed that the good old days of big dance bands were gone forever, we came across an orchestra—the property of two talented brothers named Elgart—that convinced us this wasn't so. We set out to convince everyone else with an Elgart album called *Sophisticated Swing*, and watched (somewhat amazed) while it marched briskly to the top of the best-seller list. That was nine Elgart albums ago. Today, Les and Larry (Larry sports the beard) are the happy proprietors of music's most constantly going concern. Their orchestra plays more dates, wins more polls and sells more records than any other dance band around. Their secret: a winning concoction of simple, easy-to-follow 2-beat, flowing sound and highly inventive arrangements that appeal to even the most particular ear. They call it "The Dancing Sound." We call it the most danceable and listenable music that ever happened. Here's their latest.

LES AND LARRY ELGART AND THEIR ORCHESTRA CL 1052 \$3.98

THE SOUND OF GENIUS IS ON



RECORDS

"LISTEN IN DEPTH" ON COLUMBIA PHONOGRAPHS

A Division of CBS © "Columbia" ® Marcas Reg. Prices are suggested list. Available in Canada at slightly higher prices.

ANGEL 35365/35366. Two 12-in. \$4.98 (or \$3.48) each.

For sheer joy I must jump *in medias res* and talk about the Fantasia first thing off. It is the most neglected extended work of the great Last Year, 1828 (some of it may have been written in 1827). While there are undeniable vulgarities in it, reminding us that Schubert wrote it for two virtuosos and with the prospect of an immediate public performance, there are vulgarities in many compositions which are none the less highly esteemed. Despite shortcomings, this is a grand work, worthy of 1828 and indeed closely allied to two other grand works in the same key and of the same year, the last symphony and the string quintet. Like them it speaks the

language of joy, of overbrimming confidence, of the impermanence of sorrow and the certainty that all things lead to a happy consummation. Throughout, the work is haunted by the folk idiom which we identify with Hungary but which was equally of Schubert's Vienna and was as natural to him as a different aspect of it was to Bartók. It dominates the A minor allegretto and blazes into life again in the final section, where it is interrupted by a belated but miraculously beautiful fourth transformation of the *Sei mir gevrüsst* theme.

There can be no question that this is the best performance of the Fantasia to date. A very bad one, with Szigeti and Levine, has been withdrawn, and the only other version, by Anahid and Maro Ajemian, is

merely serviceable. Jean Antonietti makes the important piano part, one of the most difficult Schubert ever wrote, extraordinarily exciting. Miss Martzy, on the other hand, is less exciting than I would have had her; her part was written for a violinist known for the vigor and drive of his playing, and all too often when the music calls for masculine assertiveness she gives it feminine reticence. But she is an impeccable artist and a sensitive one.

The *Rondo brilliant*, on the other side of the disc, fills in a gap left by the withdrawal of the only other LP version, by Szigeti and Bussotti. The artists perform this long, bravura piece well, but if you happen to know the version of it done on 78s by the two Menuhins you will probably notice that the rondo has more fire than either its polite title or Miss Martzy would suggest.

The other disc, 35365 containing the G minor Sonata and the Sonata in A, has both the virtues and shortcomings of its companion, but in this case both works have received finer LP performances: the G minor by Heifetz and Bey (now, incomprehensibly, deleted) and the A major by Fuchs and Balsam. But these two discs which together with 35364 constitute the complete violin and piano output of Schubert are a handsome memorial to the composer. D.J.



VANGUARD

RECORDINGS FOR THE CONNOISSEUR

EACH SMASH HIT DESERVES ANOTHER!

THE WEAVERS ON TOUR

On Top of Old Smoky, So Long, Clementine and other folk songs all America loves! VRS-9013

Critics' Acclaim:

THE WEAVERS AT CARNEGIE HALL (VRS-9010)

"A must" — *The Billboard*. "Extraordinary" — *Boston Globe*. "Superb" — *Cleveland Plain Dealer*.

ERICH KUNZ sings

GERMAN UNIVERSITY SONGS, Vol. 2

Of Wooing, Wit and Wanderlust

Male Chorus and Orchestra of the Vienna State Opera. Anton Paulik, conductor VRS-1010

Critics' Acclaim:

GERMAN UNIVERSITY SONGS, Vol. 1 (VRS-477)

"Kunz has never been in better voice or more joyfully recorded." — *N. Y. Herald Tribune*. "Good fun and wonderful sound." — *Washington D. C. News*. "Entrancing" — *Chicago American*. "Wonderfully entertaining" — *The New Records*.

Vanguard Hi-Fi Demonstration Record

SPECIAL PRICE \$1.98

BEETHOVEN: SYMPHONY No. 5 in C minor
SCHUBERT: SYMPHONY No. 8 in B minor, "Unfinished"
Felix Prohaska and the Vienna State Opera Orchestra (Volksooper)
Critics' Acclaim: (SRV-106)

Mozart Hi-Fi Demonstration Record

Symphony No. 40, Eine kleine Nachtmusik,
Prohaska conducting, (SRV-102)

"Impressive as a demonstration of Vanguard Quality Control, the disk is no less impressive for the playing of the Vienna forces." — *N. Y. Herald Tribune*. "Top flight performances—a terrific buy." — *N. Y. Herald Tribune*.

I SOLISTI DI ZAGREB

Antonio Janigro conductor

VIVALDI: The Four Seasons (Jan Tomaszew, violin) BG-564
AN 18th CENTURY CHRISTMAS—Corelli: Christmas Concerto.
Torelli: Pastoral Concerto, Haydn: Toy Symphony, Bach:
Three Chorales BG-569
Critics' Acclaim:

I Solisti play Vivaldi (BG-560)

I Solisti play Mozart (VRS-482)

"The Zagreb players must get the credit: even Vanguard's superb engineers could not fabricate this sound. Other fiddles may scrape; these generate pure moonlight!" — *Only, Atlantic Monthly*. "Not many discs of recent issue match this one!" — *Kolodin, Saturday Review*.

NEW RELEASES

"Come sing me a bawdy song." *Falstaff*
TAVERN SONGS. Catches and Glee.
The Deller Consort. BG-561

LIANE sings CHRISTMAS SONGS, with orchestra
"White Christmas," "Winter Wonderland," "Stille
Nacht," "O Tannenbaum" and other favorites. VRS-9021

MEXICAN PANORAMA 200 years of folk-songs. VRS 9011

Each 12" — List Price \$4.98 — SRV-102, SRV-106 — \$1.98 each Send for complete catalogue to:
VANGUARD RECORDING SOCIETY, INC., 256 West 55th Street, New York 19, N. Y.

A spine-chilling high-fidelity display!
THE SOUL OF HAITI—
Magic, love and ceremonial songs,
Jean Vincent and Orchestra. VRS-9015

The renowned children's choir!
FOLK SONGS OF POLAND.
Mazowsze Choral Ensemble, with orch. VRS-9016

SESSIONS: *Idyll of Theocritus*

Audrey Nossaman, soprano; Louisville Orchestra, Robert Whitney, cond.

LOUISVILLE LOU-57-4. 12-in. Available on special order only.

This is a work of overwhelming sweep and tragic power. The poem is the second idyll of Theocritus as translated into English by R. C. Trevelyan. Simaitha, in love with Delphis, the wrestler, who has left her, undertakes magic spells intended to bring him back or kill him. She recalls their first meeting and the fire of their love-making; and somehow she knows that it is not Delphis who will die, but Simaitha.

It never will be possible to think again of what Trevelyan called the greatest love poem in all literature except in terms of Sessions' magnificent setting. The tragic color of the music is edged with just the right touch of shrillness and fury. Its formidably long and difficult vocal part is perfect in its declamation but remains song throughout, and the orchestral sonorities, as always with Sessions, reflect the workings of an almost unbelievably fecund imagination. Not the least enthralling quality of this record is the superb performance by Miss Nossaman; the orchestral performance is very good, too, but the vocalist is the star. The recording is one of the best in the Louisville series. A.F.

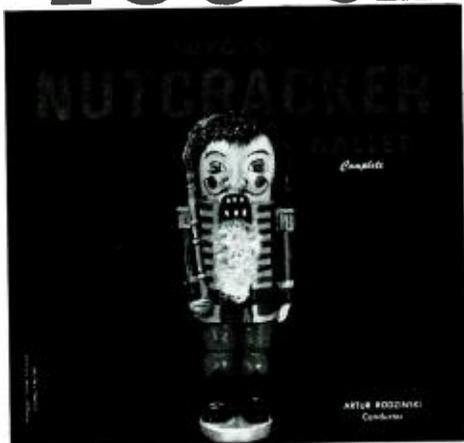
SMETANA: *Czech Polkas and Dances*

Rudolf Firkušny, piano.
CAPITOL P 837-2. 12-in. \$3.98.

The composer of *The Bartered Bride* was, it is not generally known, a fine pianist, who for a while supported himself and his wife by his keyboard activities. This was in the late 1840s, a period during

Continued on page 78

YOU CAN BE THERE



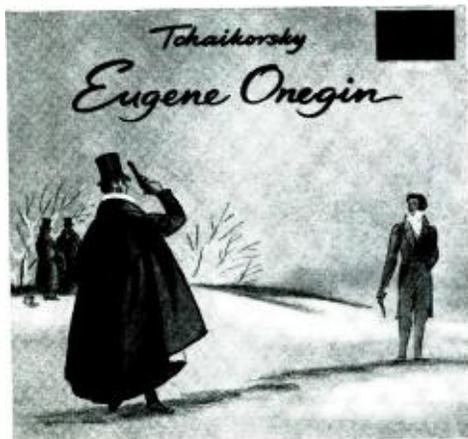
BALLET:

Christmas magic for you! In December, CBS-TV presents the New York City Ballet Company dancing the complete Tchaikovsky "Nutcracker" ballet. NOW you can enjoy the rarely-recorded, *unabridged* score in a superb new Westminster recording conducted by Artur Rodzinski. "Reveals Rodzinski as a dance-music conductor, exhibiting a new gracefulness . . . revealing attractions which few listeners can ever have realized existed in this score."*

"The Nutcracker" comes in an elaborate two-record album, complete with a magnificent program book containing full-color photos of the historic performance by the New York City Ballet Company.

THE NUTCRACKER (unabridged) by Tchaikovsky (OPW 1205)
Philharmonic Symphony of London, Conducted by Artur Rodzinski

WITH



OPERA:

To open the current season, the Metropolitan Opera has chosen Tchaikovsky's masterpiece, "Eugene Onegin." Today, Westminster brings you this passionately moving work "in the best available recorded version of this beautiful opera."*

Complete in a handsome, two-record album case, with the famous libretto based on the poem by Alexander Pushkin; libretto is in the original Russian; in a phonetic transliteration and in English translation.

EUGENE ONEGIN by Tchaikovsky (OPW 1303)
Soloists, Chorus and Orchestra of the Bolshoi Theatre, Conducted by Boris Khaikin.

WESTMINSTER



CONCERT:

Here comes the world-famous Viennese Deutschmeister Band — set for a triumphal concert tour of over 100 leading American cities in the coming season. And here is the *only* recording of the most popular concert program of the Deutschmeisters, *exactly as they will play it on their tour*: "The waltzes, galops and folk music of this band are magnificent . . ."

This is a record you **MUST** hear. You'll throb to the brilliant clash of cymbals, the tap and boom of drums, the resonant vibration of the brasses.

DEUTSCHMEISTER ON PARADE (WP 6058)
Deutschmeister Band conducted by Julius Herrmann.

*High Fidelity Magazine

If your dealer cannot supply you with the Westminster catalog or records,
write to Westminster Recording Sales Corp., Dept. A-11, 275 Seventh Avenue, N. Y. C.



which he became personally acquainted with Liszt, through whose encouragement, and even financial support, he secured a stronghold. Naturally Smetana was dazzled by the worldly, rich, glittering, and internationally famous Liszt. What more natural than that he imitate Liszt's style of writing for the piano? Smetana's piano writing too is difficult and definitely not for the amateur. Highly nationalistic, ultra-melodic, exotic, and extraordinarily effective, it has been neglected far too long.

Some of these polkas and dances are adorable; they may often be complicated in figuration, but basically they are nothing but folk tunes put through a sort of Lisztian sea change. In Firkusny they receive an ideal interpreter. He himself is Czech born, and the music is in his blood. In addition, he has the technique to take care of the tricky problems Smetana has

thrown at the pianist. Once in a while he sprints too fast, and he can almost be heard panting (should the lovely Polka in F be taken at such murderous tempo?), but he handles the music with such skill and authority that objection would be pedantic. Mercury used to have a disc of these fourteen pieces, and also a companion disc of miscellaneous pieces, played by a number of Czech pianists. Now that those are not available any longer, Firkusny has the field to himself. Most listeners should find this disc an enchanting experience, all the more in that it is unbackneyed music played by a virtuoso who knows the style inside out. H.C.S.

SURINACH: *Concerto for Piano, Strings, and Cymbals*—See Richter: *Concerto for Piano with Violas, Cellos, and Basses*.

TCHAIKOVSKY: *Concerto for Piano and Orchestra, No. 1, in B flat minor, Op. 23*

Concerto for Violin and Orchestra, in D, Op. 35

Monique de la Bruchollerie, piano; Ivry Gitlis, violin; Vienna Symphony Orchestra; Rudolf Moralt, cond. (in the Piano Concerto), Heinrich Hollreiser, cond. (in the Violin Concerto).

VOX PL 10350, 12-in., \$4.98.

This is the only recording which offers both of the popular Tchaikovsky concertos together. The sound is quite decent for the amount of music that has been squeezed onto each side. And the performances are more than decent, they are exciting. Monique de la Bruchollerie bustles through the great bunched chords and hurtling double octave runs of the B flat minor concerto with an almost insolent ease—indeed with greater ease and far greater success than she exhibited in the two Mozart concertos she has also recorded for Vox. There are at least three finer realizations of this work, Rubinstein's, Horowitz's, and Gilels' (all on RCA Victor), but none of them brings to it the youthful exuberance and daredevil high spirits of this performance.

Ivry Gitlis gives the Violin Concerto an equally young and high-spirited reading. Indeed his full-speed-ahead technique is at times so brutally athletic that one marvels the poor old work can stand it. There are almost no retards in the outer movements. If the orchestra discloses a tendency to linger, Gitlis is down on them at once, like the Promethean eagle, urging them on with an imperiousness not to be withstood. In the slow movement he does indeed consent to rest a while and sing quietly, his instrument wonderfully warm and steady—only to burst with renewed *elan* into the finale. To compare this performance with Heifetz's recent one, which for me at least is the Last Will and Testament of the Tchaikovsky Violin Concerto, is to see what the poets have been meaning all these centuries when they've talked of youth and maturity. D.J.

VIEUXTEMPS: *Concerto for Violin and Orchestra, No. 4, in D minor, Op. 31*—See Lalo: *Symphonie espagnole, Op. 21*.

VILLA-LOBOS: *The Surprise Box*—See Falla: *Homenajes*.

WOLF: *Lieder*

Goethe: *Wer sich de Einsamkeit ergibt, An die Türen will ich schleichen, Wer nie sein Brot mit Tränen aus Hartenspieler Lieder; Erschaffen und Beleben; Genialisch treiben; Phanomen; Anakreons Grab; Ob der Koran; Lasst Gelehrte sich zanken, Geh! Gehorche meinen Winken (Cophitisches Lied I & II), Geibel (Spanisches Liebesbuch); Alle gingen, Herz, zur Ruh'; Wer sein holdes Lieb verloren, Eichen-dorf; Verwehrene Liebe, Mörike; Liebt wohl; In der Frühe; Farsreise.*

Continued on page 80

No finer gift at any price!

The perfect gift for every Music Lover . . . every Hi Fi Fan . . . for every lover of Spain and its glorious music.

MONTILLA HIGH FIDELITY RECORDS FROM SPAIN

VILLANCICOS NAVIDENOS FM-84

Christmas Carols from La Mancha, Argentina, Galicia, Cuba, Canary Islands, Mexico, Andalusia, Asturias, Chile, Aragon, Peru, Extremadura.

JOTAS FM-101 (Instrumental)

Zaragoza, Aragon, La Casita Blanca, Las Estrellitas Del Cielo, Jotas Del Alto Aragon, La Villana, La Madre Del Cordero, Jotas Orenses, Orquesta de Camara de Madrid.

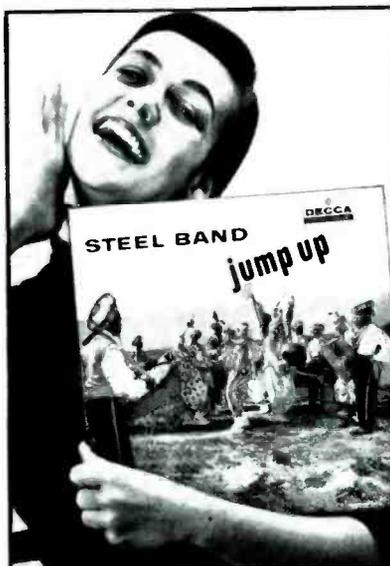
ON SALE AT ALL LEADING RECORD SHOPS
Write for complete catalog to Dept. H-11



131 East 23rd Street, New York 10, N. Y.



The Big Sound is the Decca New World of Sound!



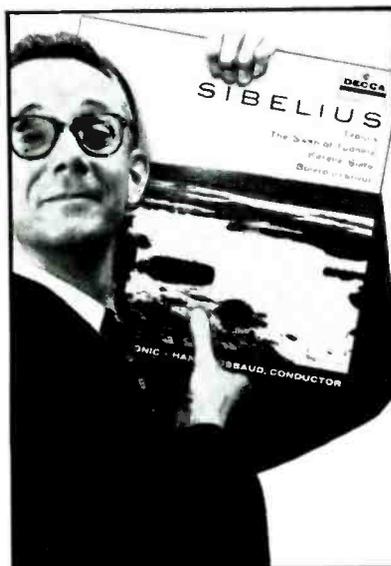
"I never knew oil drums could sound so hi-fi! . . . the Steel Band of the University of the West Indies recorded in Kingston, Jamaica. The real thing!"

DL 8617



"Like twirling a Japanese parasol! Werner Müller's orchestra weaves a super hi-fi spell with modern versions of Japanese music. Novel sounds—novel rhythms!"

DL 8603*



"SOME OF SIBELIUS' GREATEST . . . 'TAPIOLA' . . . 'THE SWAN OF TUONELA' . . . EACH MOODY AND MAGNIFICENT. THE BERLIN PHILHARMONIC OUTDOES ITSELF!"

DL 9938**



"Mozart . . . Chopin . . . Liszt played by famous Mishel Piastro and his sm-o-o-th string concert orchestra. Dreamy, plush, and quite inviting."

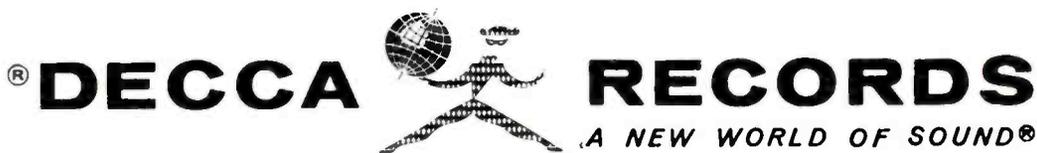
DL 8619



"Here's Schubert at his glorious best . . . music from 'Rosamunde', 'The Magic Harp', and Psalm 23'. Stunningly performed with orchestra and chorus."

DXB-144**

*Recorded by Deutsche Grammophon-Polydor® Series.
**Recorded in Europe by Deutsche Grammophon.



Dietrich Fischer-Dieskau, baritone; Gerald Moore, piano.
ANGEL 35474. 12-in. \$4.98 (or \$3.48).

In general, Fischer-Dieskau's singing is so accomplished, musically as well as vocally, that I am very puzzled by the vehement emphases and fussy overinflections which occasionally intrude to shatter the phrases of certain songs. There cannot be half a dozen singers equipped to give a performance of *Anakreons Grab* on the level of Fischer-Dieskau's best; yet I have hardly heard the song done in a way less suggestive of the elegiac calm of verse and music than it is here, so destructive of the proper mood is the ostentatious shading and underscoring for every nuance. Similar excesses spoil the *Harfenspieler* and *Cophtische Lieder* as well as the first songs in the Spanish and Mörrike groups. The rest of the singing is wonderful, though. Most

of Moore's playing is very sensitive, but he is guilty of some unduly hard hitting and of an out-of-place *ritardando* in *Lasset Gelehrte*.

The *Harfenspieler* and *Cophtische Lieder* are on another Angel record of Wolf (including also the marvelous Michelangelo settings) where they are sung much more beautifully by Hans Hotter and with better playing by Moore. C.M.S.

More Briefly Noted

Bach: Concerto for Three Harpsichords and String Orchestra, in C. S. 1064; Concerto for Four Harpsichords and String Orchestra, in A minor, S. 1065. London LL 1446.

Despite expressive performances and good violin sound, the C major concerto suffers

from imbalance of strings. The A minor is better, but on the whole Vox PL 8670 (which includes the Concerto for Three Harpsichords, in D minor) is to be preferred to this version by the Ensemble of the Ansbach Bach Festival.

Beethoven: Concerto for Piano and Orchestra, No. 5, in E flat (*Emperor*). RCA Victor LM 2108.

Emotional detachment on the part of Solomon and stodgy elegance from the Philharmonia Orchestra under Herbert Menges are the chief characteristics of this very British performance.

Brahms: *Klavierstücke*, Op. 76; Fantasias, Op. 116. London BPL 93059.

The difficult piano writing of these mostly unplayed pieces demands a soloist of great experience to convey their emotional content. Daniel Wayenberg has most success with Op. 76, but in general Gieseking's disc of both works (Angel 35028) is much closer to the spirit of the music.

Cobert: *Mediterranean Suite* (with Duke: *Souvenir de Monte Carlo*). M-G-M E 3497.

Ballet music played by the M-G-M Orchestra under Robert Cobert and Carlos Surinach. The Suite is an interesting combination of the grotesque, satiric, and menacing—and sounds rather like Copland. Vernon Duke's piece is pretty dreadful.

Grieg: Concerto for Piano and Orchestra, in A minor, Op. 16; *Peer Gynt*: Suites Nos. 1 and 2. Westminster XWN 18231. The *Peer Gynt* Suites are well done, but Yuri Boukoff's playing, in spite of his admirable technique, is heavy and unlyrical. For this concerto choose Rubinstein, Novacs, Lipatti, or Curzon—even though here the Philharmonic Symphony of London, led by Rodzinski, is superbly recorded.

Mendelssohn: Concerto for Violin and Orchestra, in F minor, Op. 64 (with Beethoven: Romances, for Violin and Orchestra; No. 1, in G, Op. 40; No. 2, in F, Op. 50). Angel 35236.

In the Mendelssohn Johanna Martzy tries to force her naturally lyric style to try for a big virtuoso approach, with unfortunate results. In the Beethoven, on the other hand, her playing is simple and altogether attractive. Paul Kletzki conducts the Philharmonia Orchestra.

Puccini: *Tosca* (excerpts). London LL 1649.

Featuring Renata Tebaldi with Giuseppe Campora, Fernando Corena, and others in some of the most dramatic bits from *Tosca*. Tebaldi's tone is beautiful, but Alberto Erede's conducting of the chorus and orchestra of the Accademia di Santa Cecilia (Rome) is somewhat unsteady.

Scriabin: *Vers la Flamme*, Op. 72; *Fantaisie*, Op. 28; Preludes (24), Op. 11; Preludes (5), Op. 74. Westminster XWN 18339.

The Op. 74 Preludes are the most interesting works on this disc and are rarely heard

Continued on page 82

HEAR IT NOW!

HIGH FIDELITY MAGAZINE LAUDS URANIA STEREO SOUND ON RECORD AND TAPE!

"Inspired choice... will surely rank near if not at the top of the list by virtue of Swarowsky's exceptionally zestful and dramatic performance (the finest I have ever heard under his baton) and the unusual distinction of Franz Eibner's organ part... To experience the undeniable spine-shivers of the Organ Symphony for the first time in home reproduction is not only a sensuous thrill in itself, but a source of new insight into the reconciliation of classical and romantic elements which the composer here, at least, so notably achieved."... R. D. Darrell, August, 1957

Hear the *Saint-Saens Organ Symphony* in all its stereophonic splendor on tape... in its true living sound on record. You'll share the critics' delight at this hi-fi thrill of the year! Yours only on Urania!



WINNER—THE BILLBOARD 1957 AWARD FOR LP RECORD ALBUM COVER DESIGN

Breaking The Sound Barrier, Volume 1, Percussion. American Percussion Society, Paul Price, Cond. UX-106 Professional hi-fidelity series. \$4.98

This LP album, a milestone in Stereophonic recorded sound, is the most exciting high-fidelity recording of the year and has been awarded first prize in cover design for classical instrumental works by THE BILLBOARD in its second annual contest. Here is a truly overwhelming experience in sound! Forty different percussion instruments "in person," rendering five outstanding percussion compositions, including the Varese Ionisation. Hear it to believe it! A real challenge to the capacity of your Hi-Fi rig!

DON'T MISS THESE OTHER GREAT URANIA RELEASES...



Amazing New Record Reveals Hi-Fi Bugs! Helps you build, buy and check your rig without expensive devices. It tunes speaker enclosures just right by ear... tells how quiet or noisy a turntable is... shows up worn stylus or poor tone arm... tests the setting of equalization controls... challenges you to name common sound effects... etc... Full instructions for Use. Developed for Urania by Popular Science Magazine.

ON RECORD

UPS-1—\$3.98

ON TAPE

TCHAIKOWSKY *Symphony No. 2 in C Minor*. Stereophonic perfection in the full breadth and depth of eighty piece symphony orchestra.

1200' UST 1205 \$11.95

STRAUSS SPARKLES IN HI-FI—Vol. 2—A brand new release—Lively polkas, stirring marches, dreamy waltzes.

1200' UST 1206 \$11.95

BREAKING THE SOUND BARRIER—Vol. 1 Percussion Here's the tape of the year! Sensational for demonstrating your Hi-Fi rig.

1200' UST 1204 \$11.95

STEREO DEMONSTRATION TAPE. Now you can sample generous excerpts of Strauss, Haydn, Varese, Tchaikowsky and Saint-Saens. All in stereophonic splendor. Remarkable value.

900' UST D2 \$3.98

HONKY-TONK IN STEREO. Vol. 1. The rinky-tink piano of Phil Moody and the great drums of Nick Fatool bring Honky-Tonk alive.

1200' UST 1213 \$11.95

STEREO DANCE TAPE. Hear your favorite tunes in true stereo. Fox-trots, waltzes, Latin tempos. Perfect for dancing.

1200' UST 1211 \$11.95

All 7" reets, 7 1/2 IPS—for stacked or staggered heads.

If your dealer cannot supply you—Order direct.

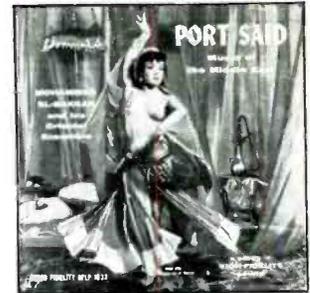




AFLP 1815



AFLP 1830



AFLP 1833



AFLP 1838

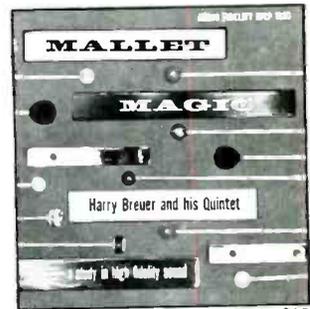


AFLP 1837

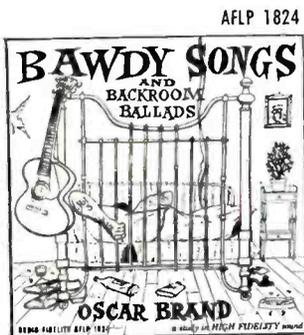


AFLP 1851

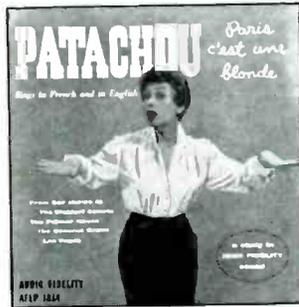
the finest in *HIGH FIDELITY* Sound . . .
AUDIO FIDELITY
 TOTAL FREQUENCY RANGE RECORDINGS



AFLP 1825



AFLP 1824



AFLP 1814



AFLP 1810



AFLP 1821



AFLP 1822



AFLP 1801

in Brilliant
 High Fidelity Sound
 \$5.95 each 12 inch LP

AUDIO FIDELITY INC

Nationally Distributed by:
DAUNTLESS INTERNATIONAL
 766 Eleventh Ave., New York 19, N. Y.
 Write for FREE Catalog



in concert. Raymond Lewenthal is a skillful pianist with plenty of spirit, but he needs more variety in his approach.

Wagner: *Tannhäuser* (excerpts). Decca DL 9928.

Excerpts recorded by different performers in different towns and at various times—not an ideal method. However, the sound is generally good, and Leonie Rysanek as Elisabeth sings particularly well.

Wildner: Woodwind Quintet, No. 2; Suite for Woodwind; *Short Arrangements*. Golden Crest CR 3019.

The Quintet is dull; but the Suite has its provocative moments and the arrangements (of *Dinab* and works by Purcell, Buxtehude, and C. P. E. Bach) are reasonably effective. Careful performances by the New York Woodwind Quintet and fine recording.

RECITALS AND MISCELLANY

ALFREDO CAMPOLI: "*Virtuoso Program*"

Saint-Saëns: *Introduction and Rondo Capriccioso*, Op. 28; *Havanaise*, Op. 83. Sara-

sate: *Zigeunerweisen*, Op. 20, No. 1. Wieniawski: *Légende*, Op. 17.

Alfredo Campoli, violin; London Symphony Orchestra; Anatole Fistoulari, cond. (in the Saint-Saëns), Pierino Gamba, cond. (in the Sarasate and Wieniawski). LONDON LL 1625. 12-in. \$3.98.

Some of the best showpieces for violin are short one-movement works with orchestral accompaniment. The four show- and bow-stoppers on this disc offer an attractive and musically rewarding program—the sophisticated playfulness of the *Introduction and Rondo Capriccioso*, the habaneralike *Havanaise*, the fire and gymnastics of the *Gypsy Airs*, and the melodic composure of *Légende*. Campoli has the technical equipment and musical understanding to exploit these varied works to the fullest. Notable features, aside from his big, singing tone in all of them, are his subtlety of phrasing and rapid double-stop passagework in the *Havanaise* and, despite some edgy intonation in a few places, his entirely gypsylike approach to the *Zigeunerweisen*. Sympathetic orchestral support, plus admirably defined sonics, help to make for a most pleasant forty minutes of listening. P.A.

CHOIR OF THE RUSSIAN ORTHODOX CATHEDRAL OF PARIS: *Selections from the Sacred Services of the Russian Orthodox Church during Lent, Holy Week, and Easter*

Choir of the Russian Orthodox Cathedral of Paris, Piotr V. Spassky, cond. EPIC LC 3384. 12-in. \$3.98.

Awarded the Grand Prix du Disque, this recording has small flaws, and yet as a whole it is singularly beautiful. Presumably singing in its own cathedral, the choir does not always sound well balanced; the *a cappella* singing is often ambiguous in pitch, and the echoes are strong. But it is the cathedral acoustics that also make the choral tone float ethereally, that sustain it as it moves slowly from harmony to harmony, and that permit one of the soprano solo voices to soar superbly upward. Russian liturgical composers must have had these tonal effects in mind when they wrote, and the full beauty of their music seems revealed only under these conditions. Certainly Kedroff's frequently sung setting of *The Lord's Prayer* is enhanced, and the Holy Week music is more poignant than ever. Mention must be made, too, of the wonderfully deep, resounding voice of the soloist, the late Very Reverend Archdeacon Nicolas Tikhomiroff, one of whose chants, repeated at higher pitches, is full of dramatic excitement.

The Russian ensembles directed in New York by Nicholas Afonsky, which have been recorded by Westminster, sing with comparable style and greater clarity, but they reveal none of the mystical atmosphere evoked by the Paris disc. R.E.

VICTORIA DE LOS ANGELES: "*Five Centuries of Spanish Song*"

Victoria de los Angeles, soprano; instrumental ensemble. RCA VICTOR LM 2144. 12-in. \$3.98.

Divas of De los Angelesian eminence seldom venture into the vast forest of pre-Mozart music. Possibly a song by Caccini or Alessandro Scarlatti, an aria by Purcell or Gluck, will stray into their repertoire, but almost never anything from the Gothic or Renaissance periods. Such "musicological stuff" they leave to specialists, reserving their affections chiefly for nineteenth- and early twentieth-century vocal literature. The great merit of this collection of Spanish song, which ranges from the early fourteenth to the late eighteenth centuries, is that it demonstrates how unmusical early vocal music can sound when performed by a singer of the highest rank.

It is a revelation to hear a fourteenth-century canticle like the *Marianam matrem* endowed with the reedy abundance of tone, the delicate gradations from *piano* to *forte*, and the acute textual colorations that Miss De los Angeles ordinarily lavishes on Verdi and Debussy, Wolf and Falla. I yield to none in my admiration of the Cuenods and Oberlins of this world—excellent artists who have exhumed so much early music so worthily—but the note of Latin mystery and opulence which the great Victoria commands is not theirs, and it is a note which suits pre-classic music wonderfully well. Not that Miss De los Angeles inflicts upon a Renaissance love song the high-voltage passion appropriate to Puccini. On the contrary, she is keenly sensible to stylistic atmosphere, whether it be the intense devotion of medieval canticles, the nimble delicacy of Renaissance *villancicos*, or the elegant

Continued on page 84

Three Mighty Moderns in Sizzling Brass

HERE are three masterpieces for wind instruments, of which only the Stravinsky has been recorded before.

The Hindemith is strenuous, vivid, brilliant, full of the Eulenspiegel humor of which this composer is past master, and marvelously scored to explore all the resources of the concert band.

The Schoenberg is something of an oddity so far as that composer is concerned. It is a piece of *Gebräuchsmusik*, written in 1943 for the use of school bands. Schoenberg is the last man on earth one would think of as attempting anything of that kind, and the variations proved to be far too serious and difficult for school musicians to cope with; Schoenberg also made an orchestral version of the piece, which has had many more performances than the original. This work is one of the few very late compositions of Schoenberg in which he returned to tonality and even, for some stretches, to romantic harmony. Its general effect is one of great weight, majestic size, and power. It does for Schoenberg what the *Haydn* Variations do for Brahms.

Stravinsky's Symphonies for Wind Instruments is not for band but for the wind complement of a symphony orchestra. It was written not long after the *Sacre*, and Fennell's interpretation stresses that fact more strongly than Stravinsky's own. The intertwined, tendril-like wind solos of the *Sacre* are recalled here, if in a harsher context, but they are contrasted with austere, blocky resonances like nothing else in the music of Stravinsky or any other composer.

The recording is simply fabulous. The sounds of the ensemble are reproduced with hair-raising fidelity, volume, and clarity, and the Hindemith has an almost stereophonic effect; the instruments stand out in relief as if they were, in fact, being played in one's living room.

ALFRED FRANKENSTEIN

FREDERICK FENNEL: *Music for Wind Instruments*

Hindemith: *Symphony for Concerto Band*, in B flat. Schoenberg: *Theme and Variations*, Op. 43a. Stravinsky: *Symphonies for Wind Instruments*.

Eastman Symphonic Wind Ensemble, Frederick Fennell, cond. MERCURY MG 50143. 12-in. \$3.98.



Frederick Fennell



LM-2103 (NOVEMBER S O R.)

PROKOFIEFF
CONCERTO NO. 3
GARY GRAFFMAN, PIANIST
CLASSICAL SYMPHONY

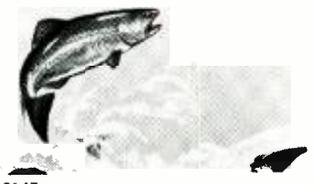


LM-2138



THE FESTIVAL QUARTET

SCHUBERT
TROUT QUINTET

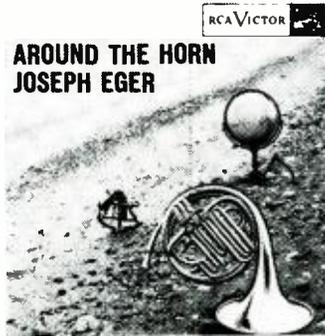


LM-2147

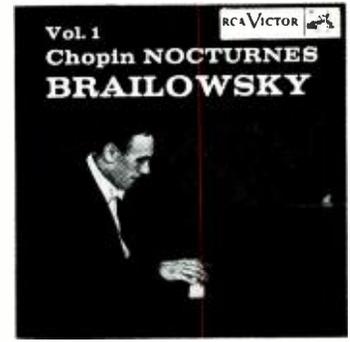
NEW IN NOVEMBER



LM-2149

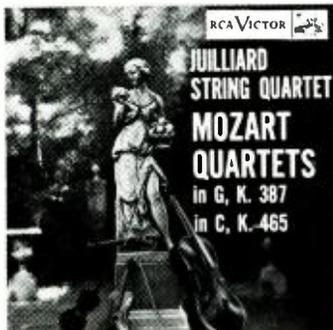


LM-2146



VOLUME I, LM-2160 VOLUME II, LM-2161

these great Red Seal albums



LM-2167



LM-2168

ARTUR
SCHNABEL BEETHOVEN
SONATAS



(ONE OF 8 NEW BEETHOVEN SONATA ALBUMS) LM-2153

from RCA Victor

EACH NEW ORTHOPHONIC HIGH FIDELITY LONG PLAY RECORD ONLY \$3.98

Other outstanding new albums for November:

- SPIRITUALS** LM-2126
- OVERTURES—IN SPADES** LM-2134
- SONGS WITHOUT WORDS** LM-2166
- ENTER THE BALLET** LM-2141
- PROKOFIEFF CINDERELLA EXCERPTS** LM-2135

THE WORLD'S GREATEST ARTISTS ARE ON



Manufacturer's nationally advertised prices shown

NOVEMBER 1957

83



If you are interested in CONTEMPORARY MUSIC

... or would like
to learn about it —

Enjoy finest Contemporary music at its high-fidelity best . . . brilliantly played by one of the nation's outstanding symphony orchestras . . . flawlessly recorded by Columbia Masterworks . . . and interpreted as the composer intended.

This is a rare opportunity to possess exclusive **FIRST EDITION RECORDS**—first recordings of newly commissioned works by leading composers, played superbly by the renowned

LOUISVILLE ORCHESTRA
Robert Whitney, Conductor

These "collector's item" recordings are available for a limited time, from the Society only. They are a priceless collection of new, exciting music . . . the finest expressions of living composers the world over.

"Splendid sound".

Cleveland Plain Dealer

"... a service to music unequalled".

Christian Science Monitor

"... the reproduction is a model of clarity".

St. Louis Globe-Democrat

"... recording and performances, excellent".

Pittsburgh Post-Gazette

"... quality higher than critics dared hope".

Time Magazine

In addition to their musical brilliance and technical perfection, First Edition Records give you the satisfaction of establishing yourself as a patron of today's finest music. The Louisville Philharmonic Society is a non-profit organization . . . income from record sales is used in the commissioning of still further works.

● ● TRY THEM—NO OBLIGATION! ● ●

LOUISVILLE PHILHARMONIC SOCIETY

Dept. G-10, 830 S. Fourth St., Louisville 3, Ky.

Please enter my subscription for First Edition Records (12", LP, two sides) and ship me the current releases, at the subscription price of \$1.98, postage prepaid.

I understand that, if I am dissatisfied in any way, I may cancel this subscription within 30 days, and keep the record, without cost. Otherwise you may continue to send me future releases (one every two months, at \$1.98 each) until I cancel my subscription.

I also understand that this subscription entitles me to buy previous issues, if I wish them, at \$6.95 each instead of \$7.95.

Name _____

Address _____

City _____ State _____

rhetoric of eighteenth-century *tonadillas*. But her unique endowments, vocal and artistic, are as germane as welcome in the works of D. Pisdor as in those of G. Puccini.

Informative notes are printed on the jacket but no texts. This is a pity, especially since the title translations are not always very helpful (what are we supposed to make, for example, of "Call me not *segalaberba*"?), but I should not want to suggest that the lack of texts discourage anyone from sampling this marvelously executed collection of unhackneyed songs. ROLAND GELATT

DELLER CONSORT: "The Cries of London"

The Deller Consort; London Chamber Players; Ambrosian Singers, Alfred Deller, dir.

VANGUARD BG 563. 12-in. \$4.98.

It is surprising, when one thinks about it, that composers have not made more use of the cries of great cities. Offhand, one thinks of the beginning of the second act of Charpentier's *Louise* (which may in turn have inspired the wonderful passage in Proust describing the sounds of Paris as it awakens in the morning) and William Schuman's *American Festival Overture*, based on a New York street cry. Denis Stevens, in his notes, mentions the use of cries in medieval compositions. My readers will no doubt think of others. Apparently it was only in seventeenth-century England that a number of fine composers, including Gibbons and Weelkes, constructed extended compositions out of cries.

The present disc includes *The Cries of London* by Weelkes, the work of the same title by Richard Dering, and the latter's *Country Cries*. Dering's *Cries of London* is the longest of these. It is a lovely work, of a grave cast despite the text, which is nothing but a string of all sorts of vendors' cries. Dering's amusing *Country Cries* is more chipper. April Cantelo, soprano, sings Weelke's *Cries of London* with attractive tone and clear enunciation. Two shorter works for solo voices, Ravenscroft's *A Bellman's Song* and *The Painter's Song*, are very nicely done too, the first by Alfred Deller and the other by Wilfred Brown, tenor. There are also nine short pieces in the form of catches or canons, sung here by three or four male voices unaccompanied. An occasional shakiness in intonation makes these the least successful performances on the disc. N.B.

EUGENE ORMANDY: "The Strings of the Philadelphia Orchestra"

Tchaikovsky: Serenade for String Orchestra, in C, Op. 48. Borodin: Nocturne for String Orchestra (arr. by Malcolm Sargent from String Quartet No. 2, in D). Barber: Adagio for Strings, Op. 11. Vaughan Williams: Fantasia on *Greensleeves*.

Strings of the Philadelphia Orchestra, Eugene Ormandy, cond.

COLUMBIA ML 5187. 12-in. \$3.98.

This release is acceptable or not according to whether or not you take your music listening seriously. Ormandy and his strings make pretty sounds. All of what they play, except for Barber, goes admirably with conversation and rattling glasses. So does the

bouquet-clutching girl on the cover.

But if you are shopping about for a performance which sustains itself in quiet, which is the sole intercessor between you and the composer, this will never do. The Tchaikovsky *almost* does: the strings play with so immaculate a tone that one suspects they trill in unison; they are copious enough to warm the heart of a Hector Berlioz; and the engineering is fine. But one gets throughout the impression that neither the orchestra nor the conductor feels very much for this music. The tempos can only be described as businesslike; the dynamics are too strenuous; and as to the last movement, almost nothing of it remains. The Philadelphians, applying their getting-on-with-it philosophy with a vengeance, make an extraordinary excision of 204 bars. One can see why they deleted this music: it is serious, contrapuntal, making its appeal to the critical intellect rather than the tapping toe.

So, one would suppose, does Barber's *Adagio*, but it is so familiar to everyone that it manages to get by in a performance which has much the same virtues and shortcomings as the Tchaikovsky. Both are better served by Munch on the RCA Victor label. The treble must be turned down in the Borodin, but it and *Greensleeves* are perfectly apropos, and get performances which perhaps they deserve. D.J.

ORQUESTA SINFONICA NACIONAL: "Viva Mexico."

Orquesta Sinfonica Nacional (Mexico), Luis Herrera de la Fuente, cond.
CAPITOL T 10083. 12-in. \$3.98.

As my former associate, R. H. Hagan, once put it, there is a difference between examining roots and putting forth shoots, and that difference is beautifully exemplified in the four compositions on this record.

Silvestre Revueltas' *Homenaje a Garcia Lorca* puts forth shoots. It has power, passion, grotesquerie, and punch. Its three short movements sweep together rhythms and thematic material inspired by Indian and Hispanic American sources and really do something with them; furthermore Revueltas handles his chamber orchestra with masterly adroitness, pungency, and ingenuity.

The other three pieces examine roots. Blas Galindo's *Los Sonos de Mariachi* is based on the popular music played by the street bands of Jalisco. José Pablo Moncayo's *Huapango* takes us back to a folk dance from Vera Cruz, and Daniel Ayala's *Tribu* represents an effort to reconstruct Mayan music through the use of ancient percussion instruments and old folk tunes from Yucatán. All three of these pieces are pleasant, but they lack the incandescence that distinguishes Revueltas.

The performances are excellent, and the recording is first-rate. The interpretation of the Revueltas is a trifle more pointed than the one by Carlos Surinach recently released on M-G-M, but both are good. A.F.

PETER PEARS: *English Song Recital*

Bridge: *Go not, happy day; Love went a-riding*. Butterworth: *Is my team ploughing?* Ireland: *I have twelve oxen*. Moeran: *In youth is pleasure*. Warlock: *Yarmouth Fair*. Holst: *Persephone*. Berkeley: *How love came in*. Britten: *Let the flood music*

praise! Oldham: *Three Chinese Lyrics*. Ford: *Fair, sweet, cruel*. Morley: *Come, sorrow, come! It was a lover and his lass; Mistress mine*. Rosseter: *When Laura smiles: What then is love but mourning*. Dowland: *I saw my lady weep; Awake, sweet love; In darkness let me dwell*.

Peter Pears, tenor; Benjamin Britten, piano; Julian Bream, lute.
LONDON LL 1532. 12-in. \$3.98.

An interesting juxtaposition of songs from two of England's richest creative periods: the Elizabethan age and the present century. The contemporary contingent is on the whole rather conservative. The song by Ireland is folklike while *Yarmouth Fair* is an actual folk song. Among the more impressive (and progressive) songs are Britten's rather elaborate and not always convincing setting of a poem by Auden, and the three short pieces by Arthur Oldham. Most of the lute songs will be familiar to those interested in Elizabethan music. They range in mood from the sprightliness of Morley's setting of Shakespeare's *It was a lover and his lass* to the tragedy of Dowland's *In darkness let me dwell*.

Pears sings all of this material with fine style and plenty of feeling. His is not the greatest technique among present-day singers: there is often an impression of hollowness, of lack of sufficient support; but to offset this there is uncommon understanding and musicianship. Britten's accompaniments for the twentieth-century songs are models of what such things should be, and Bream's lute playing is also satisfactory. N.B.

LEONARD PENNARIO: *Sonatas for Piano*

Bartók: Sonata for Piano. Prokofiev: Sonata for Piano, No. 3, in A minor, Op. 28. Rosza: Sonata for Piano.

Leonard Pennario, piano.
CAPITOL P 8376. 12-in. \$3.98.

The aim here is to overwhelm the listener with splashy virtuosity but retain his respect by invoking such honorific terms as "sonata" and "modern music." On the whole, that aim is well achieved. The performances of the Bartók and Prokofiev are very good, although they have formidable competition in current record lists from such pianists as Andor Foldes and Gary Graffman. The big, romantic sonata by Rosza has not been recorded before.

A.F.

FRITZ REINER: "Vienna"

Johann Strauss, Jr.: *Morning Papers*: Waltz, Op. 279; *Emperor Waltz*, Op. 437; *On the Beautiful Blue Danube*: Waltz, Op. 314. Weber: *Invitation to the Dance* (trans. Berlioz). Josef Strauss: *Village Swallows*: Waltz, Op. 164. Richard Strauss: *Der Rosenkavalier*: Waltzes (arr. Reiner).

Chicago Symphony Orchestra, Fritz Reiner, cond.
RCA VICTOR LM 2112. 12-in. \$3.98.

Designed both for those who are nostalgic for Vienna and for those who have never visited the "capital of the waltz," this handsome album includes some fine photographs

of the city and an essay on Vienna and its waltzes by Joseph Wechsberg. Its musical contents are somewhat less impressive. Reiner has a flair for the waltz, but here he omits most repeats and, in the *Emperor Waltz*, makes an unnecessary cut in the coda. I also would have preferred the standard concert version of the *Rosenkavalier* Waltzes to the conductor's more episodic arrangement. The range and naturalness of reproduced orchestral tone, however, are exceptionally praiseworthy. P.A.

MORIZ ROSENTHAL: *Recital*

Chopin: Sonata No. 3, in B minor, Op. 58; *Tarantelle*, Op. 43. Chopin-Liszt: *Chant Polonoise* No. 5 (*Ally Joyz*). Han-

del: *Air and Variations (Harmonious Blacksmith)*. Strauss-Rosenthal: *Blue Danube* Waltz.

Moriz Rosenthal, piano.
RCA CAMDEN CAL 377. 12-in. \$1.98.

Rosenthal was the last active exponent of the Liszt school. When he died, in 1946, only José Viana da Motta, a Portuguese pianist who had been inactive as a recitalist for many years, remained; and Da Motta died in 1948. In the Honeker biography of Liszt there is a photograph taken in 1884 showing Liszt and some of his pupils. Siloti, Sauer, Alfred Reisenauer, Artur Friedheim—all are there. And at the upper left is young Moriz Rosenthal, confident and handsome, with a mighty



MODERN CLASSICS WITH THE VIBRANT HORENSTEIN TOUCH!
SCHOENBERG: VERKLAERTE NACHT, OP. 4 • CHAMBER SYMPHONY, E FLAT MAJOR, OP. 9
Joscha Horenstein conducting the Symphony Orchestra of Southwest German Radio, Baden-Baden
PL 10,460

BRENDEL—"A FIRST CLASS VIRTUOSO"—N. Y. TIMES
LISZT: PIANO CONCERTO #1, E FLAT MAJOR • PIANO CONCERTO #2, A MAJOR
Alfred Brendel, piano—Pro Musica Orchestra, Vienna—Michael Gielen, conductor..... PL 10,420

GLORIA IN D—ONE OF THE MOST LOVED RELIGIOUS WORKS!
VIVALDI: GLORIA IN D • STABAT MATER • MOTETTE A CANTO
Friederike Sailer, soprano—Margaret Bence, alto—Pro Musica Choir and Orchestra Stuttgart—Marcel Couraud, conductor..... PL 10,390

MOZART: REQUIEM, D MINOR, K. 626. Wilma Lipp, soprano—Elizabeth Hoengen, alto—Murray Dickie, tenor—Ludwig Weber, bass—Singerverein der Gesellschaft der Musikfreunde, Vienna—Pro Musica Symphony, Vienna—Joscha Horenstein, conductor. Illustrated De Luxe Album..... DL 270



236 West 55th Street, New York 19, N. Y.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★
FOLKWAYS
OUTSTANDING
NEW RELEASES

"Highest Ratings"

- ★ **FA2320 AMERICAN FAVORITE BALLADS** with PETE SEEGER his five string banjo, and twelve string guitar in: Down in the Valley, Mary Don't You Weep, Johnny Crack Corn, So Long, Wabash Cannon Ball, My Horses are Hungry, Skip to my Lou, Wreck of the 97, Old Dan Tucker, Frankie and Johnny, On Top of old Smoky, Rock Candy Mountain, etc with Notes. 1-12" 33 1/2 rpm longplay record \$5.95
- ★ **FG3586 BIG BILL BROONZY, His Story:** Interview with Studs Terkel. Recording includes: Early Days (Plough-Hand-Blues), C. C. Rider, Willie Mae Blues, Experiences (This Train), (Mule Ridin'-Talking Blues), Travelling (Key to the Highway) (Black, Brown and White), Joe Turner Blues No. 1. Notes by Charles E. Smith. 1-12" 33 1/2 rpm longplay record \$5.95
- ★ **FS3860 Music from the sound track of the prize-winning film, PICASSO. A 12" longplay record album edition of the music composed by Roman Vlad, (Flamenco score) and performed by a world famous guitarist with orchestra directed by Franco Ferrara. This film, produced in Italy by Sergio Amidei for Rizzoli Films, won the Silver Reel Award in 1956 of the American Film Assembly. The accompanying brochure contains reproductions from some of the milestones of the works of Pablo Picasso in autobiographical sequence, and poet Claude Roy's text (translated from the French) based on scenario by Pablo Picasso and Sergio Amidei. 1-12" 33 1/2 rpm longplay record \$5.95**

For complete FREE catalog of over 400 albums, write to:

★ **FOLKWAYS RECORDS** ★
& SERVICE CORP. ★
 117 West 46th Street • New York, NY

★ ★ ★ ★ ★ ★ ★ ★ ★ ★
HIGH FIDELITY
RECORD OF THE MONTH

"What would, on some other labels, be a subject for excited pronouncements about hi-fi, is for London, merely a continuation of leadership. . . ."
 Irving Kolodin-Saturday Review



Pierino Gamba conducting
 The London Symphony Orchestra

LL-1671 \$3.98

★ **LA TRAVIATA** — Preludes to Acts 1 and 3 (Verdi); **CAVALERIA RUSTICANA** — Intermezzo (Mascagni); **CLEOPATRA** — Overture (Mancinelli); **I VESPRI SICILIANI** — Overture (Verdi); **NOTTURNO** (Martucci); **LA GIOCONDA** — Dance of the Hours (Ponchielli).



★ **LA BOUTIQUE FANTASQUE** — Complete Recording (Rossini-Respighi); **L'APPRENTI SORCIER** "Sorcerer's Apprentice" (Dukas).

★ **GEORG SOLT** conducting **THE ISRAEL PHILHARMONIC ORCHESTRA.**

LL-1715 \$3.98



539 WEST 25TH STREET, NEW YORK 1, N. Y.

mane of hair and a close-clipped moustache (in contrast to the enormous Kaiser Wilhelm handlebars he sported later on).

What memories Rosenthal carried to the grave with him! And they were not all musical memories. A famous raconteur, a *bon vivant*, a man with a rapierlike tongue, a strong chess player, a cultivated human being, Rosenthal lived intensely. In his prime—from 1890 through the middle Twenties, say—he was considered the most electrifying pianist before the public, and old-timers speak with awe about the heroic way he went through the repertoire. The Liszt E flat was one of his specialties, and his conception was believed unparalleled for bravura and thunderous tone.

Rosenthal did make quite a few recordings that were published during his lifetime, but here Camden has come up with a disc of items that were never released. The B minor Sonata and *Harmonious Blacksmith* were recorded in 1939; the *Tarantelle* and *Cbant Polonaise* in 1942; the Rosenthal potpourri from Strauss in 1928. Perhaps Rosenthal never approved these; they are, says Camden, presented through the courtesy of Mme. Hedwig Rosenthal (the pianist's wife) as "an artistic and historical memento."

Artistic and historical they are. When Rosenthal recorded these pieces, he no longer had the strength to storm through the music. Remember, he was seventy-seven years old in 1939. His fingers no longer always obeyed him, and there is some fumbling. But what craft and style are found here! What variety of touch! What exquisite tracery! And, above all, what a singing tone! This quality of tone, luscious and never percussive, is found in all the great turn-of-the-century pianists, who knew how to coax from their instrument a type of coloration that seems to be entirely alien to the younger generation. And thus, despite certain inadequacies, this disc is in truth a document. It represents not only Moriz Rosenthal but also a certain era and philosophy of the keyboard.

For the 1928 performance of *The Blue Danube* (a transcription that weaves in *Fledermans* excerpts and other waltzes, and should not be confused with another similar potpourri that Rosenthal also recorded for Victor) no allowance for age is necessary. Here is Rosenthal pretty much in his prime, throwing notes all over the area like confetti at a New Year's celebration. Some amazing technical feats are present, yet the playing is anything but a technical stunt. Rosenthal never bangs, and if you want to hear an authentic Viennese lilt, get this disc and see how a master hesitates on the second beat. The recorded sound is as good as can be expected. There is one bad tape splice, at bar 143 of the last movement of the Chopin, which obviously was intended as a 78-rpm turnover point. H.C.S.

★ **TRAPPIST MONKS OF GETHISEMANI: "Hail, Holy Queen"**

Trappist Monks of Gethsemani.
 COLUMBIA ML 5205. 12-in. \$3.98.

The sixty monks who form the choir of the Trappist community in Gethsemani, Kentucky, sing these excerpts from the Assumption liturgy in simple, unadorned

style, without for example, the subtle nuance found in the chanting of the Solemn monks. But the plainness of the singing is immaterial—the music gently and lovingly gives wings to the all-important words. Extended melismas, serene but sometimes almost lively, suggest the ecstasy of the texts, which contemplate rapturously and adoringly the character of Mary and her ascension to heaven.

The recording, made under the supervision of Ralph Jusko, has the intimacy of a small chapel. The final *Salve Regina* was recorded live on a November evening in 1956, with two-hundred monks and lay brothers chanting, and the ringing of the Angelus bell brings the recording to a close. Latin and English texts, notes, and a glossary of liturgical terms are included in an accompanying folder. R.E.

★ **FERNANDO VALENTI: The Spanish Harpsichord**

Soler: Sonatas: in D; in D minor; in C minor; in D flat; in F sharp. Gallés: Sonata in F minor. Anglès: Adagietto. Rodríguez: Rondo in B flat. Freixanet: Sonata in A. Mateo Albéniz: Sonata in D.

Fernando Valenti, harpsichord.
 CONCORD 4004. 12-in. \$4.98.

Since Mr. Valenti's performances of these same works on two Westminster records (*Spanish Keyboard Music* and *Soler Sonatas*) now are out of the catalogue and since other recorded performances of this repertoire are played on the piano, where the music loses so much life and color, this Concord reissue of an Allegro disc is most welcome. Mr. Valenti brings to these delightful sonatas and other pieces by some of Scarlatti's successors in Spain his customary vigorous, strongly rhythmic style. The sound is not as brilliant and transparent as on Westminster, but it will serve. R.E.

★ **HELEN WATTS: "Songs for Courtiers and Cavaliers"**

The Italian Monodists. Henry Lawes.

Helen Watts, contralto; Thurston Dart, harpsichord and chamber organ.
 OISEAU-LYRE OL 50128. 12-in. \$4.98.

Five of the little-known Italian composers who cultivated the solo song in the first decades of the seventeenth century are represented here by seven songs. These are of several kinds. I found most interesting Vincenzo Caletani's *Damigella tutta bella*, an appealing strophic song in dance rhythm; Sigismondo d'India's *Infelice Didone*, a long, tragic recitative with flashes of the direct emotional appeal that was to become characteristic of Italian opera; and Alessandro Grandi's *Vientene, o mia crudel*, an attractive love song. The other side presents thirteen songs by an Englishman active in the second third of the century. These, too, vary in character. There are hymns, love songs, and one song in the style of an Italian air, with a nonsensical text that Lawes deliberately strung together out of Italian song titles. Especially lovely, it seems to me, are the melancholy *Parting* and the pastoral-like *Sufferance*. All are

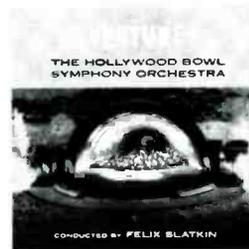
Continued on page 88

NOW PLAYING



In *Landmarks*, Stokowski presents new recordings of his most famous interpretations. Works by Bach, Sibelius, Strauss, Debussy.

Sensitive...
Stirring...
Exciting!



Here are four overtures whose melodic excitement has made them concert favorites. Felix Slatkin with the Hollywood Bowl Symphony.



Tonal masterpieces by the two great French impressionists, sensitively performed. Erich Leinsdorf conducts the Los Angeles Philharmonic.



Roger Wagner conducts his Chorale and the Hollywood Bowl Symphony in stirring choruses from *Aida*, *Carmen*, other famed operas.



Beethoven's robust, passionate *Seventh Symphony* finds its perfect interpreter in William Steinberg. With the Pittsburgh Symphony.

It's not likely you'll see such heady billing on the boards at your local concert hall. But *here*, it applies. Because these five albums offer some of the most sensitive, stirring, exciting moments in music.

In all else, they are as different from each other as 14 composers, 200 years of musical history, and 5 conductors can be.

This, frankly, is music to hear as the spirit moves you. And Capitol's Full Dimensional Sound brings it to you with all its intensity intact.



THE SPANISH HARPSICHORD

Fernando Valenti plays a delightful program of music by Spanish classical composers.

SOLER: Sonata in D Major
Sonata in d minor
Sonata in c minor
Sonata in D Flat Major
Sonata in F Sharp Major

GALLÉS: Sonata in f minor

ANGLES: Adagietto

RODRIGUEZ: Rondo in B Flat Major

FREIXANET: Sonata in A Major

ALBENIZ: Sonata in D Major

Fernando Valenti, harpsichord

Concord 4004—Long Play 12" Recording—\$4.98

AMERICAN ANTHOLOGY, VOL. 1

Orchestral music by American Classical and Romantic composers. "Fascinating history . . ."
—TIME

FRANCIS HOPKINSON: A Toast to Washington

HANS GRAM: Death Song of an Indian Chief

WILLIAM HENRY FRY: Overture to "Macbeth"

LOUIS GOTTSCHALK: Andante from Symphony

"A Night in the Tropics"

JOHN KNOWLES PAINE: Overture to "As You

Like It"

EDWARD MACDOWELL: Lamia, Tone Poem

GEORGE CHADWICK: "Hobgoblin" from Sym-

phonic Sketches

HORATIO PARKER: Orchestral Interlude from

"Mona"

CHARLES GRIFFES: "The Vale of Dreams" from

Three Tone Pictures, Op. 5

HENRY HADLEY: Scherzo Diabolique

Karl Brock, tenor; James Pease, baritone; Concord

Philharmonia conducted by Richard Korn

Concord 3007—Long Play 12" Recording—\$3.98

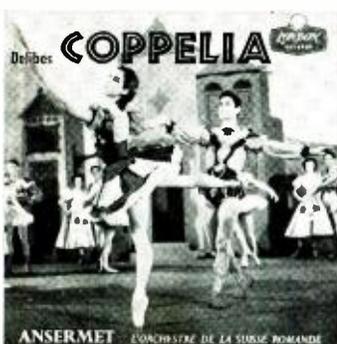
At your dealer or write:

CONCORD RECORD CORPORATION

Bureau 25, 519 S. Fifth Avenue
Mount Vernon, N.Y.

"The happiest moments I have thus far spent in a recording studio."

Ernest Ansermet



Complete Full-length Version

ERNEST ANSERMET conducting
L'Orchestre de la Suisse Romande

LL-1717/18 2-12" Records \$7.96

It is easy to comprehend the great conductor's pleasure for here is music with a most infectious charm and gaiety. It remains fresh, strikingly rhythmic and melodious, and full of dramatic color. It is also of a symphonic quality far removed from the average ballet of its day and age.

LONDON
RECORDS
539 WEST 25TH STREET, NEW YORK 1, N. Y.

very well sung by Miss Watts, who, unlike many English singers we have heard on records, gives the impression of committing her heart and soul to each piece. No texts are supplied; none are needed for the English songs, so clear is Miss Watts's diction. N.B.

VIRGINIA ZEANI: Operatic Recital

Verdi: *La Traviata: Ab! Fors' è lui—Sempre: Addio del passato.* Bellini: *1 Puritani: Qui la voce—Vien diletto; La Sonnambula: Ab! non credea mirarti.* Donizetti: *Lucia di Lammermoor: Regnava nel silenzio—Quando rapito in estasi: Il dolce suono—Ardon gl'incensi.* Puccini: *La Bohème: Si, mi chiamano Mimi; Donde lieta uscì.*

Virginia Zeani, soprano; Orchestra of the Maggio Musicale Fiorentino (Florence), Gianandrea Gavazzeni, cond.

LONDON LL 1650. 12-in. \$3.98.

The Rumanian-born soprano Virginia Zeani is a relative newcomer to the operatic stage, having made her debut in Bologna just six years ago. She has a bright and slightly hard soprano voice, an interesting and vital sound, not at all pretty but potentially of great beauty. She sings clean coloratura, and her *Lucia* Mad Scene is especially distinguished for the sound of its top-most notes: even above high C, the tone remains vibrantly human and there is no trace of that electronic squeak into which so many sopranos degenerate at those heights.

From this record, which presents Miss Zeani in a kind of audition program, I do not get a really clear picture of her artistic personality. There is no question of "bad taste" in anything she does, yet her fondness, for instance, for unwritten high notes suggests an absence of a positive "good taste." She also has a bad habit of breaking up a phrase with a sudden and unmotivated outburst ("*non rado sempre a mesSA*" in Mimi's narrative, for example), but in general her singing is pleasantly simple and unaffected. Given a nourishing and stimulating artistic environment, Miss Zeani ought certainly to become an important soprano.

The most successful performances on this record are of Verdi's "*Addio del passato*" (except for an overpathetic reading of the letter) and the two scenes from *Lucia*. The accompaniments are delivered in rather an offhanded manner. C.M.S.

More Briefly Noted

Jacobean Consort Music, Oiscau-Lyre OL 50133.

Spirited playing by the Jacobean Ensemble, under Thurston Dart's direction, of music written in the first quarter of the eighteenth century. Four lively suites by Giovanni Coperario (né John Cooper) and Orlando Gibbons' lovely Galliard are among the high spots.

Mildred Kayden: "Presentation of Plainchant." Folkways FS 3865.

The enterprising young woman who presents weekly interviews with musical personalities on a New York radio station discusses Gregorian chant with a French

Benedictine specialist and introduces examples of the chant as well as excerpts from a Palestrina and a Langlais Mass.

Robert Noehren: Baroque Organ Music. Concord 4002.

Noehren, well-known for his intelligent and stylistically appropriate performances, is heard here on the Hermann Schlicher organ at the Kenmore Presbyterian Church in Buffalo. Again, a discriminating presentation of organ music of the period, with good sound and excellent notes.

Russell Oberlin: Music of the Middle Ages, Vol. III. Expériences Anonymes EA 0023.

Twelve of the songs included in the thirteenth-century collection of more than 400 known as the *Cantigas de Santa Maria* are included here. Most are in praise of the Virgin Mary. Russell Oberlin sings them with his usual skill, and Joseph Ladone, lutenist, performs ably. Excellent notes and texts.

Eugene Ormandy: Overtures. Columbia ML 5206.

Ormandy and the Philadelphia Orchestra manage to suffuse some life into the shopworn *William Tell* Overture, Offenbach's *Orpheus*, Smetana's *Bartered Bride*, Thomas' *Algonon*, and Suppé's *Beautiful Galathea*. The engineers, however, are tired.

THE SPOKEN WORD

KATHARINE CORNELL

Readings from Rudolf Besier's *Barretts of Wimpole Street* (with Anthony Quayle) and Elizabeth Barrett Browning's *Sonnets from the Portuguese*.

CAEDMON TC 1071. 12-in. \$5.95.

Wimpole Street without Flush and Papa Barrett is not quite what it once was, but something of the romantic real-life drama of Elizabeth Barrett and Robert Browning does emerge from the three brief dialogues presented here. Anthony Quayle, even granted the poet's fervor, occasionally sounds as if he were Romeo in that young man's more feverish moments, but Katharine Cornell as Elizabeth is always properly gracious, tender, and noble.

On the overside, Miss Cornell reads twenty of the forty-four *Sonnets from the Portuguese*. These somewhat embarrassingly personal verses seem sometimes to be declaimed rather than spoken, but perhaps Mrs. Browning's own lofty abstractions are to blame here. J.G.

THE HEROIC SOUL: Poems of Patriotism

A selection of nineteenth-century American patriotic verse, read by Arnold Moss, R. E. Johnson, and Jay Jostyn.

DECCA DL 9044. 12-in. \$1.98.

It takes a good man and true to read a poem like *Breathes There a Man* or Whitman's *Liberty* without making an audience

Continued on page 90

Sonotape

Here is a new adventure in listening . . . the world's finest music on stereophonic tapes. Made from famous Westminster originals.

Seasoned audiophile and novice alike will be delighted by the tonal fidelity of these superb tapes. They've been reproduced from the masters on a one-to-one basis, each being a *direct reproduction* from the original. Be sure to ask for them at your dealers.

NEW and EXCITING!
STEREOPHONIC
"7000" SERIES

Here are the latest Sonotape "7000" Series Releases

CNY 1957 CHICAGO-NEW YORK AUDIO SHOW STEREOPHONIC DEMONSTRATION TAPE	
SWB 7001 TCHAIKOVSKY Nutcracker Highlights Philharmonic Symphony Orchestra of London Conducted by Artur Rodzinski	SWB 7008 KHACHATURIAN Gayne Ballet Highlights Vienna State Opera Orchestra Conducted by Hermann Scherchen
SWB 7002 TCHAIKOVSKY 1812 Overture Vienna State Opera Orchestra Conducted by Hermann Scherchen	SWB 7009 TCHAIKOVSKY: March Slav KHACHATURIAN: Lezhinka Vienna State Opera Orchestra Conducted by Hermann Scherchen
SWB 7003 LEHAR: Gold and Silver Waltz WALDTEUFEL: Skater's Waltz Vienna State Opera Orchestra Conducted by Armando Aliberti	SWB 7010 DUKAS Sorcerer's Apprentice Vienna State Opera Orchestra Conducted by Hermann Scherchen
SWB 7004 DEUTSCHMEISTER ON PARADE Deutschmeister Band Conducted by Julius Herrmann	SWB 7011 VERDI Aida, Triumphal March & Ballet Music Vienna State Opera Orchestra Conducted by Armando Aliberti
SWB 7005 GYPSY PASSION Lendvay Kalman and His Gypsy Band	SWB 7012 SPIRITUALS Graham Jackson Choir.
SWB 7006 RAVEL Bolero Vienna State Opera Orchestra Conducted by Hermann Scherchen	SWB 7013 CATHEDRAL BELL RINGERS Cathedral of St. Philip, Atlanta, Ga.
SWB 7007 LISZT Mephisto Waltz Vienna State Orchestra Conducted by Hermann Scherchen	SWB 7014 CHRISTMAS EVE IN THE CATHEDRAL Chorus & Organ Conducted by Homer Edwards
SWB 7024 INTRODUCTION TO STEREO	SWB 7015 A MERRY WURLITZER CHRISTMAS Dick Leibert, Organ

All the Quality of Westminster Originals Captured for You on Stereophonic Tapes in The Sonotape "7000" Series at ONLY

\$6⁹⁵



FREE: Complete Sonotape Catalog of Monaural and Stereophonic Tapes. Write Dept. F-11 Sonotape, 275 Seventh Avenue, New York City, N. Y.

squirm, as anyone who has suffered through one of the thousands of high school graduations knows.

But Arnold Moss, R. E. Johnson, and especially Jay Jostyn give beautiful readings here—and if there is any squirming in the audience it is probably due to the fact that some people naturally get a little uncomfortable these days when they are reminded that once upon a time men actually sacrificed their lives so that others might be free; reminded, as these poems remind us, that we have come a long way from Bunker Hill to the suburban shopping center; that that stretch of beach, littered with pop bottles and beach umbrellas and peopled by soft men in plaid shorts, was once a "Stern and Rockbound Coast"; that Valley Forge is now just a name for beer and Barbara Fritchie a box of candy; and that card-carrying members of the Boston

Tea Party would be unable to work for the government they helped create until they got their official clearance.

These poems won't set well unless you're in the right mood. But if you are—that is, if you are among those depressed by the folly in our land—then they will surely strike a sympathetic chord. As the nineteenth-century poet Josiah Gilbert Holland wrote: "God Give Us Men. . . Tall men, sun-crowned, who live above the fog." R.H.H., JR.

FOLK MUSIC

by Edward L. Randal

FROM RCA's Vik label comes a strange sally into the realm of folk music. On

Old But New (LX 1091), George Siravo and his Orchestra offer a selection of Siravo-arranged traditional melodies. Probably the best clue both to intent and result is furnished by the nature of the altered titles: *She'll be Swingin' Round the Mountain*, *Piggy Me Back to Old Virginny*, etc. What is the nature of the Siravo treatment? *Old Folks at Home* gains an incongruous Latin American beat; a muted trumpet etches a waltzlike *I've Been Working on the Railroad*. Stephen Foster, whose adversities clearly did not end with his death, is the principal beneficiary of Siravo's musical restyling and—in the words of the fatuous album notes—the Foster who emerges is "witty; he's slick; he's Cole Porter." Faced with this sort of aberration, one can only wonder why.

Calypto fever has struck at Vox and the result is a release titled *Caribbean Calyp-*

Sportscars Are Machines to Demonstrate Courage

FOR those sportscar enthusiasts who consider listening to five minutes of a 3.5 Ferrari warming up the height of pleasure, one record in the Riverside sportscar series—*Pit Stop*—is highly recommended.

True, *Pit Stop* also has other features. It was made during the Nassau Trophy races of December 1956 and manages to capture a fair portion of the color associated with sportscar rallies—brief conversations with racing greats; the excitement in the pit stop when a car comes roaring in with trouble; the announcement of ground rules; the endless discussions, especially about tires. But essentially the recording is sound—the Ferrari warming up; the spiningling testing of brakes; the roaring in and out of the pit and the continual flap of motors humming by. And *Pit Stop* is recommended for the pure enthusiast, who can hear things in a Maserati motor that others hear in a Beethoven symphony.

Not so the other two records. The recorded conversations with the late Marquis de Portago and the great British driver Stirling Moss are recommended not only to sportscar fans, but to anyone who is interested in the general phenomenon of automobile racing. These two gentlemen know what they are talking about; and when you are finished hearing them out, you may have a little better understanding

of this fascination with tremendous speed whose only significant objective seems to be death. At any rate, Portago and particularly Moss are professionals. When they strap themselves behind their wheels their usual head gear is a metal helmet and goggles—not a striped sports cap with a buckle in the back.

Their professionalism was especially borne out in their discussions of their favorite cars, discussion, incidentally, which should be approached by sportscar enthusiasts with the greatest caution: it is going to be a shattering experience. Portago, for instance, said that in his opinion the best car in the world is the American Ford—that's what he would buy if he wasn't a racing driver. Nothing to do with it; just trade it in every year. As a driver and not a mechanic, he felt that the trouble you have with sportscars—the ever changing of spark plugs and experimenting with special oils, etc.—was just a big nuisance. Except for racing, he said that his only interest in cars was "in getting from Point A to Point B."

Moss, on the other hand, says he enjoys driving little cars—the Morris Minor, for instance. He gets most of his pleasure out of car-handling—going around a 70-miles-an-hour curve at 75. But for touring, he says he prefers the American car: "a Lincoln or a Caddy with air conditioning and a radio and reclining seats—I can't see any point in shifting gears myself. I like automatic gear boxes and Servo brakes and electric windows. . . . I reckon," he says, "if you want to go from A to B you might just as well do it in great comfort. Just as a conveyance in America, you can't beat an American car."

Their credentials in order, then, the two racing gentlemen settle down to discuss the intricacies of driving a high speed sportscar on a course rather than on a date. Not that they don't like women. Portago, for instance, felt that the real sportscar driver is an incurable romanticist, that in another era he would have been fighting in the Crusades or conquering dragons or rescuing maidens in distress. "Today," he says, "the only man who can help a woman in distress is a doctor."

There is perhaps more truth than humor in Portago's remarks, and both men give the impression that one of the reasons they risk their necks to drive a racing car is that it is one of the few things left to do today that permits romantic flirtation with death. Racing, bull fighting, mountain climbing, big game hunting, preferably with bow and arrow, all seem to attract the same types—those who are having an increasingly difficult time demonstrating their courage.

Portago himself made his point. He was killed in a spectacular accident last May when his car reportedly blew a tire at 150 miles an hour during the Italian Mille Miglia. Hearing him talk this record is an extended interview recorded in New York, November 1956; you can't help feeling that you are listening to an aristocratic Latin James Dean.

Moss, on the other hand, is the reserved Britisher with an excellent sense of humor and a very engaging manner of speech. In discussing the recent fate of his Standard Eight, for instance, he does not say "my manager wrecked it," but rather: "he modified it for me by parking it between two cars which were moving at different speeds—which unfortunately shortened the wheel base for me."

Both men provide a fascinating forty-five or fifty minutes, each discussing the many facets of the subjects he knows best: racing cars; sportsmanship; cornering; car handling; favorite courses; racing techniques and strategy; accidents; death; performance; other drivers, particularly Fangio; qualities of a good driver; loyalty to the factory; style; Le Mans; and many, many more.

If you are looking for a quick introduction to the lore of sportscar racing, these two interviews will provide it.

ROY H. HOOPES, JR.

SPORTSCARS

Pit Stop; *Stirling Moss: The Story of Britain's Greatest Racing Driver*; *The Marquis de Portago: A Memorial Tribute*.

RIVERSIDE R 5003/4; 5007. Three 12-in. \$5.95 each.



JANE GRAUER
The late Marquis de Portago

songs (VX 25-420), featuring a small corps of assorted Caribbean vocalists with orchestral accompaniment. The disc is heavily seasoned with Haitian patois—no translations provided—and a certain over-all success stems from the relatively calm tempos in which the artists serve up their songs. This latter represents a pleasant departure from the interminable and largely artificial *frenesi* that besets most of this year's calypso releases. A tasteless and almost embarrassingly ineffectual treatment à la calypso beat of *When The Saints Go Marching In* sounds the only sour note on an otherwise enjoyable record. Excellent sound.

Los Bocheros, who derive their name from the basque word *bucho*, or hole, which is often applied to their home city of Bilbao, are heard in a relaxed Spanish and Hispano-American songfest on Montilla's *Los Bocheros Volume II* (FM 99). The quintet's close harmony and their careful preservation of melodic line provide an eminently suitable vocal frame for this type of material. The record is handsomely engineered.

Abetted by equally fine sound, Elektra's Tom Kines sings *Of Maids And Mistresses* (Elektra 137). Kines, who is a Canadian, possesses a strong, clear tenor that he manages to shade expertly according to the varying demands of a song. He has drawn his repertoire largely from D'Urfe's bawdy *Pills to Purge Melancholy*; happily, Kines has precisely the right touch—light and avoiding overstatement—to complement D'Urfe's wit.

FI MAN'S FANCY

by Philip C. Geraci

"Hi-Fi à la Española." Eastman-Rochester "Pops" Orchestra, Frederick Fennell, cond. Mercury MG 50144.
Fennell conducts 10 short pieces including Ernesto Lecuona's *Andalucía* and *Malagueña*; Arthur Benjamin's *Jamaican Rumba*; Manuel de Falla's *Ritual Fire Dance* from *El amor brujo*; and *The Bullfighter's Prayer*, by Joaquín Turina. Fennell imparts a sensitive touch where needed, yet relies on his experience with the Eastman Symphonic Wind Ensemble for expert handling of crushing climaxes. Maracas, marimbas, and other percussion mainstays wisely have been given a rather subdued position and do not overshadow the basic melodic themes, yet their presence does its part. The dynamic range of the record—true to current Mercury practice—is impressive, but surface noise and distortion are within acceptable bounds. The single-mike technique has been judiciously applied, with highly satisfactory results.

"Hi-Fi in the Highlands." Regimental Band and Massed Pipers of the Scots Guards, Lt. Col. Sam Rhodes, cond. Angel 35464.

A sound not too familiar to American ears is heard on this wonderfully executed recording. The pipers and brass band alternate on both sides of the record. Although the band has been recorded very well, in an atmosphere bespeaking the out-of-doors, it is the bagpipes of this beloved



THOMAS TOMKINS
MUSICA DEO SACRA
EA 0027

THE AMBROSIAN SINGERS
THE IN NOMINE PLAYERS
MARTINDALE SIDWELL, *organ*

SONGS AND CONSORT MUSIC
EA 0028

THE AMBROSIAN SINGERS
THE IN NOMINE PLAYERS
*recorded in England under
the direction of DENIS STEVENS*

ENGLISH POLYPHONY
EA 0024
RUSSELL OBERLIN, *countertenor*
CHARLES BRESSLER, *tenor*

THE PSALMS
MORRIS CARNOVSKY
EA 0025

SPANISH
KEYBOARD MUSIC
EA 0026
PAUL WOLFE, *harpsichord*

\$4.98 the record \$14.95 the tape
FOR COMPLETE CATALOG WRITE:
**EXPERIENCES
ANONYMES**
20 East 11th Street, New York 3



HAMLET

IF...
YOU
WANT
SOME-
THING
REALLY
NEW

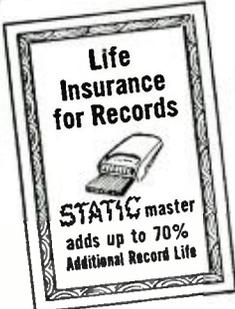
... TRY THIS!

BAYLOR THEATER'S "HAMLET"

THREE memorable discs of an exciting and revolutionary staging of HAMLET. A daring theater experiment, directed by Paul Baker, it features THREE ACTORS in each major role. A recording sure to interest drama lovers, excite hi-fi enthusiasts and infuriate Elizabethan purists. 3 LP discs with complete script and detailed, illustrated brochure. At better record stores . . . or buy direct from Word Records \$15.98

WORD RECORDS, Inc.
P. O. Box 385, Waco, Texas

CLEAN RECORDS THE EASY WAY...



**FAST, ECONOMICAL,
Non-SCRATCHING...and
you'll enjoy BETTER
LISTENING.**



Remove Surface Static,
dust and lint while
record is rotating

ALWAYS USE A

STATICmaster®

RECORD BRUSH



*The
Polonium
Strip
Does the
Trick!*

ONLY...\$14⁹⁵

Buy your STATICmaster at
your Hi-Fi shop, music store
or order direct. Sent postpaid
cash with order.

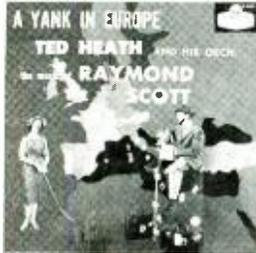
No residue from
liquids to coat
surfaces and
cloud fidelity of
reproduction.

NUCLEAR PRODUCTS CO., 10173 E. Rush St., El Monte 1, Calif.

HIGH FIDELITY

Specialties

TED HEATH—Big Band Precision Sound



Twelve new Raymond Scott originals depicting colorful European scenes. LL 1676



Twelve exciting arrangements spotlighting leading Heath soloists. LL 1721



Begin the Beguine; April in Paris; 'S Wonderful; Tenderly; Autumn Leaves; Stardust, 6 others. LL 1716

ARGENTA—Music of Spain



Premiere Recording. Famous Spanish Opera. Free Spanish-English libretto. A 4121



Navarra (Albeniz); Procesión del Rocio, Oracion del Torero (Turina); Basque Dances (Guridi). LL 1585



Capriccio Espagnol (Rimsky-Korsakov); España Rhapsody (Chabrier); Andaluza (Granados); Spanish Dances (Moszkowski). LL 1682

TEBALDI—"Magnificent Soprano"



Including Campora, Corena, Santa Cecilia Chorus & Orch.—Erede. 5077

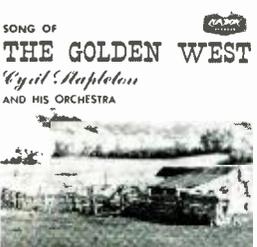


Including Campora, Mascernini, Corena, Santa Cecilia Chorus & Orch.—Erede. 5280



Including Del Monaco, Stignani, Protti, Corena, Santa Cecilia Chorus & Orch.—Erede. 5279

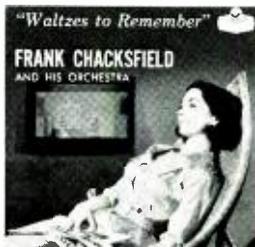
MOOD MUSIC—in high fidelity



Indian Summer; High Noon; Home on the Range; Indian Love Call; Ramona; Red River Valley, 6 others. LL 1723



Moonlight Cocktail; The Moon of Manakoora; Moonlight in Vermont; How High the Moon; Moonglow; Blue Moon, 6 others. LL 1709



The Desert Song; Sympathy; Wunderbar; Kiss Me Again; The Count of Luxembourg; My Hero, 8 others. LL 1603

LONDON
RECORDS



539 WEST 25TH STREET,
NEW YORK 1, N. Y.

Scottish group, playing traditional airs, which absorbs interest. There is an absolute lack of the recorded coloration which so often obscures the naked purity of the bagpipe. The microphoning was very skillfully done, and the disguise of the acoustical setting is perfect. The lilt and snarl of the pipes are welcome variations in a fi man's musical fare, and the Angel menu is tasteful indeed.

"Hi-Fi in the Tropics." Orquesta Montilla, Gilberto Valdes, cond. Montilla FM 94.

This is an intriguing collection of Cuban and Puerto Rican compositions in arrangements by the conductor. Valdes has sought continuity in his scoring for symphonic orchestra, and the result hangs together well. The recording is brisk and excellently balanced, and displays ever-present drums without overemphasis. Although at times sensuous and frenzied, the music has still a decidedly classical flavor, and well fits the spaciousness of the hall in which recorded. The Orquesta Montilla handles the music with glove-like familiarity under arranger Valdes' direction.

"Lecuona's Afro-Cuban Suite." Noro Morales and his orchestra. Vik LX 1100. Morales leads a tri-orchestral grouping—a full orchestra with twenty-eight strings; a combination of rhythm and wind instruments with eight trumpets; and a smaller group of rhythm and wind instruments—in a sparkling arrangement by George Siravo of Ernesto Lecuona's works. Siravo has molded eight short Lecuona compositions into a continuous tone poem, wherein jungle drum rhythms are superimposed on Latin-American melodies. Noro Morales' piano is masterful though subdued and several extremely difficult but perfectly executed trumpet passages will make your hair stand on end. Moods change constantly, from piercing trumpet to softly patted rhythms and gentle piano. The recording is superb, with crisp, biting brass, and perfect microphone balance which imparts big-hall coloration without over-reverberance or hollowness. This record represents a rare fortuity, where every mechanism from microphone to stamper has worked in perfect harmony—and the result is indeed a treat.

Sampler. Unicorn UNSR 2.

This second Unicorn sampler offers a piquant collection of musical bits ideal for spot listening, and an appetizing assortment of excellent sounds. It is, of course, intended to be representative of the Unicorn catalogue, offering excerpts from regular Unicorn releases. However, the samples have been carefully edited to begin and end at suitable transition points, and do not fade maddeningly in midpassage. They include portions of Vivaldi's Concerto in A; Sir Arthur Sullivan's *The Tempest*; Bartók's Divertimento for String Orchestra; Stravinsky's Symphony in E flat; Cowell's Hymn and Fuguing Tune, No. 5; and others. Although some artists appear twice, enough diversity exists to make unusual the fact that all of the bands contain the same big hall sound. It's almost as if the same room were used for

Continued on page 94

HIGH FIDELITY MAGAZINE

The Music Between

by Murray Schumach



SPRAWLED between the disciplined classical music that calls for respectful attention and the contrived dance rhythms that provoke boisterous footwork, is the growing field of harmonious sound that makes no great demand either on ears or legs. Known as background music, or mood music, this heavy money maker of the record industry, though without great artistic pretension, may have become the most widespread music of the nation, the stimulus of commerce and industry, a sauce for the dinner table, a solace for the conversational lull.

With a form as variable as the antioeba's, background music pours through piped systems, from the strings of meandering violinists in restaurants, and, as the witchcraft of high fidelity spreads, from the long-playing records in the living room. Whatever the original song—*Song of India* or *Autumn Leaves*—background music makes it nonintrusive on mind, heart, or body, whether it emanates from a sixty-piece symphony orchestra or a Hammond organ. Musical purists may rant on symphonic or jazz rostrums at what seems musical castration, but the market for background music seems limitless.

The most ambitious project in background music I have heard to date has been released by Columbia Records in four albums, each with two records, as a sort of compendium of the songs of George Gershwin, Jerome Kern, Richard Rodgers, and Cole Porter. Of the four attractive albums the only one I thoroughly liked was the *Columbia Album of Jerome Kern* (C2L-2), with Paul Weston's orchestra. Kern's music is, I think particularly challenging because its basic appeal is melody, rather than tricky rhythm or orchestration. Unless handled scrupulously, it can easily seem maudlin. Mr. Weston, however, shows excellent taste with Kern—a quality generally lacking in background music. He knows how to keep violins in their place, how to build climaxes, how to switch adroitly from brass to reed and back.

The other albums in this series suffer from a variety of shortcomings. The Gershwin selections (C2L-1), played by Percy Faith's orchestra, have overelaborate introductions or else, as in *Nice Work If You Can Get It*, suffer from a hodgepodge of jazz idioms. Andre Kostelant's approach to Rodgers (C2L-3) goes in for questionable medleys, lets the violins drip too much, and even uses a shrill violin for the solo of *Younger Than Springtime*, despite the fact that this song was written for a virile young Marine, not a vapid soprano. As for Mr. Legrand's approach to Porter (C2L-4), I need only mention that he uses a sort of angel chorus for *In the Still of the Night*.

A SERIOUS shortcoming of much background music is the absence of good vocalists. A good example of what background music lacks is Lena Horne's latest bit for RCA Victor, called *Stormy Weather* (LPM

1375). This is easily one of the best pop records I've heard this year. In her version of the record's title song she displays both trained technique and beautifully controlled passion. In *Mad about the Boy* she is intense and dramatic, and in *Ridin' on the Moon*, she shows driving, but unflustered rhythm. As usual, she has the fine arrangements of Lennie Hayton, who conducts the orchestra.

Harry Belafonte has some preseasonal holly for the phonograph with *Belafonte Sings of the Caribbean* (RCA Victor LPM 1505). Here is his usual humor (*Scratch, Scratch*), his sincerity and lyricism (*Cordelia Brown*), and fullness when needed (*Judy Drowned*). My only complaint is with the choral background. I think he's better without it. Frank Sinatra's latest record, *Where Are You* (Capitol W 855), shows how a good pop singer can save ballads from a heavy orchestral background—in this case by Gordon Jenkins' orchestra. On the other hand, Nat "King" Cole, on *This is Nat "King" Cole* (Capitol G 870), gets a helping hand from arrangements of Nelson Riddle well suited to his keen rhythmic sense and his talent for having fun with lyrics.

Perry Como justifies once more his reputation for relaxation on *We Get Letters*, with Mitchell Ayres's combination (RCA Victor LPM 1363). Elvis Presley, on the other hand, finds it quite difficult to relax on *Loving You* (RCA Victor LPM 1515). He still chops up syllables in *Teddy Bear*, gargles *Loving You*, makes Cole Porter's *In True Love* sound like a Hawaiian chant. Though Pat Boone is hardly as famous as Presley, I prefer his less lunatic approach to rock 'n roll on *Pat* (Dot DLP 3050). He prefers to sing, not scream, and he even finishes the words.

Occasionally legitimate singers—those trained for concert or opera—stray into the popular field, often much to my pleasure. Maria Teresa, of whom I'd never heard until I picked up *Look at Me, Love* (RCA Victor LPM 1450), has a lovely lyric soprano, obviously trained in classical music. In the twelve Spanish-language songs of this record she adds tenderness and charm of interpretation to technique.

Teddi King, who is strictly pop, handles lyrics well with a lush, warm voice on *A Girl and Her Songs* (RCA Victor LPM 1454). Another songstress I like is Fran Warren, who has recorded *Here's Fran Warren* (Tops L 1585). With fine arrangements by Marty Paich, who conducts the orchestra, she tackles *Rain or Shine* and *Beuitched, Bothered, and Bewildered* with rhythm, good phrasing, and even breath control. Lillian Roth, strictly a stylist, gets the heat of the red hot mamma school without the holler in *Lillian Roth Sings* (Tops L 1567).

THOSE who like Eddie Cantor—I am not one of his adorers—will undoubtedly find much for their money in *The Best of Eddie Cantor* (Vik LX 1119). Here the



Paul Weston: antidotal antics.

ebullient singing comic presents such trademarks as *If You Knew Susie*, *Makin' It*, *Whoopee*, *Ain't She Sweet*. Moreover, between songs he delivers commentaries about the tunes. Gracie Fields's substantial following will find a pretty well-rounded selection of her works in *Our Gracie* (London L.L. 1677), ranging from *The Biggest Aspidochelone in the World* to the romantic *Come Back to Sorrento*. The record sounds as if it had been made long ago.

The best party record I've heard in a long time is *The Piano Artistry of Jonathan Edwards*, made, under assumed names, by Paul Weston and Jo Stafford (Columbia CL 1024). This is the perfect antidote for anyone driven wild by incompetent cocktail pianists or off-key chanteuses and diseuses. On this hilarious spoof, Mr. Weston knows exactly when to become ten thumbs on a piano and Miss Stafford does an exquisite satire of the bistro diva. This is salvation for anyone planning to drown himself in watered Scotch to a dirge from a Hammond organ.

NOT many musical groups can make the skin crawl. But the bagpipes, drums, and regimental band of the famous Black Watch do just that in *Highland Pageantry* (RCA Victor LPM 1525). Their long tradition has not made them stale. With the martial spirit, they have the color of a tartan and, when needed, the lithe grace of a Highland dancer. The band never forgets it is playing music and, when the pipes skirl and the drums roll, the music is as fantastic as twilight on Ben Nevis. By comparison, the American equivalent, a drum and bugle corps, sounds anemic. Even the Skokie Indians, the American Legion Senior National Championship Group, is weak on *Drum and Bugle Corps* (Epic LN 3341).

There is nothing feeble about the Deutschermeister Band. The zest and musicianship of this famous Austrian military band applied to marches, as on *Angel's The Deutschermeister Band* (35498), can make a man whistle faster than many dance orchestras—and even make the feet more restless.

THE BLACK WATCH

ON PARADE IN TWO STIRRING
RCA VICTOR ALBUMS!



THRILL TO THE ROUSING MUSIC OF THE WORLD-FAMOUS BLACK WATCH! "HIGHLAND PAGEANTRY" (LPM 1525) & "SCOTTISH SPLENDOR" (LPM 1526) LONG PLAY. ONLY \$3.98 EACH.



CLASSICAL RECORD COLLECTORS
announcing . . .
The 1958
ARTIST LISTING
Schwann Catalog

COMPLETE DISCOGRAPHIES
OF ALL CLASSICAL ARTISTS

Every classical music listener will want a copy of this valuable record catalog, the only one available providing a complete cross reference by artist to classical long playing records.

Major classifications include: Instrumentalists, Vocalists, Choral and Operatic Groups, Orchestras and Conductors.

Last year's issue was sold out in a very few weeks. Be sure to pick up your copy from one of the 3,600 record stores carrying the

SCHWANN
long playing record catalog

every recording, a proposition belied by the jacket listing. Like most samplers, this is a half-price record and, as such, is a good buy.

"Sound and Fury." Sid Bass and his orchestra. Vik LX 1084.

This record is literally exciting in its recorded perfection. Further, the content is truly imaginative jazz. Stock-in-trades like *Power House*, *Swamp Fire*, and *Jungle Drums* achieve new twists, guaranteed to snag wandering interest. The band appears to be typical in structure, but Bass does amazing things with drums. Ingenious electronic techniques have been lavished upon the Bass orchestra, and the splendid acoustics of New York's Webster Hall give pleasantly spectacular results. Although the very quiet groove surfaces could have withstood less compression, enough power remains enmeshed to satisfy most volume fiends.

"Tarde de Toros." Banda de Aviación Española, Manuel Gomez de Arriba, cond. Montilla FM 98.

"Torero!" Banda Taurina, Genaro Nunez, cond. Audio Fidelity AFLP 1818.

Two entries into the bullfight music arena show an interesting contrast on nearly identical music. Montilla FM 98, *Tarde de Toros*, contains sixteen authentic Spanish *pasodobles*. Although the recording leaves little to be desired, the Banda de Aviación Española, under Manuel Gomez de Arriba, unhappily attacks each piece as if it were a chore.

On the other hand, Audio Fidelity AFLP 1818 (*Torero, Music of the Bull Fight Ring*) has the necessary ring of authenticity that establishes it as a thrilling and realistic adventure. Only the frenzied screams of the crowd are missing, and imagination should suffice as the band breaks into *Toque de Cuadrillas* (*Signal for the Assistants*) or *Toque de Muerte* (*Signal of Death*). There's enthusiasm and vitality in the melodramatic strains. The recording is almost perfectly dead—quite in keeping with the expected dryness of a band playing in a stadium out of doors. Perfect clarity, tremendous dynamics, and inaudible surface noise contribute to a record which is convincingly descriptive.

THE BEST OF JAZZ

by John S. Wilson

HENRY "RED" ALLEN'S ALL STARS:
Ride, Red, Ride in Hi-Fi
RCA VICTOR LPM 1509. \$3.98.

The unjustified neglect in current recording of the jazz stars of the Thirties is given sharp focus by Allen's All Stars. Here is J. C. Higginbotham bursting forth once more with his exuberant and blustering trombone, Allen's strutting trumpeter, and Buster Bailey's cleanly tripping clarinet, supported by a lithe, swinging rhythm section made up of Cozy Cole, Marty Napoleon, Everett Barksdale, and Lloyd Trotman. There is also the lunging, leathery saxophone of Coleman Hawkins, who adamantly refuses to be neglected. It is a high-spirited reunion devoted mostly to

nostalgic material—*Love Is Just Around the Corner* and *5 Wonderful*, both torn apart in happily rough and raucous fashion, a rocking *St. James Infirmary Blues*, a brightly bounced *Ain't She Sweet*, and a fine display of Allen's breathy trumpet on *I've Got the World on a String*. An attempt to revive *Ride, Red, Ride* with a small group doesn't come off, and Allen's occasional vocals carry even less weight than they used to. But these are minor flaws in a generally exhilarating display of a headlong, gummy-style jazz that is a rarity today.

THE AMRAM-BARROW QUARTET:
Jazz Studio No. 6
DECCA DL 8558. \$3.98.

David Amram, who plays a rough-grained French horn, a dour, angular, Monk-derived piano, and, inexplicably, the tuben, is well matched musically with George Barrow, a tenor saxophonist with a hard but flexible tone sometimes rising to a glowing cry. They seek, often with interesting results, unusual sound textures and sound movements on this varied disc. Most of their voicings have a dry, dark quality which proves very effective on blues-derived themes and the slow moodily development of such popular tunes as *Damn That Dream*. But it can trip them up, too, and when the balance is not exactly right the effect turns stodgy. This is inevitable for adventurers, however, and their adventurousness has the decided merit of avoiding the preciousness that seems to grip so many jazz experimenters.

LOUIS ARMSTRONG: *Satchmo*
DECCA DXM 155 (four discs). \$19.50.

The bulk of Louis Armstrong's important recordings, those which helped to establish him as a major jazz figure, were made during the 1920s. He added a few to the list in the early Thirties, but since then his career on discs has been relatively dry, brightened only by a couple of spurts during the last decade. In this "musical autobiography," Armstrong reminisces about and introduces tunes he recorded during his most fruitful period on discs, 1923 to 1934.

But—and this "but" practically reduces the whole project to ashes—the performances that make up this autobiography are not the original ones that built Armstrong's fame but attempts at re-creations, most of them made last winter by the wan and weary group the trumpeter now leads.

Judged without consideration of the historic background, Armstrong's current playing of these tunes is polished and showmanly but it is always careful reconstruction rather than the spirited, it sometimes rough, creativity that fired the originals. Freed from the monotony of the program they have been limited to for the past two or three years, Armstrong's sidemen—primarily Edmond Hall and Trimmy Young—show that they are still capable of some warmth and taste although even the usually dependable Hall get badly tangled in *High Society*. Armstrong introduces each selection, reading from a glossily unreal script. The unctuous sentimentality with which he recalls his old associates in jazz is made even harder to take by the memory of his conduct at Newport last

SUPERLATIVE
New Hi-Fi Records!

FALL RELEASES

Rachmaninoff 6 Moments Musicaux Poulenc
LL61 12 Improvisations, Ely Kassman, piano
J. S. Bach Fantasias (d,c,a) and Toccatas (c.e.f.)
LL62 Alexandre Kagan, piano

C.P.E. Bach The Six Essay Sonatas played on the
Broadwood Hammerklavier (E. Katzenellenbogen)
LL63

Promised Land A treasury of American folk music
from all four corners of the land
LL64 The Welch Chorale

Mozart Sinfonia Concertante Anh. 9 Wind Quartet
of Paris, L'Orchestre des Concerts Disenhaus
Clarinet Quintet K. 581 S. Forrest & Galimir Quartet
LL67

Schubert Impromptus (complete Op. 90 & 142)
LL68 Fabienne Boury, piano

HI-FI SAMPLERS for a limited time \$1.98!
LL5-1 Classical Hi-Fi Sampler (all orchestral)
LL5-2 Strictly for Dancing
LL5-3 Accordion with a French Accent
LL65 Chopin for Two (orchestral suite)

On ETERNA

(Immortal Singers of the Past)

- 722 FAMOUS TENORS SING THE HIGH "C"
- 723 GREAT TENORS IN VIENNESE OPERETTAS
- 724 PUCCINI TENOR ARIAS

Eterna \$5.95, Lyrichord \$4.98
Send for free catalogs

LYRICHORD DISCS INC.
619 West 54th Street, New York 19, N. Y.

BRILLIANT RECORDINGS
PERIOD
STEREOPHONIC TAPES

1 1/2 ips — 7" reel — \$11.95
available for stacked or staggered beats

BELA BABAI & His Gypsy Orchestra Play
Haunting Hungarian Melodies
— virtuosic Gypsy fiddle in nostalgic,
sentimental, and dashing selections. **PST-1**

NIUIT PARISIENNE
Lili with Bela Babai Orchestra
— French chanteuse sings favorite French pops
with authentic flavor. Lush orchestral
support. **PST-2**

MAXINE SULLIVAN
— unique vocal style returns to the
recording scene with Charlie Shavers
Orchestra. **PST-3**

MAD THAD
— Jazz with the original touch of
Thad Jones. **PST-4**

FREILACH IN HI-FI
— Jewish wedding dances in which the Old
World and the New meet. Lively, gay,
sentimental. Wonderful for social af-
fairs. **PST-5**

GIOVANNI GABRIELI: Symphoniae Sacrae
(1597)
— multiple choirs of trumpets and trombones
produce a 16th century study in hi-fi
tonal contrast and balance. **PST-6**

SCHOENBERG: Suite, Op. 29
— interesting work for 8 instruments
dating back to the 1920's. **PST-7**

SCHUBERT: "Trout" Quintet
— everybody's favorite chamber work because
of its charming melodies and light-
hearted flavor. **PST-8**

CYMBALOM IN HI-FI
— national instrument of Hungary comes alive
in the hands of Hosszu, recently from
Budapest. **PST-9**

PERIOD MUSIC COMPANY
304 E. 74th Street New York 21, N. Y.

summer when he publicly turned his back
on two of these colleagues, Jack Teagarden
and Kid Ory.

The original recordings of most of the
selections reproduced in this set can be
found on Columbia CL 851/854, Riverside
12-101 and 12-122.

RUBY BRAFF: Braff!
EPIC LN 3377. \$3.98.

Braff, a performer of rare and heartening
consistency during his short career on
records, here produces his soundest and
most satisfying disc yet. Over a light,
bright, and swinging beat, his mellow,
lyric trumpet, open-belled or with a variety
of mutes, floats through equally mellow
tunes — *Just One More Chance*, *Blue Turn-
ing Grey Over You*, *How Long Has This
Been Going On*. There's variety here, too,
for Braff is heard with three different
groups — two small ensembles, in one of
which he receives the stimulating backing
of Freddie Green's rhythm guitar while
the other is enlivened by some of Dave
McKenna's churning piano solos. A larger
group includes Coleman Hawkins, Law-
rence Brown, and Ernie Caceres. It's all
excellent, meaty, middle-ground jazz.

DAVE BRUBECK QUARTET: Jazz
Goes to Junior College
COLUMBIA CL 1034. \$3.98.

The reconstituted Brubeck Quartet, with
Joe Morello on drums, stumbles occasion-
ally this time but makes up for every-
thing with a performance of *One Moment
Worth Years* which brings out the best in
every member of the group, including Bru-
beck, who is quite convincingly swinging
in a subdued vein. The version of *St. Louis
Blues* included here suggests the
merit of letting an idea season before it
is recorded. Not that there is anything
wrong with this *St. Louis* in itself — it is
a pleasantly gentle and wistful perform-
ance. But this was only the second time
that the group had tackled the piece.
Since then it has been refined and de-
veloped — Morello's drum solo, a brief
passage in the recording, has become a
delightfully subtle and humorous explora-
tion of the drummer's equipment — and it
is now far superior to what, unfortunately,
will probably stand as the permanent ver-
sion.

KENNY BURRELL
BLUE NOTE 1543. \$4.98.

Groups of varied personnel are led by
guitarist Burrell through a series of vigor-
ous but generally unemotional perform-
ances. A consistent exception is pianist
Tommy Flanagan, who digs into all the
material warmly and creates a brilliantly
easygoing solo in a tantalizingly slowed
version of the old Kansas City rocker,
Moten Swing.

KENNY CLARKE SEXTET: Kenny
Clarke Plays André Hodeir
EPIC LN 3376. \$3.98.

The French critic and composer, André
Hodeir, has written his own arrangements
of well-known pieces by Thelonious Monk,
Gerry Mulligan, Tadd Dameron, Miles
Davis, and others, recasting them in one of
three forms: arrangements that are com-

ESOTERIC
HIGH FIDELITY RECORDS
PRESENTS
HIGH FIDELITY
COUNTERPOINT
RECORDINGS

A new High Fidelity Label
for the Connoisseur

Robert Louis Stevenson's
**A Child's Garden of
Verses**. Set 10 Music
by Seymour Barab—
sung by Russell Oberlin.
CPT 539



Salute to Bunny—
Rusty Dedrick plays
Berigan Tunes.
CPT 552



Documentary Talking Blues
— Pat Foster and
Dick Weissman. Labor
Songs, Work Songs, Union
Songs and Documentary
Songs of the 30's and 40's.
CPT 550



For new catalog write:
ESOTERIC & COUNTERPOINT RECORDS
333 6th Ave., New York City 14

THE BEST IN
MARTIAL
MUSIC
BY
SOUSA
ON STEREO TAPES
AND RECORDS

Tapes—Allentown Band

1401-L "Music by Sousa"	\$9.98
1401-S2 "Music by Sousa"	\$9.98
1205-S1 "Concert Marches"	\$9.98
1205-S2 "Quick-Step Marches"	\$9.98

LP Hi-Fi Record Selection

1401-L "Music by Sousa"	\$4.98
1203-L "Band Concert"	\$3.98
1205-L "March Polpaurri"	\$3.98

The Allentown Band, Meyers

At your Dealer or write to



STEREOPHONIC
WFB PRODUCTIONS, Inc.
SOUDEKTON, PENNA.
DISTRIBUTORSHIPS AVAILABLE

pletely written, including the solos; arrangements that attempt "a new use of such compositional procedures as the canon, expansion, climination"; and arrangements in which the movement of sound patterns and their evolution are given prime consideration.

The greatest vitality is developed in the last group, the least in the fully written pieces. However, all three are provocative, and drummer Kenny Clarke's essentially French sextet plays them with sharp, clear precision. Pianist Martial Solal, who does most of the solo work, is constantly enlivening as he plays fluently in a variety of veins.

ART FARMER: *Last Night When We Were Young*. (Orchestra conducted by Quincy Jones.) ABC-PARAMOUNT 200. \$3.98.

Trumpeter Art Farmer reveals a bigger, darker sound than usual as he deserts his customary modern jazz surroundings for this excursion into ballads with massive string accompaniment. The effect is somewhat like Bobby Hackett's ventures with Jackie Gleason's strings although Farmer does not yet have Hackett's assurance and polish.

THE FOUR BROTHERS: *Together Again* VIK LX-1096. \$3.98.

A reunion of a foursome of saxophonists who at various times made up Woody Herman's "Four Brothers" reed section — Zoot Sims, Al Cohn, Herb Steward, and Serge Chaloff — playing originals mostly by Cohn and Manny Albam. The ensembles, in the characteristically warm Four Brothers voicings, are full-bodied and propulsive but there is a general lack of distinction in the solos.

ERROLL GARNER: *Other Voices*. (Orchestra conducted by Mitch Miller.) COLUMBIA CL 1014. \$3.98.

Unlike most jazz soloists currently being heard with large orchestral backing, Garner's venture is with an orchestra that includes brass and reeds as well as strings. He also has created the arrangements (written out by Nat Pierce since Garner remains stubbornly illiterate in music). The emphasis is on the lush, romantic side of Garner and he plays with his customary forthright, exuberant sensuality. He has given the orchestra full-bodied arrangements but his piano is always dominant. The effect, at best, is that of the usual solo Garner surrounded by a wall of luminous sound which melts the sharp, clean edge of his playing. At less felicitous moments he loses the discipline that is part of his strength as a solo performer as he busies himself with superfluous decorative trifles. His playing remains warm

and spirited but Garner-on-the-rocks is a more stimulating experience than this enormous, frothy Pink Lady.

EARL "FATHIA" HINES: *Solo FANTASY* 3238. \$3.98.

Hines, the most absorbingly influential pianist that jazz has yet produced, has been recorded all too infrequently as a soloist. In late years, he has been recorded all too infrequently in any fashion. The magnetic, strutting Hines, who shifted the piano into the jazz mainstream, is heard only dimly in these solos. The difference between the old Hines piano approach and this present one is most evident on *My Monday Date*, originally a dancing, driving bit of ebullience, which now emerges as a mood piece. It's a nice mood piece and Hines's playing is direct and attractive all through the mixture of old and new pieces on this disc. But it rarely has the electric, gripping quality associated with that earlier pianist of influence.

JAZZ AT THE HOLLYWOOD BOWL. VERVE MG V-8231-2 (two discs). \$9.96.

If Norman Granz had limited this recording to a single disc, he would have had a reasonably pure gem. As it is, the package includes two sides devoted to the tiresome, empty jam sessions and dry, mechanical performances by the Oscar Peterson trio that Granz has already recorded too often. The remaining two sides, however, are made up of four superior Art Tatum solos, six selections by Ella Fitzgerald which finally catch that warmth, fluency, and consummate skill usually tempered by studio surroundings, and two duets between Miss Fitzgerald and Louis Armstrong. One of the duets, *You Won't Be Satisfied*, falls apart through lack of preparation, but on the other, *Undecided*, Miss Fitzgerald whirls out a magnificent mixture of scat and word singing. Her solo version of *Too Close for Comfort* is a superbly projected example of singing which is completely jazz oriented.

THE JAZZ MESSENGERS: *Play Lerner and Loewe* VIK LX 1103. \$3.98.

THE JAZZ MESSENGERS: *Ritual* PACIFIC JAZZ M-402. \$4.98.

The hard-driving, hard-toned Messengers are, with the exception of *Moondog*, just about the last source one would think of for show tune performances. Yet the Vik collection of Lerner and Loewe tunes (from *My Fair Lady*, *Paint Your Wagon*, and *Brigadoon*) comes off surprisingly well, thanks to some imaginative planning in the ensemble passages and hair-raising solos by the newest Messenger, tenor saxophonist John Griffin. Seemingly impatient to draw every possible idea from his horn, he joins one to another with rapidly unfolding logic, never losing, even in his fleetest moments, his warm, clean tone or assurance of ultimate destination. Drummer Art Blakey, leader of the group, is somewhat subdued in this set but on the Pacific Jazz disc he drives the Messengers with the fierce zest that one expects of him. This is the pre-Griffin group with alto saxophonist Jackie McLean in Griffin's spot. McLean, normally very fluent, is in-

Ellington's Sweet Thunder Spoofs the Bard



Duke Ellington

SUCH SWEET THUNDER, indeed! For after the dismal disappointment of Ellington's last attempt at a long work, *A Drum Is a Woman*, he has produced this vital, multitaceted bit of true Ellingtonia. It is made up of twelve relatively short sketches in which Ellington attempts "to parallel the vignettes of some of the Shakespearian characters in miniature—sometimes to the point of caricature." Viewed as a single, extended work, it is easily Ellington's most successful effort in that direction. Or taken simply as a group of short pieces, they are the products of the most fertile and creative period that Ellington has had in more than ten years. And, possibly not surprisingly, the latter-

day Ellington band has never come as close to matching the ensemble magnificence and solo brilliance of the Duke's great band of fifteen years ago as it does in this performance.

Ellington's best attributes pour through these sketches — his inventive and dramatic tonal coloring, his well of melody, his wit (his splashy cartoon of Cleopatra's barge slurping down the Nile is one of the rare uses of nonlapstick humor in jazz), his unmatched ability to weave the personal styles of several musicians into a consonant whole that is nonetheless stamped unmistakably with his own personality. More than that, his interpretations of Shakespeare are both apt and highly Ellingtonian. Juliet emerges from Johnny Hodges' soft and beguiling alto saxophone, Lady Macbeth ("we suspect there was a little ragtime in her soul") is portrayed through a jazz waltz, the three witches become brassy trombones.

Like most Ellington projects, this one was done on the run. He didn't have the final part ready for the première performance at Town Hall, New York, last April. It is included on the disc — a brief, inconclusive flurry built around Paul Gonzalves' furry tenor saxophone — and it is one of the few weak spots in the work. But up to this last fleeting moment, *Such Sweet Thunder* is a huge and welcome feast of well-seasoned Ellington.

JOHN S. WILSON

DUKE ELLINGTON AND HIS ORCHESTRA: *Such Sweet Thunder*

COLUMBIA CL 1033. 12-in. \$3.98.

clined to be merely facile here, while trumpeter Bill Hardman can find little to say on either disc. The presence of Griffin makes a world of difference.

JIMMY MCPARTLAND: *Dixieland*
EPIC LN 3371. \$3.98.

If any single person is going to build Dixieland into anything more fruitful than it already is, it will probably be Dick Cary whose arrangements moved Bobby Hackett's band into a new and provocative eminence last year. Now Cary has done much the same thing for Jimmy McPartland, with orchestrations that have Dixie overtones but also richer, more imaginative voicing than the standard Dixieland group produces. McPartland digs into them with bright, driving clarity, occasionally rolling off some very Bixian phrases. He hasn't been heard to as good advantage on records in a long time and the group he leads swings happily with him. Among the happiest are Peanuts Hucko, Cary (playing piano), Bill Crow, and George Wettling.

THELONIOUS MONK: *Thelonious Himself*
RIVERSIDE 12-235. \$4.98.

Monk is a spare, gnawing, worrisome pianist whose reflective poking around between the keys does not accommodate itself to casual listening but whose ideas can come back to haunt you. Here he devotes himself to carving stark, unaccompanied statements from popular ballads and a few of his own pieces (*'Round Midnight* is one of these). As might be expected, his own compositions lend themselves to his deliberate probing more successfully than such tunes as *April in Paris*, *Ghost of a Chance*, and *All Alone*. It's not only that he finds more to say when he is mulling through his own creations, but he says it in more ingratiating fashion. It's only natural, I suppose. Why should he build up Irving Berlin?

LEE MORGAN
BLUE NOTE 1557. \$4.98.

Morgan, the teen-age trumpet marvel of Dizzy Gillespie's band, plays with firm assurance throughout this disc and achieves some warm, melodic development at slower tempos. But the major interest must focus on tenor saxophonist Benny Golson, who wrote all the selections. His writing is of much greater intrinsic interest than the customary modern jazz sketches. A strong melodic feeling and sense of characterization invigorate his ensembles and give the musicians a firm jumping off point for their solos. His playing, too, has a stirring quality, frequently starting in uncertain, muffled fashion, but building in intensity with a jabbing, deliberate urgency that is extremely effective. The over-all performances are erratic—both Morgan and alto saxophonist Gigi Gryce wander empty at times—but Golson's contributions and a strong rhythm section (Wynton Kelly, Paul Chambers, Charlie Persip) keep them moving.

PHINEAS NEWBORN, JR.: *While My Lady Sleeps*. (Orchestra conducted by Dennis Farnon.)
RCA VICTOR LPM 1474. \$3.98.

Newborn's jazz qualities, which have had a hard time peeping through his technical glitter, all but disappear in sleek string surroundings and overdeliberate tempos.

RED NORVO SEXTET: *Some of My Favorites*
RCA VICTOR LPM 1449. \$3.98.

Dave Garroway gets top billing on this disc as sponsor for singer Matt Dennis and Norvo, each of whom contributes four selections to the collection. This is a needless bit of condescension, at least to Norvo, who leads his sextet, including tenor saxophonist Ben Webster and trumpeter Harry Edison, in fresh, relaxed performances that swing with gentle but positive ease. One is a persuasive re-creation of *Just a Mood*, the classic Teddy Wilson Quartet work in which Norvo took part, with Edison easing into the Harry James role and Jimmy Rowles strolling gracefully through Wil-

son's part. The group provides Norvo with a more appealing setting than he has had for some time.

HALL OVERTON: *Jazz Laboratory Series, Vol. 2*
SIGNAL 102. \$4.98.

This is the second in a series of discs aimed at the home performer. As in Vol. 1, a quarter (this time Phil Woods, alto saxophone. Overton, piano, Teddy Kotick, bass, Nick Stabulas, drums) improvises on four selections on one side of the recording while on the other the rhythm section repeats its role on the same selections minus Woods. It's a two-barrelled effort and it largely succeeds on both counts. For the nonplaying listener, here is some of the most polished work that the fast-rising Woods has recorded and while the parlor jazzmen may not find this rhythm section as stimulating as that on Vol. 1, in Woods

STEREOPHONIC

LARGEST TAPE TREASURY

from
Bach to Jazz



— on such famous independent labels as:

- ELEKTRA
- EMPIRICAL
- BOSTON
- ATLANTIC
- RIVERSIDE
- ESOTERIC
- LIVINGSTON

All LIVINGSTON tapes are splice-free, fully guaranteed and packaged in attractive individual boxes.

STEREO, Stacked or Staggered (1200', 7" reels) \$11.95

Audition LIVINGSTON tapes at your High Fidelity — Audio Dealer or Record Shop. Send for our complete catalog and the name of your nearest dealer.

LIVINGSTON

LIVINGSTON AUDIO PRODUCTS CORP. Box 202 CALDWELL, N. J.

NEW RELEASES

LENNY HERMAN
Sentimental Favorites by the King of Stereo. Outstanding selections of popular melodies by the "best selling" stereo group.
Livingston 1098 BN

STERED DANCERAMA
Featuring the golden sound of Mel Connor's trumpet. Thrilling Audio Quality.
Livingston 1100 BN

SOUNDS OF SONNY
America's fastest rising young sax star plays inventive modern jazz.
Riverside 7-18 BN

MONK'S MUSIC
One of the most original talents of the new jazz era
Riverside 7-20 BN

VIENNA STRINGS PLAY JOHANN STRAUSS
A delightful collection of scintillating Strauss melodies played in authentic style.
Livingston 717 BN

CHRISTMAS HIGHLIGHTS
An especially suited release for the Christmas season—Choral and Organ selections
Livingston 724 BN

MESSIAH — HANDEL
The premier stereophonic recording of the glorious Messiah in its entirety. May be purchased individually
BOSTON 7-10, 11, 12 BN

and ANNOUNCING

A NEW STEREO SHOWCASE
#3 by LIVINGSTON
containing complete selections and excerpts from the very latest best-sellers of the Livingston Library.
LS-5-5 BN—5" STEREO \$6.95

1956

High Fidelity

RECORD REVIEW INDEX

A complete index to all classical, semiclassical, jazz, and spoken word record reviews which appeared in HIGH FIDELITY Magazine in 1956.

Arranged alphabetically by composer or by collection-title, with the issue and page on which you will find the review you wish.

ONLY 50¢ EACH

1954 and 1955 Indexes also available at 50¢ per copy.

HIGH FIDELITY Magazine
Great Barrington, Mass.

Enclosed find Please send me
..... copies of the 1954 Index
..... copies of the 1955 Index
..... copies of the 1956 Index

Name

Address

No C.O.D.s or charge orders please

Record Market



Professional RECORD BROWSER

Double decker disc-caddy rolls on 2" casters; holds 250 long-playing record albums. Open front enables you to "flip-through" entire collection in 90 seconds, with full view of every album! Deep cradle-design secures albums firmly in upright position, so they can't fall out. Now you can "file" your records alphabetically! Heavy duty black wrought iron, 37" H., 15" W., 22" D.; with 3/4" dia. corner posts. Fully assembled. Please remit \$19.95 with order; nominal express chgs. collect. AIR MAIL MONEY BACK. **GUARANTEE: \$19.95**

LESLIE CREATIONS

DEPT. 209-J,
LAFAYETTE HILL, PA.

SUPERB STUDIES IN HIGH FIDELITY SOUND ON ELEKTRA

THE UNABASHED VIRTUOSO (EKL-106), Stephen Kovacs . . . a dazzling display of piano pyrotechnique in the grand virtuoso style - Fledermaus Paraphrase; La Campanella; Danse Macabre; Rigoletto Paraphrase; Humoresque (Dvorak); Capriccio (Dohnanyi); Hungarian Rhapsody #2. 12" \$4.98

TIGER ON THE KEYS (EKL-111)
Stephen Kovacs puts twelve tunes in a lighter vein through a series of fascinating pianistic calisthenics. 12" \$4.98

OUTSTANDING ENGINEERING BY
DAVID HANCOCK
catalog on request

ELEKTRA RECORDS

361 Bleecker Street New York 14, N.Y.

he gets a more finished model of improvisation than Gigi Gryce provided on the earlier disc.

GEORGE RUSSELL AND HIS SMALL-TET: *The RCA Victor Jazz Workshop*
RCA VICTOR LPM 1372. \$3.98.

Russell, a composer with a highly personal bent and a puckish sense of humor, has a tendency to get so intricately involved in some of the carefully celebrated works played by his six-piece Smalltet that they refuse to swing readily. But there are moments when his tightly knit writing boils up into virile, exciting performances and these moments are worth waiting for.

HORACE SILVER QUINTET: *Six Pieces of Silver*
BLUE NOTE 1539. \$4.98.

HORACE SILVER QUINTET: *The Stylings of Silver*
BLUE NOTE 1562. \$4.98.

Silver's striking use of blue tonality in firmly structured compositions gives both of these discs compelling interest. Almost alone among his contemporaries (Thelonious Monk is another notable exception), he is not content simply to provide his group with a chord pattern and then let them go soloing off from there. There is constant, building ensemble movement in a Silver work that gives it musical point and provides the soloists with the stimulus of something to work against. He has instilled his quintet with a dash and vigor that are exhilarating at fast tempos and stirring in the slower moods. The principle difference between these two discs is the presence on 1562 of Art Farmer, trumpet, in place of Donald Byrd, who is heard on 1539. Byrd has flashes of bright, charging strength, especially on Silver's by-now classic *Señor Blues*, but Farmer maintains a more consistently high level of clear, pungent playing. As a piano soloist, Silver is rugged, hard-driving, and full of ideas at fast tempos, but he gets down to his real business in the low-down rocking pace of a minor blues like *Soulville* (on 1562) or in the contrasting style of a slow ballad (*For Heaven's Sake*, on 1539) when he puts an interestingly nubby surface on something that might have been only blandly pretty.

ZOOT SIMS: *Plays Four Altos*
ABC PARAMOUNT 198. \$3.98.

A convincing argument in favor of tape trickery is Zoot Sims. His performance here as all four alto saxophones in one of the most smoothly swinging reed sections ever contrived by any means is absolutely superb. The fact that Sims is the magnificent saxophonist that he is justifies this quadrupling on tape, since it would be almost impossible to find three other reed men to match him. The selections are pleasantly serviceable creations by George Handy, who also performed the difficult task of writing parts for the three additional altos around Sims's original improvisations with rhythm section (Handy, Knobby Totah, Nick Stabulas). Sims preserves a remarkable spontaneity in dubbing in these three parts so that the ensembles swing with a persuasive lilt. And Sims also manages to vary his solo style just

enough in the course of successive appearances in one selection so that it doesn't sound like the same man taking all the solos. Trickery aside, this is an enormously satisfying collection of polished, pulsing jazz.

THIRD FESTIVAL OF BRITISH JAZZ
LONDON 1639. \$3.98.

Recordings of a 1956 London concert which holds firmly and capably to a middle area of jazz. *Struttin' with Some Barbecue* is pulled in from its normal position to the right in a happy and imaginative big swing band arrangement by the Courtley-Seymour Orchestra, while Phil Seaman's Quintet modifies *Manteca*'s equivalent position to the left in a subdued performance brightened by Ken Wray's gruff-toned bass trumpet. Duke Ellington's normally rocking *Satin Doll* is given an unaccountably delicate piano treatment by Alan Clare, but the Jazz Today Unit pulses with proper lightness and buoyancy through two old Basie specialties, *Swingin' the Blues* and *Doggin' Around*.

COOTIE WILLIAMS AND REX STEWART: *The Big Challenge*
JAZZTONE 1268. By subscription.

The battle line-up for this "big challenge" is imposing: besides trumpeters Williams and Stewart, there are J. C. Higginbotham and Lawrence Brown on trombones and Coleman Hawkins and Bud Freeman on tenor saxophones—all major jazzmen of the late Twenties, Thirties, and early Forties—plus a rhythm section of Hank Jones, Billy Bauer, Milt Hinton, and Gus Johnson. They bring back a brilliant, rugged, loose-jointed sort of jazz that is distressingly rare these days. The focal point throughout the set is Williams, a prodigal returned from nine years of rhythm and blues, whose playing is just as potent and pungent as in his great days with Duke Ellington. He growls through his old *Concerto for Cootie* as Hawkins fills in sumptuously behind him, shouts out *I Got a Right to Sing the Blues*, and even matches Stewart's trademarked half-valve style. All of these men play with magnificent swagger and George Simon's grouping of them for Jazztone has produced some wonderfully tull-blooded, freebooting jazz.

JIMMY WITHERSPOON SINGS. WILBUR DE PARIS PLAYS: *New Orleans Blues*
ATLANTIC 1266. \$4.98.

Jimmy Witherspoon is an impressively fresh voice in the blues field. He has, as a matter of fact, been around since 1945 when he joined Jay McShann's band, but this is the first time he has been given an LP showcase. His easy, virile voice is patterned on Joe Turner's but he seems to have more flexibility than Turner. He rears back and pours it out on this disc in the slow melancholy of *T.Ain't Nobody's Business If I Do*, the grinding stripper's strut of *Lotus Blossom*, and an intense, powerful *St. Louis Blues*. Suitably rugged backing is supplied by the De Paris band, which lays on a heavy beat punctuated by brother Sidney's artistry with mutes and some rare, ruddy brandishing of brother Wilbur's normally sedate trombone.



"Do it yourself" ...on a **CONN ORGAN**

Music offers its greatest pleasures to those who participate in the making of it. Your pleasure—playing a CONN Organ—will add greatly to the pleasure your hi-fi system is now bringing into your home.

But can you play an organ? A little piano technique is a help, but not at all necessary. The simplest of music, expressed in the inherent tonal beauty of the CONN, sounds rich and satisfying—relaxing at the touch of one stop tab—stimulating at the touch of another.

CONN ORGAN

magnificent in music

PRODUCT OF AN 82-YEAR TRADITION

The CONN Minuet here pictured has two 44-note manuals, a 13-note pedalboard, built-in hi-fi speakers, and 23 voice and coupler controls. Styling by Raymond Loewy is "modified traditional," and the choice of finishes includes mahogany, walnut, limed oak and maple. The price of the Minuet is under \$1500.

See your CONN dealer for more details, or send the coupon below. CONN Organ Corporation, Elkhart, Indiana.

CONN Organ Corporation
Elkhart, Indiana



- Please send CONN Minuet Bulletin 4046.
- Please send description of CONN electronic tone production.

Name.....

Address.....

City.....State.....

University
BREAKS
THE
'SPACE
BARRIER!

Revolutionary!

UNIVERSITY ULTRA-LINEAR

space-saver speaker systems

Ultra-compact loudspeaker systems without
compromise of performance! FLAT response
from 18 cycles to the upper limit of audibility
... and in radically smaller enclosure space

Incredible but true . . . these new *Ultra-Linear* speaker systems tell your ear that here is luxurious "big system" performance that brooks neither blurred bass nor strident treble. Yet your eyes see only these handsome, convenient-to-place enclosures that are *fully 40 to 80% smaller* than previously available systems of similar performance standards!

Yes, here is the "impossible" brought to miraculous tonal reality . . . a small enclosure that leaves *nothing* to be desired in musical performance. Here, at last, is *authentic, distortion-free bass in limited enclosure volume* . . . completely new, completely different, a most significant forward step in loudspeaker design.

Do NOT confuse University *Ultra-Linear* systems with other small units that offer an acoustic compromise acceptable only because of necessity. The *Ultra-Linear 12* and *Ultra-Linear 15* systems employ newly designed, specially high-compliant woofers tolerating no artificial resonances that "mask" bass deficiency. Mid-range and tweeter performance is balanced to assure completely flat *ultra-linear* response to beyond the limits of hearing range.

Do NOT confuse *Ultra-Linear* systems with other "low efficiency" transducers. Though you will need about 20-25

clean watts to drive *Ultra-Linear*s, here the resemblance ends . . . transient peaks are not distorted because of excess power demands, hence you get *cleaner* performance. Most important, *Ultra-Linear* bass reproduction is effective at *low volume* as well as at higher levels.

There is only one valid comparison for *Ultra-Linear* systems . . . only one equal they acknowledge. And that is, the superlative performance of University's famed king-sized *Dean* and *Classic* deluxe systems! . . . recommended for those who possess the necessary optimum space.

In your home, an *Ultra-Linear* system will recreate all the brilliant reality of the lowest organ tones, the most fleeting nuances that identify tympani and percussion . . . with such faithfulness . . . that you will listen relaxed and without "ear fatigue," hour after hour. *Ultra-Linear* systems are ideal, too, for binaural and stereophonic installations.

The data on these pages tell you how truly momentous University *Ultra-Linear* speaker systems are. But the real test is when your own ears tell you how they live up to every specification, and more! Hear them soon . . . at your dealer . . . and learn that finally there is a genuine answer to the small-space speaker problem!

University Loudspeakers, Inc., 80 So. Kensico Ave., White Plains, N. Y.

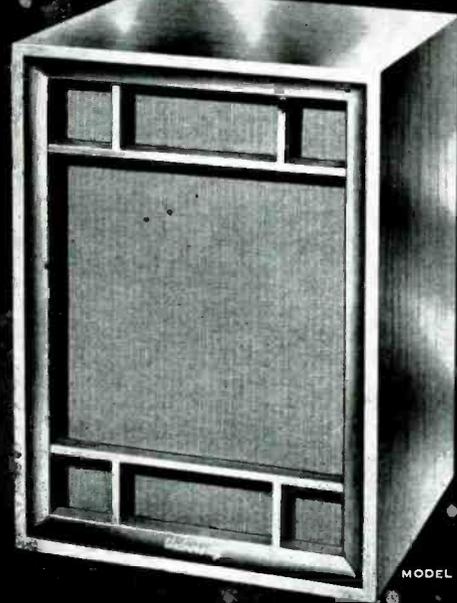
COMPONENTS USED IN ULTRA-LINEAR SYSTEMS ARE AVAILABLE INDIVIDUALLY FOR THE DO-IT-YOURSELFER

LISTEN

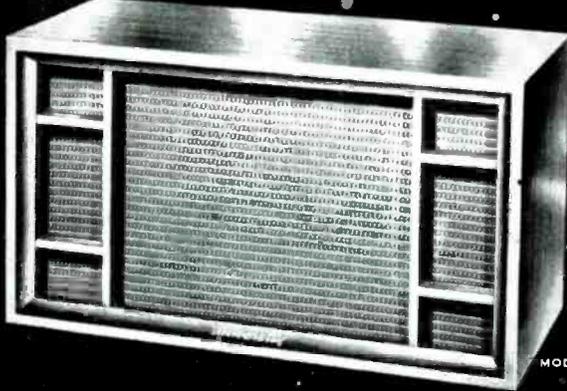
University sounds better



For the first time . . . truly BIG sound from a small enclosure. The first really definitive answer to the "restricted space" problem



MODEL S-11H



MODEL S-10L

TYPICAL APPLICATIONS SHOWING VERSATILITY OF THE FOUR ULTRA-LINEAR MODELS



ON BOOK SHELVES



AGAINST WALL



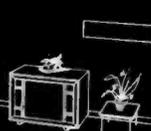
FOR BINAURAL



BUILT-IN



IN CORNER

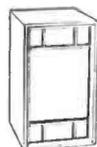


LOWBOY CONSOLE

ULTRA-LINEAR 15 CONSOLETTTE, MODELS S-11H and S-11L. Unusually small size is achieved by coupling the new University ducted annular relief enclosure to the new heavy duty high compliance 15" C-15HC woofer. Special HC-3 matched-level network with "Presence" and "Brilliance" balance controls integrates the Diffusicone-8 in its own compression chamber for mid-range (200 cps crossover) for response to beyond audibility. Operates with power input of 20 to 60 clean watts. 8 ohms impedance. Extra-dense 3/4" thick double-braced construction, fine-furniture finish and styling. 26 1/4" x 19 1/2" x 17 1/2" deep; removable base adds 2" to height. S-11H is upright model; S-11L lowboy. User net: Mahogany-\$245, Blond-\$249, Walnut-\$253.



MODEL S-11L



MODEL S-10H

ULTRA-LINEAR 12 CONSOLETTTE, MODELS S-10H and S-10L. For use where space is most restricted. Only 25" x 14" x 14 1/2" deep; removable base adds 1 1/2" to height. Model S-10H is for upright use; S-10L for lowboy. The new C-12HC 12" high compliance, low resonance woofer is employed with special UL/HC wide-angle tweeter (2500 cps crossover) and HC-2 matched-level crossover network with high frequency adjustment to match room attenuation characteristics. Operates with power input of 25 to 60 clean watts. 8 ohms impedance. Extra-dense 3/4" thick double-braced construction; beautiful natural grain, hand-rubbed finish. User net: Mahogany-\$139, Blond-\$143, Walnut-\$147.

TECHNICAL DATA

Components covered in Patent Nos. 2,611,329; 2,690,231 and other patents pending

The basic concept behind these University *Ultra-Linear* systems begins with a basic woofer mechanism that responds to the very lowest of reproducible frequencies with the very flattest of response throughout its entire operating range. Then, the woofer-driver speaker is built into a new type acoustic enclosure that smooths out whatever self-resonances may exist in the moving coil system. This enclosure is vented through a *tubular* duct towards the rear of the cabinet, accomplishing a phase inversion action without affecting its performance as a legitimate, tuned circuit for the system's extremely low resonant woofer. By use of a duct of the proper cross section of area and proper length designed around the extreme low resonance of the woofer, the enclosure performs as if it were 30-40% larger. The venting of this cabinet towards the back of the enclosure serves two purposes: (1) it relieves the short-circuiting effect of a port upon the speaker by placing the opening as far away from the face of the speaker as possible; and (2) when placed against a wall, there is additional loading of this vent by proximity to the wall. This creates essentially two radiating surfaces and thus overcomes the diffraction effects of other types of small cabinets.

The woofer mechanisms that drive these enclosures were designed to have mechanically stable high compliances, and masses sufficient to give cone rigidity. Thus, the woofer, when experiencing the large low frequency excursions of which it is capable, maintains its piston-like action over its entire operating range down to the lowest reproducible frequency. The compliance designed into these speakers is a specially formed light cambric material impregnated with phenolics to give it stability and then treated with a newly developed plasticized rim treatment that will give lifelong protection to the very high compliance and yet maintain adequate acoustic sealing between the rear and the front of the speaker. Very low frequency cone resonances have been achieved by

the combination of the high compliance and the mass relationships of the cones. Achieving resonance by this method results in an exceedingly uniform frequency response characteristic which provides increased linearity throughout its excursion. This, in conjunction with the voice coil (designed to overhang the magnetic gap and thus produce a constant force factor over wide limits of coil amplitude regardless of coil position) insures the preservation of ultra-linearity. To achieve maximum conversion efficiency without affecting response linearity, a new magnet material, Hi Flux UNIFERROX-7, is employed in a newly designed magnetic assembly. Truly clean fundamental cone resonances as low as 15 cps in the 15" Model C-15HC woofer (used in the *Ultra-Linear 15*) and 18 cps in the Model C-12HC 12" woofer (used in the *Ultra-Linear 12*) are accomplished.

Because of the woofer and enclosure designs, these systems may be classified in the low efficiency category. However, because matched components designed to complement the woofer are used with it, greater efficiency may be obtained without sacrificing linearity than is possible with other low efficiency systems. Thus, for a given power input, reasonably high listening levels may be achieved. This is vitally important in the case of transients, where the peak power may at times severely exceed the average output power of an available amplifier. If an amplifier has to work too hard to drive a speaker of too low efficiency, the transient response of the combination will be deteriorated. Consequently, in the University design, the extra efficiency, even though it is in the so-called "low efficiency" class, will provide excellent transient response with reasonable conversion efficiency.

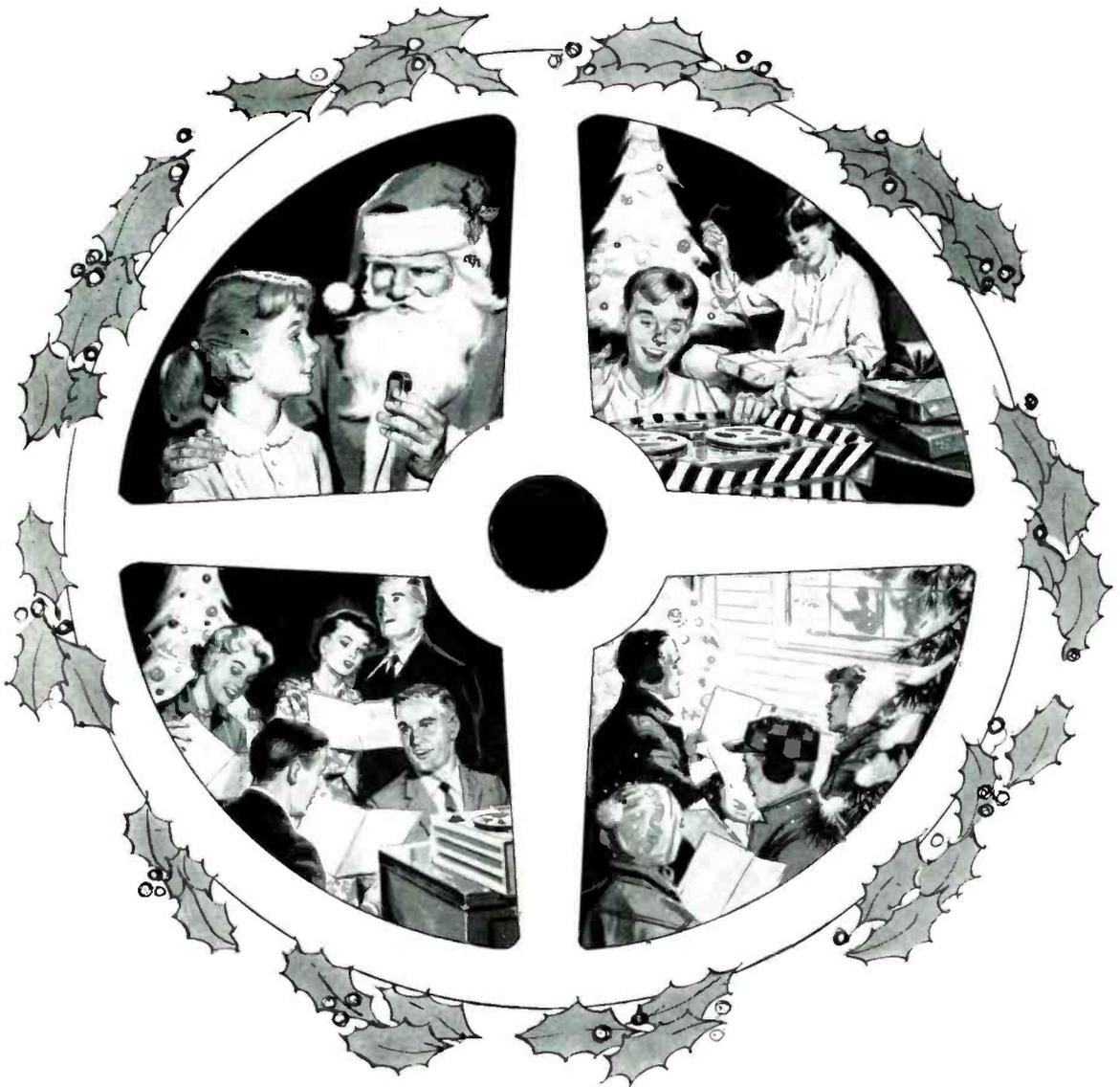
For over-all linearity, these systems employ other complementary speakers to complete the mid and high frequency acoustic spectrums. In the *Ultra-Linear 12*, the response of the woofer extends to a point where it is possible to complete the

system with simply one additional treble complementary reproducer.

By molding the low frequency response of the tweeter to a level corresponding to the acoustic output level of the woofer, it is possible to obtain a completely "flat" system over the entire operating range from the very lowest of the woofer frequencies to the very top of the tweeter range. Although the system is connected for flat response under normal conditions, the over-all level of the tweeter can be changed by a small amount when it is desired to accentuate the high frequencies. Thus the system can be adjusted to suit both the user's preference and the particular acoustic environment.

In the *Ultra-Linear 15*, a 3-way system is employed, whereby the upper end of the woofer is joined to the acoustic response of a mid-range speaker which, in turn, is complemented by the tweeter. This is necessary because the massive structure of the 15" basic woofer limits its upper frequency response. The mid-range is supplied by a high quality 8" cone speaker installed within the cabinet but in its own rear compression chamber, which protects it from the low frequency pressures of the woofer. It also provides an acoustic crossover for the mid-range, determined by the internal volume of the chamber. The mid-range speaker then works in conjunction with a *hyperactive* tweeter again balanced to be compatible with the level of the mid-range and woofer speakers. The matched-level network which integrates the three speakers is also adjustable to give a small but perceptible boost in the mid-frequencies and a similar boost to the high frequencies, if listening conditions warrant. However, this system is factory-connected for ultra-linear response.

Thus, high cone mass, high cone compliance, overhanging voice coil and complementary matched upper range units . . . plus the specially designed enclosure, all work together to produce original studio quality.



Record this Christmas forever

on tapes made with MYLAR[®]

This Christmas, when you record the kids' voices, family gatherings, or those "once in a lifetime" songfests, you'll want to make sure they last and last for years to come. By recording on tapes made with "Mylar"[®] polyester film, you assure yourself of the ultimate in long-lasting fidelity. Here's why:

NO STRETCHING PROBLEM—Under normal operating conditions, tapes made with "Mylar" will not stretch or break. There's an extra margin of safety against stretching offered in no other tape.

EXTRA PLAYING TIME—Tape made with "Mylar" offers far better performance *plus*

50% or more extra playing time per reel . . . fewer reel changes necessary; less storage space is needed.

NO STORAGE PROBLEM—Tapes made with "Mylar" can't dry out or become brittle with age . . . no special storage facilities needed to protect tapes against changes in temperature and humidity.

So this Christmas, make all your recordings on the new high-quality tapes made with "Mylar". Ask your dealer for an extra reel . . . make it two reels . . . of your favorite brand of tape—now made with "Mylar".

LOOK FOR THE NAME MYLAR[®] ON THE BOX!

"Du Pont manufactures the base material "Mylar"[®]—not finished recording tape. "Mylar" is Du Pont's registered trademark for its brand of polyester film.



REG. U.S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY



HIGH FIDELITY MAGAZINE

by R. D. DARRELL

The Tape Deck



Note: As usual, all tapes reviewed are 7.5 ips and—unless specifically noted as stereo—are 2-track single-channel recordings. The symbol ● ● prefixed to a review indicates stereo tape. If a date in parentheses is appended to the review, it refers to the issue of HIGH FIDELITY in which the corresponding disc review appeared.

● ● BRAHMS: *Symphony No. 1, in C minor, Op. 68*

Boston Symphony Orchestra, Charles Munch, cond.
RCA VICTOR GCS 42. 43 min. \$18.95.

Frankfurt Opera Orchestra, Carl Bamberger, cond.
CONCERT HALL LX 32. 40 min. \$17.90.

● ● BRAHMS: *Symphony No. 4, in E minor, Op. 98*

Frankfurt Opera Orchestra, Carl Bamberger, cond.
CONCERT HALL LX 33. 38 min. \$17.90.

Unless I've been misled by several exceptional instances, it would seem safe to claim that stereo enhances not only the sonic but the interpretative appeals of attractive performances and in similar, but contrary, fashion tends to exacerbate one's sense of dissatisfaction with less agreeable interpretations. There have been several pertinent examples recently, but the Munch-Bamberger Brahms First comparison is perhaps the most striking of all. For while I'm sure that the Munch stereo version does even greater justice to the Bostonians' truly gleaming tonal qualities than the LP edition (LM 2097), the conductor's own laboriousness, lack of grip and continuity, and susceptibility to overemphasis and lachrymose overexpressiveness seem to be almost intolerably accentuated. On the other hand, young Bamberger, despite his somewhat coarser-toned if still highly competent orchestra, succeeds throughout not merely in holding my attention but in commanding my delighted admiration. The Concert Hall re-

coding, too, while less pure and glowing than RCA Victor's, seems better suited (perhaps only by slightly greater reverberance) to the dark richness and weight of Brahms's scoring. At any rate, there can be no question about the marked superiority in eloquence and dramatic conviction of the German version. (Munch LP, Aug. 57; Bamberger, no LP as yet.)

Bamberger is less notably successful with the Fourth, for although this tape has much of the dramatic vigor of his Second (reviewed here a few months ago), his wind players' tendency to coarseness and his string choirs' overintensity in the high registers are more obvious here than in the First. Perhaps the greatest handicap, however, is the memory of Toscanini's incomparable reading—further proof that all the technical miracles of stereo never can substitute for interpretative insight matched by executant mastery. Yet all this is not to deny that Bamberger's Fourth warrants considerable respect—and in any case it is the sole stereo version to appear so far. (Simultaneously released on LP as RG 137.)



BLACKSTONE

Hanson propels a sunny Perambulator.

● ● CARPENTER: *Adventures in a Perambulator*

Eastman-Rochester Symphony Orchestra, Howard Hanson, cond.
MERCURY MMS 5-2. 27 min. \$12.95.

Developments in music since 1914 have drained much of the novelty from the *Adventures'* score and have made obvious the composer's debts (to the French impressionists and to Richard Strauss); but the present combination of Hanson's zestful performance and the breeziness of stereo recording reveals more piquantly than ever before the warmth and buoyancy which

keep Carpenter's heart-warming masterpiece alive. Until the advent of stereo, certainly, it never was possible—in home reproduction—to capture intact this work's full sunniness and open-air expansiveness, qualities barely suggested in the LP edition (MG 50136), but made delectably explicit here. (Aug. 1957)

● ● HAYDN: *Symphonies: No. 99, in E flat; No. 104, in D ("London")*

Vienna State Opera (Volksooper) Orchestra, Mogens Woldike, cond.
VANGUARD VRT 3001 and 3004. 29 min. \$11.95 each.

While I still can't be sure whether I'm mesmerized by Haydn's exuberant lyricism or Woldike's self-effacing graciousness, I can only report my complete acquiescence in every detail (interpretative, executant, and technical) of the performance and unbounded relish both for this eternally invigorating music itself and the gravitation-defying buoyancy with which it soars in the present seemingly flawless stereo reproduction. (LPs VRS 491 and 493, May 1957)

● ● KHACHATURIAN: *Gayne* (excerpts)

Vienna State Opera Orchestra, Hermann Scherchen, cond.
SONOTAPE SWB 7008. 16 min. \$6.95.

The relentless plugging of its hit numbers by symphonic-pops and even salon orchestras hardly has been calculated to change the conviction that the *Gayne* music was at best second-rate Khachaturian. But Scherchen's performances of six excerpts (*Dances of the Rose Maidens, Young Kurds, and Kurds*, as well as the *Sabre Dance and Lullaby*) well may bring about a more favorable reevaluation. Played straightforwardly, the music seems far less crudely sensational, far more the light but colorfully and rhythmically effective ballet score the composer undoubtedly intended it to be. And in the present taping there is still plenty of more agreeable sensationalism left—in the crisp brilliance of the recording itself.

● ● LISZT: *Berceuse: Apparition No. 1: Vallée d'Obermann*

Iren Marik, piano.
ZODIAC ZST 1004. 26 min. \$11.95.

Continued on next page

*Since current commercial practice is to issue stereo tapes on 7-inch reels almost exclusively and to price them for the most part according to the length of tape actually required, it appears that information on the running time is likely to be more helpful to prospective purchasers than that on the reel size. Hence, beginning this month, review headings will note the reel size only in the exceptional instances when a 5-inch reel is used and will include the total elapsed time (rounded off to the nearest minute) of the performance or program.

TAPE DECK

Continued from preceding page

The present group of solo piano works reveals some of the least-known and most valuable jewels of Liszt's musical legacy. The *Apparition* (one of three like-named pieces dating from 1835) never has been recorded before to my knowledge; the *Berceuse* (1854) and *Vallée d'Obermann* (No. 6 of the *Années de Pèlerinage*, 1st Year, Switzerland, 1835, rev. 1852) have been issued only on obscure or European-only 78s and LPs. This in itself would make the first release I have heard from Zodiac (also available on LP as Z 1004) one to be highly recommended, but in addition the pianist (new to me and about whom no information is provided) proves to be a mistress of the romantic Grand Style, bringing the proper sentiment and waywardness to the *Berceuse*, jewelled bravura to the Chopinesque *Apparition*, and both the poetry and stormy energy demanded by the bold contrasts of the *Vallée d'Obermann*—surely one of Liszt's most distinctive works for solo piano.

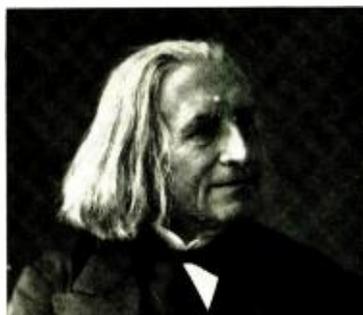
Technically, however, the tape is more open to criticism: the richly liquid piano tone in the middle register becomes uncommonly brilliant, but at times almost shatteringly so, in the high registers; while either the music or the recording is top-heavy with comparatively few real lows to balance adequately the glittering highs. Then, too, the stereo spread is so extensive that it gives the piano a grandiosity far beyond that of any normal-sized "grand." Yet I must admit that I was more curiously fascinated by the sonic (as well as the musical) qualities here than in most far more acoustically "correct" recordings.

• • LISZT: *Concerto for Piano and Orchestra, No. 1, in E flat*

Philippe Entremont, piano; Radio Zürich Orchestra, Walter Goehr, cond.
CONCERT HALL EX 29. 18 min. \$8.95.

While I gave young Entremont a clear decision over Rubinstein in the Rachmaninoff Second and over Brendel in the Liszt Second, he places behind both these rivals in the Liszt First. He plays here with the same bold assurance and éclat, but seemingly with less personal conviction. As a consequence he never redeems the music's tawdriness as Brendel's rich sentiment manages to do partially and as Rubinstein's heroic poetry succeeds in accomplishing magisterially. Goehr's orchestra, too, sounds even less attractive than in the earlier Entremont concertos, and in my judgment the over-all effect is not improved by the apparent attempt to bring the solo piano nearer to a center position. Assuming that this recording was made under the same conditions as the other Entremont stereos, and judging entirely by ear, I surmise that in the present tape processing a considerable amount of left-channel signal has been "bled" into the right one, effectively "moving" the piano further toward the center, but simultaneously lessening the stereo breadth and the sonic contrasts between solo and orchestral passages. And though it may be a minority opinion, neither the present experiment nor any actually centered-soloist tapes have persuaded

me to abandon my strong preference for a markedly off-center location. (LP editions: CHS 1500 and MMS 68.)



Liszt's least-known jewels scintillate.

• • MOZART: *Concerto for Clarinet and Orchestra, in A, K. 622*

Benny Goodman, clarinet; Boston Symphony Orchestra, Charles Munch, cond.
RCA VICTOR DCS 39. 28 mins. \$12.95.

Both at the July 1956 Berkshire Festival performance and in the LM 2073 disc version, the Goodman-Munch collaboration has been received respectfully rather than warmly—a general verdict with which I find myself entirely in agreement. The playing is skillful and straightforward with little if anything to jar even a purist's sensibilities; the clarinet tone a little hoarser than I remember from the Goodman of old, yet rather attractively so; but unfortunately there is scant true Mozartean lilt, humor, or fancifulness. In short, this is a competent reading rather than an inspired or even arresting re-creation. The only aspect which calls for less lukewarm praise is the beautifully transparent recording and the skill with which the engineers have avoided exaggerating the apparent size of the solo instrument even though it seems to be centered and is quite closely "miked" at that. (May 1957)

• • PROKOFIEV: *Peter and the Wolf, Op. 67*

Cyril Ritchard narrator; Philadelphia Orchestra, Eugene Ormandy, cond.
COLUMBIA JMB 4. 24 min. \$13.95.

Every LP version of this score I know has been spoiled for me by either too elocutionary or too self-consciously folksy delivery of the narration—errors which Ritchard (of *Visit to a Small Planet* and *La Périphérie fame*) avoids here by a disarming combination of straightforwardness and a distinctively individual, rough-rimmed voice. Ormandy's reading, too, is admirably free from mannerisms and any suggestion of playing-down to the presumably youthful audience, and in stereo innumerable imaginative details of the deft scoring come through more clearly than I have ever heard them before in home reproduction. The final triumphal march in particular is wondrously jubilant—indeed my only criticism of the clean, broad-spread recording is that some of the solo instruments are reproduced rather larger than life-sized, perhaps a legitimate procedure in music intended as much for quasi-educational purposes as for sheer entertainment. (Simultaneously released on LP as ML 5183, Oct. 1957)

• • PROKOFIEV: *Symphonies: No. 1, in D, Op. 25 ("Classical"); No. 7, in C sharp minor, Op. 131*

Philharmonia Orchestra, Nicolai Malko, cond.
RCA VICTOR ACS 37 and DCS 38. 13 min. and 29 min., \$6.95 and \$12.95 respectively.

Malko's recording of the *Classical* Symphony was reviewed here last spring in its original HMV "stereosonic" taping (SD1 1750). Its domestic reissue with NARTB rather than CCIR recording characteristics seems only to add—as might be expected from the slight differences in these "curves"—some enhanced high-end brilliance to a recording which is more than ever a "sonic joy throughout." The reading itself, however, still strikes me as run-of-the-mill except for the uncommonly sparkling finale.

Malko plays the singular Seventh Symphony (coupled with No. 1 in the LP edition, LM 2092) with more personal feeling and lilting grace, almost persuading me that Prokofiev did not have his tongue in his cheek in the too naively *semplice* lyricism of the *Moderato* and *Andante espressivo* movements or the mild ribaldries of the *Allegretto* and *Vivace*-finale. But whether one takes the music itself with complete seriousness, there can be no question about the ingenuity—as well as ingenuousness—of its scoring or the matchless transparency and lift with which these sonic felicities can be reproduced in the stereo medium. British engineers may have something to learn from their American colleagues in exploiting stereo's dramatic powers, but they still are supreme in their mastery of wholly natural acoustical balances and gleaming air-borne tonal textures. (June 1957)

• • SAINT-SAËNS: *Carnaval des animaux* (with verses by John Burt)

Gary Moore, narrator; Bronx Zoo animal sounds; Vienna State Opera Orchestra, Hermann Scherchen, cond.
SONOTAPE SWB 8026. 26 min. \$11.95.

No! This is going altogether too far! It was bad enough when Ogden Nash felt impelled to provide introductory verses for the various sections of this zoological suite, but at least they were mildly amusing as casually recited by Noel Coward in the well-known Columbia LP. The present imitations, by John Burt and Garry Moore respectively, lack even that much wit and charm; and when they are augmented by a variety of mostly plaintive roars, cackles, and clackings provided by captive—and undoubtedly well-prodded—Bronx Zoo "artists," the results are as objectionable as they are ludicrous. It's a pity, too, for I've never heard the music itself played or recorded more attractively—especially the two piano toles, filled here by Josef and Grete Diehler, and heard in separate channels for maximum clarity. Surely Sonotape will give us an opportunity to enjoy a stereo taping of the *Carnival* alone, just as the composer intended it to be heard?

• • STRAVINSKY: *Fire Bird: Suite*

New York Philharmonic Orchestra, Leonard Bernstein, cond.

Continued on page 106

when you buy **SOUNDCRAFT TAPE**

fill your home with

a high fidelity recording on your own reel of Soundcraft Tape!



Adeste Fideles
Silent Night
Rudolph the Red
Nosed Reindeer
Noel
Jingle Bells
God Rest Ye
Merry Gentlemen

performed by
The Street Singer
Caroleers, orchestra and
chorus under the
direction of world famous
arranger-composer
Dewey Bergman.

**The Spirit of Christmas
Captured in Sound!** —
the best-loved of
traditional Christmas
melodies... joyous...
nostalgic... reverent...
as much a part of the
holiday season as
decorations on the tree!

A collector's item...
not for sale at any price
...this 15-minute
high fidelity recording
is yours FREE, except
for postage and
handling, when you buy
any 7" reel of
Soundcraft Tape. See
your Soundcraft dealer
now, or write us for
his name... he will tell
you how you can get
"SOUNDS OF CHRISTMAS"
recorded on your tape.
Not only the
"SOUNDS OF CHRISTMAS"
but the sounds of all
the year sound better
on Soundcraft Tape!



REEVES

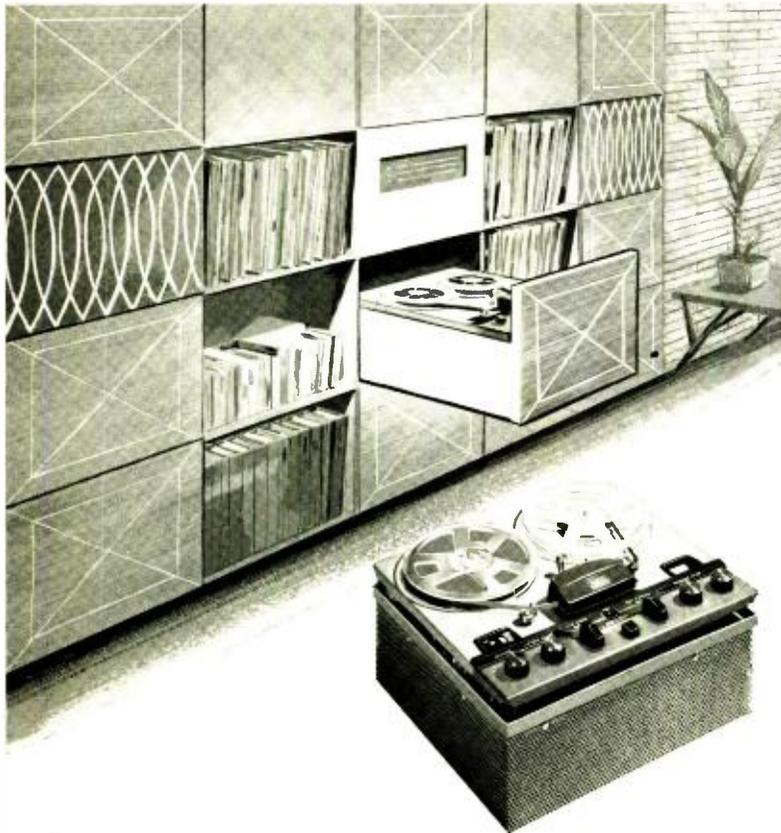
SOUNDCRAFT

CORP.

10 E. 52nd St., New York 22
West Coast—338 N. LaBrea,
Los Angeles 36, Calif.

AMPEX STEREO

SIGNATURE OF PERFECTION IN SOUND



takes you

BEYOND THE HI-FI BARRIER!

Add Ampex Stereo to your system, and you've pierced the last barrier that stands between you and the long-sought goal of actually experiencing the complete realism of the original performance. Ampex true stereophonic sound gives you power to suspend the laws of time and space, to carry you magically back to the authentic realism of the place and hour the sound was recorded. Hear it once, and you'll never be satisfied with anything less.

Ampex is most-wanted because it is best-engineered. You can install this precision tape-deck in the secure knowledge that it is not only the finest equipment available today, but years from now will still be outperforming everything in the field.

In addition to the Ampex Model A124-U recorder-stereophonic reproducer shown here, there are portables, modular units, and consoles complete with their own AM-FM tuners and record changers. They're all described in a colorful new Ampex brochure which is yours for the asking.

AMPEX

CREATORS OF THE VIDEOTAPE TELEVISION RECORDER; MAKERS OF AMERICA'S BEST-ENGINEERED, MOST-WANTED AUDIO EQUIPMENT

AMPEX AUDIO INC.

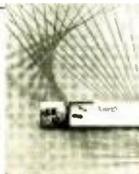
1032 KIFER ROAD, SUNNYVALE, CALIFORNIA

Please rush free Ampex Stereophonic Sound brochure to:

NAME _____

ADDRESS _____

CITY _____



TAPE DECK

Continued from page 104

COLUMBIA IMB 3. 20 min. \$12.95.

Southwest German Radio Orchestra (Baden-Baden), Jascha Horenstein, cond.
PHONOTAPES S 710. 19 min. \$11.95.

The colorful *Fird Bird* score is such a "natural" for stereo that duplications are inevitable. Fortunately, however, the selection problem remains uncomplicated (at least until the expected Montoux version arrives from RCA Victor), since the earlier Concert Hall taping by Goehr, reviewed here last spring, offers no real competition to either of the present editions, and even the choice between these is not likely to cause devotees of the music any hesitation. For although the American orchestra is clearly superior to that of Baden-Baden, boasting more refined French horn and bassoon soloists in particular, the Columbia recording is too sharply literal for full romantic effectiveness; whereas that of Vox-Phonotapes, while less transparent, is richer in the essential acoustical warmth and large-auditorium breadth. The decisive factor, anyway, lies in the interpretations and here Bernstein proves to be unexpectedly detached, content merely to read the score, with notable precision, to be sure, but little trace of personal conviction. Horenstein, on the other hand, and almost as surprisingly, plays the work as if he relished every moment of it, and his verve, expressiveness, and dramatic intensity are sure to carry every listener irresistibly along with him. Both conductors use the most-often-heard 1919 edition of the Suite, but Horenstein adds a seven-bar *Andante* link, drawn from the more elaborate 1935 edition, between the *Infernal Dance* and the *Berceuse*. (Bernstein LP, ML 5182, Sept. 1957; Horenstein, no Vox LP as yet.)

• • TCHAIKOVSKY: *Serenade for Strings, in C, Op. 48*

Sorkin Symphonette, Leonard Sorkin, cond.
CONCERTAPES 23-3B. 30 min. \$11.95.

I assume that this recording (issued earlier in a single-channel version as Webcor 2928-3) is the same as that recently released on LP by Vanguard as VRS 1003. At any rate the critical comment on that disc jibes closely with my reaction to the Sorkin performance as one lacking marked distinction and played by a rather too-small string choir deficient in tonal warmth and color. In stereo reproduction, however, the bass is no longer obtrusive and the string sonorities, while still rather dry and narrow in spread, are much more pleasant to one's ears. The salonish Bolzoni Minuet, included as a filler, seems wholly incongruous and pointless. (Sept. 1957)

• • TOCH: *Symphony No. 3, Op. 75*

Pittsburgh Symphony Orchestra, William Steinberg, cond.
CAPITOL ZF 7. 27 min. \$14.95.

Toch's 1956 Pulitzer prize-winner is one serious modern work which *should* command lively admiration, for it obviously is

Continued on page 108

HIGH FIDELITY MAGAZINE

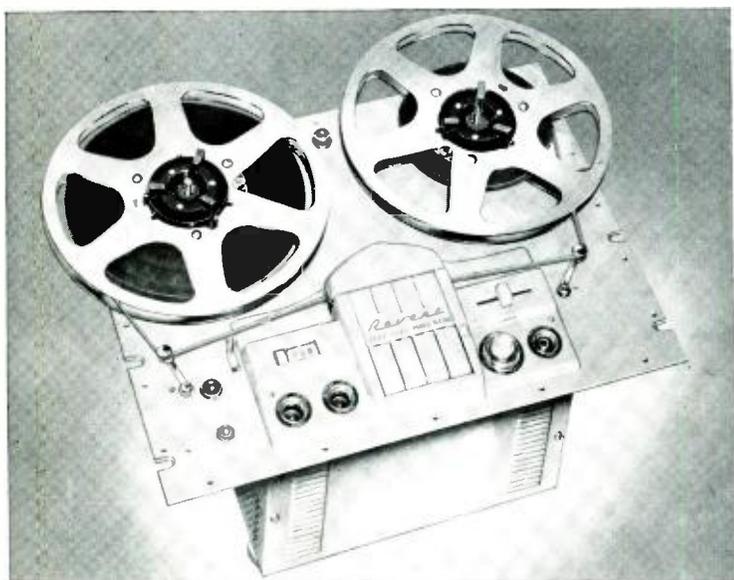
Revere's exclusive



makes the difference

Revere TAPE RECORDERS

The incomparable high fidelity and rich tonal quality of Revere Tape Recorders is the direct result of a Revere exclusive, patented feature. "Balanced-Tone" is the control that coordinates amplifier and acoustic system response to emphasize both high and low tones, giving strikingly realistic HIGH FIDELITY sound reproduction, even on low volume. Compare and you'll choose REVERE!



T-11 HIGH-FIDELITY CUSTOM MODEL

For professional use and easy installation into any high fidelity system. Solenoid operated keyboard, push-button control. Outstanding Performance.

GUARANTEED SPECS: Freq. Resp. 40-16,000 ± 3 db., S.N. greater than 50 db., WOW-Flutter less than 0.2%, Overall-Dist. 0.65%.

FEATURES: 1-Volt cathode follower output; Accepts 3, 5, 7 and 10 1/2 reels; Automatic head demagnetization; Tape counter; 2-hum balancing controls; Adjustable high freq. equalization . . . with reel adapters, cords and plugs
\$284.50

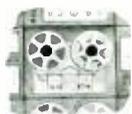
SK-707 Stereophonic Kit—Converts all Revere T-11, T-1100 series and keyboard tape recorders to IN LINE High Fidelity Stereophonic playback and monaural recording. Simple installation; uses phono amplifier for record channel. Exceptional specifications . . . \$34.50.

REVERE CAMERA CO. • CHICAGO 16, ILLINOIS



T-700-D Dual-Speed — Simplified automatic keyboard controls. Standard tape speed of 3.75 and 7.5 i.p.s. Records up to three hours per seven inch reel with new long-play tape. Exclusive index counter. Complete with microphone, radio attachment cord, two reels (one with tape) and case. \$225.00
TR-800-D—Same with built-in radio \$275.00

T-1100 Dual-Speed — Single knob control. Tape speeds of 3.75 and 7.5 i.p.s.; records up to three hours with new long-play tape. Durable fibre-glass case; two acoustically matched excursion speakers. Complete with microphone, radio attachment cord, two reels (one with tape) and case. \$169.50
TR-1200—Same with built-in radio \$219.50



VERTICAL MOUNTING



HORIZONTAL MOUNTING

The preference for Revere by artists of renown is your guide to recorder selection.



ARTUR RUBINSTEIN
noted pianist



MARIAN ANDERSON
famed soprano



ANDRES SEGOVIA
foremost guitarist



ZINO FRANCESCATTI
brilliant violinist



ROBERT CASADESUS
piano virtuoso

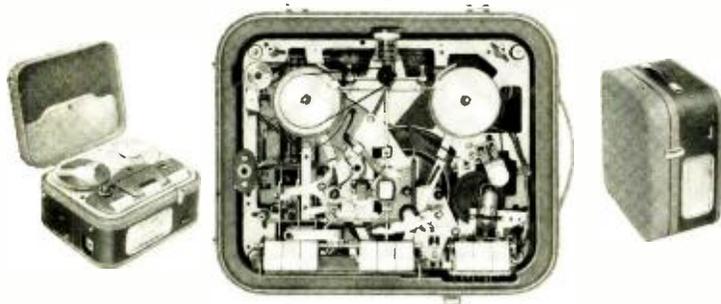


LAURITZ MELCHIOR
great Wagnerian tenor

it sounds like this...



because it's built like this!



the new imported

NORELCO® CONTINENTAL®

world's most advanced all-in-one portable
TAPE RECORDER

For the name
and address
of your nearest
Norelco dealer,
write to Dept. 44

NORTH AMERICAN
PHILIPS CO., INC.
High Fidelity
Products Division
230 DUFFY AVENUE,
HICKSVILLE, L.I., N.Y.



Engineered by Philips of the Netherlands, world pioneers in electronics
Precision-crafted by Dutch master technicians

Styled by the Continent's top designers
Three speeds (7½, 3¾ and 1½ ips)...
twin tracks... push-button controlled

Special narrow-gap (0.0002 in.) head
for extended frequency response

Built-in, wide-range Norelco speaker
Also plays through external hi-fi set

TAPE DECK

Continued from page 106

expertly constructed on a large scale, rich in clearly profiled melodic and rhythmic ideas, and of special audiophile interest for its ingenious use of such symphonically novel timbres as those of the vibraphone, Hammond organ, and even a compressed-air "hisser." Moreover, it is performed with impressive dramatic power by Steinberg and recorded with a strong clarity even more striking in this broad, solid, high-level stereo version than in the LP edition (P 8364). Yet I simply cannot escape the conclusion that it is wholly cerebrally contrived. Much as I relish—as a hi-fi fan—the big blasts and intricate details of the sound weaving, as a musical listener I am left entirely unresponsive. (May 1957)

• • BREAKING THE SOUND BARRIER: Vol. 1, Percussion

American Percussion Society, Paul Price, cond.

URANIA UST 1204, 35 min. \$11.95.

More sound and fury, in a hi-fi fanatic's holiday of multitudinously varied percussive timbres, but here—at least in part—there is genuine emotional significance and the lighter pieces on the program have at least the attractions of humor and infectious gusto. The big works are the famous (or notorious) Varèse *Ionisation* and Lou Harrison's *Canticle No. 3*; and to my surprise the former, an old favorite of mine, is well-nigh eclipsed by the latter, a completely new discovery, since I haven't heard either the LP version of the present program (UX 106) or an earlier recording Price conducted several years ago for a University of Illinois LP (URS 3). The details of *Ionisation* are of course delineated more realistically than in the celebrated EMS LP of early hi-fi triumphs, but Price, for all his vigor and speed (which trims more than a minute in playing time from the composer-authorized EMS performance), seems to lose much of Varèse's essential drive. But he does the *Canticle* magnificently, and with each rehearing this long and amazingly varied work strikes me more emphatically as not only the most complex score yet devised primarily for percussion (augmented by a wonderfully expressive, hollow-toned ocarina), but a true contemporary masterpiece of imaginative and poetic expression. It must be heard—in stereo—to be believed.

The other pieces are ephemera of strictly novelty appeal, yet Harry Bartlett's *Four Holidays* is an amusing *divertissement*, and the Introduction and Allegro by Jack Mackenzie and *Three Brothers* by Michael Colgrass (both Price pupils and players in the present ensemble) are lively if rowdy *jeux d'esprit* which have the unpretentious merit of delighting pure sound-fanciers with a fresh variety of catchily rhythmed bangs, bonges, rattles, and thumps.

REEL MUSIC NOTES

CAPITOL: The breeziness and bold postmodernish colorings we expect in a summer pops program are present in abundance in the stereo tapings of *Gypsy!* and *L'Italia*, but

Continued on page 110

WHICH "STEREO-TYPE" ARE YOU?



Hi-Fi Purist?



Music Loving Moderate?



Bewildered Beginner?

emc presents
**ONE TAPE PLAYER THAT'S RIGHT
 FOR ALL STEREO LISTENERS!**



Listeners of every type are taking the step to stereophonic sound. And small wonder. Once you discover the power of dual channel recording to recreate music with all of the depth, presence and realism of a live performance, no other sound will ever quite satisfy you.

Whatever type *you* are, you can take the step to stereo confidently and inexpensively when you choose the EMC Stereophonic Tape Player.

Its performance will convince the hi-fi purist that here is a player truly worthy of his cherished components. The EMC is built to professional standards.

The music lover, primarily interested in listening, will especially like the fact that the EMC is *all* player. To get all of this playback quality in a machine that both plays and records would cost many times more.

The beginner can enjoy true stereo right now, with the machine as one speaker and a radio or TV set as the

other, yet this same player can be the basic building block for the finest high fidelity system. The addition of quality components serves only to show off the EMC to better advantage; never shows it up. Choose the tape player with a future as unlimited as the future of stereo! You can own this high fidelity player for less than the cost of an ordinary monaural tape recorder. See your EMC dealer now.

The EMC Stereophonic Tape Player plays stacked (in-line) stereo tapes, full track or dual track monaural. Two-channel in-line micro-gap playback heads, twin-channel pre-amplifiers, one self-contained power amplifier and twin speakers crossed over for one channel, cathode followers for two external amplifiers and one external speaker jack; superior shielding for hum rejection. Tape speed: 7.5 ips. Wow and flutter: less than .25%. Noise: At least 50 db below 3% distorted signal. Frequency response 40 to 12,000 cps, plus or minus 2 db; 30 to 15,000 cps, plus or minus 5 db signal to noise, at least 50 db in either channel. Dust-proof, shock proof luggage cases. Price: **\$189.95**
 Tape deck mechanism, minus electronics. **\$89.95**



RECORDINGS
 CORPORATION
 806 EAST SEVENTH STREET

Manufacturers of EMC Tape Players and
 Long Life Fluids • Distributors of Stereophony
 Incorporated Recorded Tapes
 • ST. PAUL 6, MINNESOTA



GUY LOMBARDO
makes his tape
recordings on



That's not
the reason why
you should use



Here's why
you should use



It's the best-engineered tape in the world... gives you better highs... better lows... better sound all around! Saves your tape recorder, too—because the IRISH FERRO-SHEN process results in smoother tape... tape that can't sand down your magnetic heads or shed oxide powder into your machine. Price? Same as ordinary tape!



Available wherever quality tape is sold.
ORRadio Industries, Inc., Opelika, Alabama
Export: Morhan Exporting Corp., New York, N. Y.
Canada: Atlas Radio Corp., Ltd., Toronto, Ontario

TAPE DECK

Continued from page 108

since the orchestra is that of the Hollywood Bowl under Carmen Dragon these entertainments are also characterized by a highly polished chromium plating and strongly marked contrasts between lush sentiment and jet-powered energy. Yet if you aren't stubbornly sales-resistant to such professional manipulations of raw emotional and dynamic appeals, you're likely to be soothed and stimulated in proper turn by the persuasive readings, effective and not overfancy arrangements, and the uncommon brilliance of both the orchestral performances and the extremely bold, open recordings. Each program omits two or three pieces included in the corresponding LP versions (P 8342, Sept. 56, and P 8351, Jan. 1957), but *Gypsy!* still features the dazzling Dragon scorings of Montei's *Csardas*, Sarasate's *Zigeunerweisen*, and *Dark Eyes*, as well as shorter pieces by Dvořák, Brahms, and Dinić; while *L'Italia* still stars the conductor-arranger's Böhm *Tarentella* and De Curtis *Come Back to Sorrento*, as well as the inevitable *Cavalleria Rusticana* Intermezzo, Cottrau *Santa Lucia*, Wolf-Ferrari *Dance of the Camorristi*, and a chunk of Tchaikovsky's *Capriccio Italien* (• • ZF 6, 23 min., and ZF 3, 26 min., \$14.95 each).

COLUMBIA: Andre Kostelanetz's *Romantic Music of Rachmaninoff* may disappoint some of his mass public (and pleasantly surprise others) by the straightforwardness of the crisp opening *Serenade* and resilient G minor Prelude, but there is a quick return to the expected florid sentimentality in the following G major and G sharp minor Preludes, *Melodie*, *Vocalise*, and *Daisies* transcriptions, and a combination of languishing romanticism and brilliant verve in the abbreviated version of the Scherzo from the Second Symphony. The recording, however, is beautifully clean and open throughout; and the brief hits of Leonid Hambro's piano playing are so good that one's appetite is strongly aroused for a solo Rachmaninoff program by this versatile artist (• • KCB 7, 25 min., \$12.95; originally released as August "buy-of-the-month" LP, (L 1001). The original-cast version of *Cinderella* is one of Rodgers and Hammerstein's (and Julie Andrews') lesser efforts. Nevertheless, it strikes me as far more effective in this rather brash yet extremely bright stereo taping than in the original LP (OL 5190, June 1957), and I must concede that after several hearings its obviously hastily contrived materials begin to assume considerable appeal if hardly marked distinction. (• • POB 10, 41 min., \$19.95)

CONCERTAPES: Austin Lovelace tends to plod through his rather conventional *Organ Concert*, and his Austin instrument (of the First Methodist Church, Evanston, Illinois) is better suited to the undistinguished "symphonic" pieces by Flor Peeters and Hermann Schröder than to Bach's Prelude and Fugue in A minor and two chorale preludes, Pachelbel's *Vom Himmel hoch*, and Daquin's *Grand Jeu et duo*. Yet the ultrastrong and reverberant stereo recording captures some of the biggest and most impressive pedal and full-organ sound I have

STEREO TAPE FROM CAPITOL

...the leader in sound



STAN KENTON:
Kenton In Hi-Fi

Here are Kenton's greatest hits, featuring many of his original stars. This is Kenton as he should be heard — in flawless, breathtaking stereo. (ZD-10)

Other Top Stars in Stereo

NAT "KING" COLE:

Love is the Thing (ZD-11)

GEORGE SHEARING: *Black Satin* (ZC-13)

FRED WARING & THE PENNSYLVANIANS
IN HI-FI (ZD-12)

"Full Dimensional Sound"

Stereo Releases

LEOPOLD STOKOWSKI:

The Orchestra (ZH-8)

ROGER WAGNER CHORALE:

House of the Lord (ZF-9)

WM. STEINBERG, PITTSBURGH
SYMPHONY:

Toch: Third Symphony (ZF-7)

HOLLYWOOD BOWL SYMPHONY
ORCHESTRA:

L'Italia (ZF-3)

Gypsy (ZF-6)

Symphonic Dances (ZF-5)

Bolero & Capriccio Espagnol (ZF-4)

'A STUDY IN STEREO'

A breathtaking showcase of stereo's vast range featuring Capitol's big-name artists. (ZH-2)

* * *

'INTRO TO STEREO'

A narrated journey through the wonders of stereo — music and real-life sounds. (ZA-1)



2 CHANNEL — 7½ IPS — FOR IN-LINE HEADS

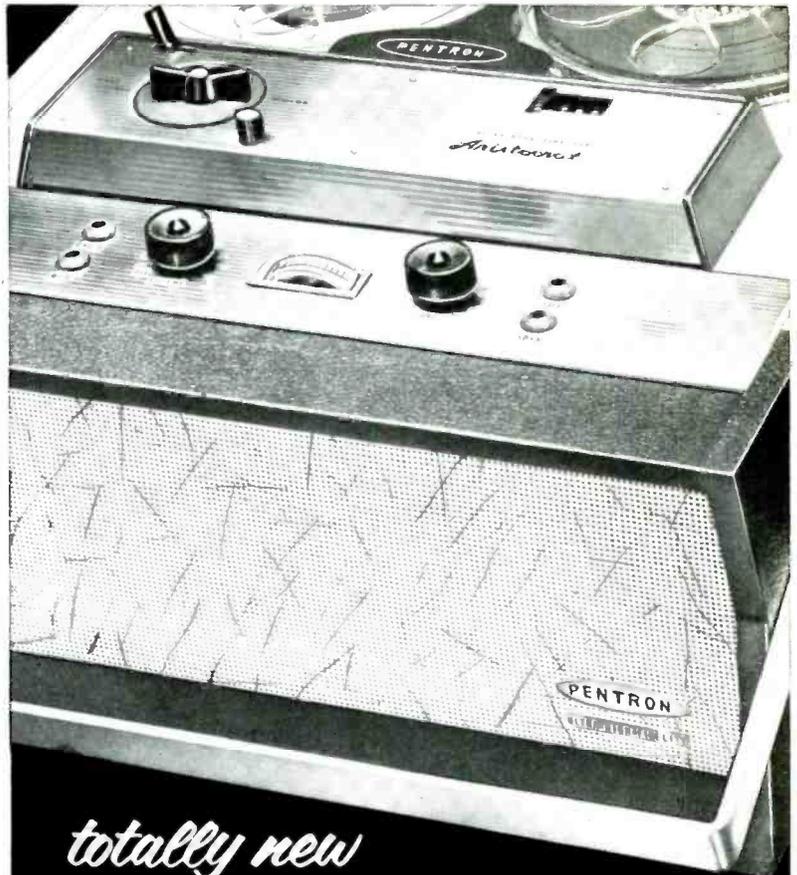
ever heard in home reproduction. (• • 24-3, 31 min., \$11.95)

CONCERT HALL: Although I'd hesitate to claim that *Jazz at Strevoville* contains the best examples of so-called classical jazz playing I've ever encountered, I have no hesitancy at all in hailing it as probably the most fascinating jazz recording yet produced and certainly the most imaginative exploitation of stereo potentialities in this domain. For, as better indicated by the title of the LP version, *The Big Challenge* (J 1268), it pits two groups of star performers in "cutting" contest versions of a heavily swinging *I'm Beginning to See the Light*, torridly bluesy *Do Nothing Till You Hear from Me*, and a superbly jumping, elaborately extended *Alphonse and Gaston*... and differentiates the rival soloists in a way quite beyond the powers of the single-channel medium. On the left (and in stereo there's no mistaking) we have Rex Stewart (cornet), Bud Freeman (tenor sax), and J. C. Higginbotham (trombone); on the right, Coorie Williams (trumpet), Coleman Hawkins (tenor sax), and Lawrence Brown (trombone); with a centered rhythm section made up of Hank Jones (piano), Bill Bauer (guitar), Milt Hinton (bass), and Gus Johnson (drums). And antiphonally or collectively they all play their heads off in virtuosic yet always tautly controlled performances, every detail of which is captured with ultra-clarity, realistic power, and glowing color. (• • CH/EX 40, 19 min., \$8.95)

MERCURY: The Richards organ in the Ballroom of the Atlantic City Convention Hall may have been designed as a compromise between the concert and theater types of instrument, but even in a mostly typical theater-organ recital by Robert Elmore (*Boardwalk Pipes*) its sonic resources and variety of registration are far superior to those in kindred programs. Elmore himself plays with more assured skill than most theater-organ specialists, although he too is hardly sparing of either the jauntiness or the sentimentality appropriate to *The Stars and Stripes Forever*, Kreisler's *Stars in My Eyes, Lovesfriend*, and *Old Refrain*, and his own *Fantasies on Nursery Tunes*. A sprightly Boex *Marche champêtre* and the brilliant Clarke *Trumpet Voluntary* provide more distinguished musical novelty, but top honors go to the recording engineers for preserving so much sonic warmth and clarity in what must have been acoustically cavernous surroundings. (• • MDS 5-5, 26 min., \$12.95; originally released on LP as MG 50109, Aug. 1957)

OMEGATAPE: *Clear the Grid! Heavy Iron in Stereo* is so specialized in appeal that only racing-car aficionados and hi-fi fanatics are likely to relish its confused but uproarious sonic documentation of the Pomona Road Races, varied only by what sounds suspiciously like a parody on racing-expert interviews. I seldom was able to identify any particular buzz-saw or whizz-past, but more educated ears undoubtedly can recognize each one as characteristic of a Jaguar, Ferrari, or Mercedes, as the case may be. Even to a novice the terrific over-all racket is unquestionably authentic, at times singularly exciting, and—repro-

Continued on next page



totally new

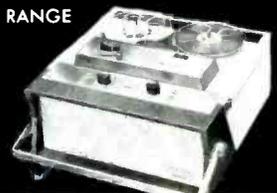
PENTRON

high fidelity Tape Recorders

Each of the new Pentron recorders offers performance, simplicity and exclusive features that set it apart from the ordinary. Each Pentron is the finest in its price class, bar none! See and hear... then choose the Pentron that suits you best.

BRILLIANT FEATURES exclusively PENTRON

- FINGER FLITE SINGLE ROTARY CONTROL
- ENTIRE LINE AVAILABLE STEREOPHONICALLY (STACKED ONLY)
- BIGGER AMPLIFIERS AND EXTENDED RANGE SPEAKER SYSTEMS
- QUICK-FLIP SPEED CHANGE CONTROL
- MODULAR DESIGN HEAD ASSEMBLY WITH AZMUR-X HEAD ADJUSTMENT
- SEVEN OTHER PENTRON EXCLUSIVES



important notice!

Your dealer is now demonstrating new Pentron integrated tape components for custom installation. See them!

PENTRON

783 S. TRIPP AVE.
Chicago 24, Ill.

Send the Following:
 Pentape Recorded
Tape Catalog

Full Color Literature
 Tape Components
Brochure

Name _____

Address _____

City and State _____

Canada: Atlas Radio Ltd., Toronto

Why we call it the

magnificent

Ferrograph



finest
hi-fi tape
recorder
in all the
world



Made in
England

Model 3A/N
3¾" — 7½ ips
\$379.50 net

Model 3AN/H
7½" — 15 ips
\$425.00 net

Read these exciting excerpts from
the AUDIO LEAGUE* Report:

"... lives up to its claims in full measure,
delivering superb performance."

"... does not degrade or change the quality
of an LP dubbed on tape."

"... SIN ratio agrees exactly with adver-
tised claims."

"... performance fully up to professional
standard in many respects."

The AUDIO LEAGUE Report is a firm assurance to discriminating music lovers, authoritatively stating that all claims made for the FERROGRAPH's performance are met and often exceeded. As a FERROGRAPH owner, you will find your own words of marvel and praise when you first hear the majestic true-to-life sound reproduction it offers for home or professional use.

Dual speed, dual-track FERROGRAPH recorders offer a frequency response ± 2 db between 50 and 10,000 cycles with wow and flutter less than 0.2% at 7½ ips. All models have 3 motors with a synchronous hysteresis capstan motor providing unparalleled long-term speed stability, thus avoiding pitch errors.



**CUSTOM
MODELS**

Model 66N, 3¾" — 7½ ips.....\$399.50 net
Model 66H, 7½" — 15 ips.....\$425.00 net



TAPE DECKS 3¾" — 7½" IPS

"A", 2 heads \$195.00; "B", 3 heads \$225.00;
"C", staggered \$250.00; "C" #77, stacked \$275.00;
"C" #88, stacked \$275.00

*Authorized Quotation #64. Please consult the AUDIO LEAGUE REPORT Vol. II, No. 4, March 1957 for complete technical report and listening evaluation of the Ferrograph Recorders. P. O. Box 262, Mount Vernon, N. Y.

At selected franchised dealers

ERCONA CORPORATION (Electronic Division)

551 Fifth Ave., Dept. 12, New York 17, N. Y.

In Canada, write Astral Electric Company Limited, 44 Danforth Road, Toronto 13.

TAPE DECK

Continued from preceding page

duced at full volume — it should clear not only the grid but one's living room and perhaps whole neighborhood in a hurry. (• • ST 2010, 21 min., \$10.95). *Stereo for Hillbillies* is almost as specialized in a quite different way, but this reel should prove a much more amusing — and less exhausting — living-room novelty, since Warren Baker's Little Band beats out a varied batch of old-time tunes, reels, etc., with toe-tickling gusto. Only the more sophisticated, jazzy version of *Bury Me Not on the Lone Prairie* strikes an incongruous note, and although the separation between channels would seem excessive in more conventional fare, it works out very well for the present fiddle-sawing, banjo-strumming, and miscellaneous slap-sticking. (• • ST 2013, 20 min., \$11.95)

PHONOTAPES: For all its proficiency and the powerful breadth of the present stereo tapings, the West Point Cadet Glee Club, under Chief Warrent Officer Frederic Boots, seems almost deliberately calculated — in both its self-consciously "good-fellows" ingratiation and shoddy music — to arouse my worst biases against male choruses singing traditional college materials with traditional glee-club mannerisms. The unaccompanied sonorities of Harling's *The Corps*, O'Brien's *Benny Harcus, Ob!*, and *Army Blue* do have their attractions, but I'm quite insensible to any at all in the crude emotional appeals of Friml's *Song of the Vagabond*, Loesser's *Ballad of Roger Young*, Malotte's *The Lord's Prayer*, etc. — including even an incongruous calypso. *Hold 'Em Joe*, complete with maracas as well as piano accompaniment. (• • S 709, 26 min., \$11.95; originally released on LP as Vox 25390)

RCA VICTOR (Pops): I hear so little, non-hot or non-cool, big-band dance music these days that perhaps I am more easily impressed than I should be by Joe Reisman's *Party Night at Joe's* and Billy Butterfield's *They're Playing Our Song*. Both programs strike me as well varied and highly danceable throughout, with *The Major and the Minor* particularly catchy in the former, and a haunting *All the Things You Are* and jaunty *Again and Again and Again* outstanding in the latter. Both bands, too, are notable for their precision and both are excellently recorded, Butterfield's exceptionally so in acoustical warmth and broad-spread stereoism. (• • CPS 73, 26 min., \$10.95; BPS 77, 20 min., \$8.95)

SONOTAPE: Rodzinski's magnificent *Nutcracker* Ballet is evidently an inexhaustible mine, for here comes a third release from the same source and there will be still more to follow. Strangely, though, this is not the complete concert suite but a selection of six "highlights" (the usual suite minus the *Overture Miniature* and *Arabian Dance*). Not so strangely it is issued in a new, relatively low-priced stereo series and, in this taping, with considerably higher-level modulation — presumably for more effective reproduction on small home-

Continued on page 114

HIGH FIDELITY MAGAZINE

announcing the new **CONCERTONE GLOBEMATIC 60**

The world's greatest tape recorder



- Stereo—Full Track—Half Track
- Push Button Operation • Lightweight
- Takes up to 10½" Reels
 - Direct Hysteresis Synchronous Tape Drive
 - Torque Control Switch
 - Safety Erase Interlock
 - Two High-Speed Take-up Motors



Audio Division

AMERICAN ELECTRONICS, INC.

655 WEST WASHINGTON BOULEVARD, LOS ANGELES 15, CALIFORNIA

Just released:
8 BRILLIANT NEW STEREO TAPES

Available stacked or staggered

ADELE GIRARD
"Jazz on Harp"

Exciting jazz selections by the greatest jazz harpist in America. TN 100. \$10.95



DICK TODD
"Sings in Stereo"

Popular vocalist singing a group of old standards. TN 101. \$10.95



JOE MARSALA
"Chicago Jazz"

Chicago style jazz by the musicians who made it famous. TN 102. \$10.95



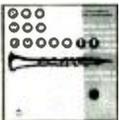
BUD FREEMAN
"The Bud Freeman Group"

Presenting the famous originator of the Austin High School gang, him self! TN 103. \$10.95



DAVE MACKAY
"Plays Progressive"

Piano selections by the brightest star on the modern jazz horizon! TN 104. \$10.95



PEE WEE RUSSELL
"Pee Wee Plays"

Original member of the Mound City Blue Blowers. "Nuff said! TN 105. \$10.95



DICK CARY
"Hot and Cool"

New arrangements for some "hot and cool" favorites. TN 106. \$10.95



GEORGE WETTLING
"And His Windy City Seven"

Drums like nobody's business! Played by one of the greats in jazz. TN 107. \$10.95

Ask your dealer or write direct

EXCLUSIVE DISTRIBUTORSHIPS AVAILABLE

Stere-O-Craft
1650 Broadway, New York 19, N. Y.

Gentlemen:

Please send me full information on your Stere-O-Craft releases and place my name on your regular dealer catalog mailing list.

Name

Address

City

Zone

State



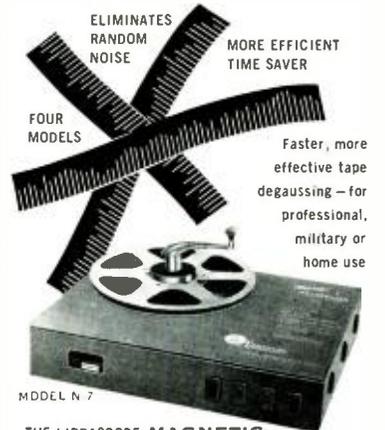
TAPE DECK

Continued from page 112

playback equipment. But even in so brief samplings, the grace of Rodzinski's performances and the exquisite transparency of the stereo recording are as magical as ever. (● ● SWB 7001, 14 min., \$6.95). Another release in the same 7000 series is a new Deutschermeister Band program, this one called *On Parade* and featuring Julius Herrmann's famous wind ensemble in a batch of Viennese favorites none too well known in this country: *Lachende Sonne*, *Der alte Trommler*, *Egerlander*, *Nachledil*, and *Nussdorfer* marches—all high-spirited, martial oom-pah stuff recorded with stirring swing and uncommon brilliance. Most interesting, technically, of all is the introductory *Castaldo Marsch*, since this is done not only in patrol (soft-loud-soft) but also in true march-past style—with the band actually proceeding during the music's course from far left to distant right with a motional realism achievable of course only in stereo. (● ● SWB 7004, 17 min., \$6.95)

STEREOPHONY, INC., runs the gamut this month—at least from C to D: from the Candlelight Trio's *Champagne for Two* to Doc Evans' *Dixie in Stereo* and *Dixieland Encore*. The first of these is not a vintage product, but nonintoxicating dinner and salon music: some nine light-classic and standard pop tunes played quite seriously and not overenthusiastically, but recorded at excessively high level and in rather narrow stereo spread, if with ultraclarity. (● ● B 150, 24 min., \$7.95). Doc Evans' two tapes also are quite closely "miked" in none too reverberant studio acoustics, but here the rowdy vitality of the playing itself packs a potent kick, especially in the longer program's *Oh, Didn't He Ramble*, the *Encore's* *Waiting for the Robert E. Lee*, and in George Tupper's elephantine tuba playing throughout. (● ● B 121, 23 min., \$7.95; A 123, 5-in., 16 min., \$6.95)

VANGUARD: Even in a jazz month dominated by Coontie's and Rex's Concert Hall masterpiece above, Buck Clayton's *Buckin' the Blues* (simultaneously released on LP as VRS 8514) would be notable, both for its slow-swinging, quite poetic *Good Morning Blues* and a batch of Clayton originals, topped by a terrifically driving *Queen's Express*, all recorded with ultrabold, open, and vibrant sonority (● ● VRT 3006, 30 min., \$11.95). The Rolf Kuhn Quartet's *Streamline* (originally issued on LP as VRS 8510, May 1957) is less brilliantly recorded, but boasts even better stereo balance. The music and playing are less torrid than Clayton's, but the German-born clarinetist-leader's florid passages (obviously modeled on Benny Goodman's in his palmiest days) are often highly imaginative as well as virtuosic. The costarred pianist, Ronnell Bright, also has some fine moments, although his featured solo appearance in *I'll Remember You* is not as distinctive as his less pretentious contributions to Gershwin's *Lore is Here to Stay* and the Kuhn originals, *Streamline*, *Keystone*, and *Rolf's Tune*. (● ● VRT 3007, 28 min., \$11.95)



ELIMINATES RANDOM NOISE
MORE EFFICIENT TIME SAVER

FOUR MODELS

Faster, more effective tape degaussing—for professional, military or home use

MODEL N 7

THE LIBRASCOPE MAGNETIC NOISERASER

Because it thoroughly "cleans" the tape of random signals as well as prior recordings, these Librascope Noiseraser units are preferred by professional broadcasting recording technicians, exacting military users and Hi-Fi enthusiasts. Several models are available.

Tape up to 1" and reels to 14" dia.; operates on standard 110V AC; erases new as well as used tape. Made by one of the foremost manufacturers of computers and controls.

Bulletin M500-1 available upon request.



INCORPORATED
120 E. SANTA ANITA AVE., BURBANK, CALIF.

Better Results With ROBINS' AUDIO ACCESSORIES!

GIBSON GIRL® TAPE SPLICERS		
1. Semi-Pro	SP-4	\$ 3.50
2. Junior	TS-4JR	6.50
3. Standard	TS-4STD	8.50
4. De luxe	TS-4DLX	11.50
5. Industrial (5 sizes to 1")		(net) 55.00

ROBINS PHONO AND TAPE ACCESSORIES		
6. Splicing tape	ST-500	\$.39
7. Jockey Cloth for Tapes	JCT-2	1.00
8. Tape Threader	TT-1	.98
9. AUD-O-FILE	AF-5TD (net)	23.99
10. Changer Covers	CC-1, 2	2.00
11. Turntable Covers	CC-3	2.50
12. Disclosures	EIO, 12 (pkg)	1.20
13. Jockey Cloth for Records	JC-1	1.00
14. KleeNeeDLE	N8 1	1.50
15. Phono-Cushion, 10", 12"	PC-10, 12	1.50
16. Atomic Jewel	SE-90	5.00

At Dealers Everywhere
ROBINS INDUSTRIES CORP.
2415 22nd ST. NEW YORK



99.75 net

NEW 12" PRECISION TURNTABLE

OUTSTANDING FEATURES

Four speeds, each with +3% speed adjustment. Built-in illuminated strobe disk for all speeds. Built-in level bubble and leveling screws. Precision 4-pole motor, extra-compliant belt-drive and idler system plus exclusive Thorens Roto-Drive principle, provide complete vibration isolation, absolutely constant speed. Provision for easily changing arms without leaving unsightly permanent marks—just replace low-cost arm mounting board, available for 12" or 16" arms in various finishes. Easy to mount, the TD-124 requires only 2 3/4" clearance below mounting board. Furnished with attached line cord, shielded cable and solder plate.

Gyro-like Roto-Drive gives new Thorens TD-124 absolute speed uniformity. Heavier than 16-inch turntables, yet it starts, stops in less than 2/3 turn!

How to get the heaviest possible turntable for smooth, absolutely quiet operation without sacrificing fast starts and stops.

That's the problem Thorens engineers faced when they set out to build the best four-speed, 12-inch, hi-fi turntable money can buy. You'll be amazed at the simplicity of their solution.

The new TD-124 really has two turntables in one: (1) a heavy 10-lb. rim-concentrated, cast-iron flywheel (outweighs 16" aluminum turntables) (2) a light aluminum cover, or turntable proper. An exclusive, Thorens-originated clutch couples or decouples the light aluminum table to the heavy flywheel for instant starts and stops. What's more, the Thorens double turntable system gives you the weight of a cast-iron table (3 times as heavy as aluminum) without danger of attracting any pickup magnet. And with this unique construction, your pickup gets magnetic shielding from motor or transformer hum fields by the iron turntable.

Ask your hi-fi dealer to show you the Thorens TD-124. Better yet, arrange to hear one of those critical, slow piano records on the TD-124. If you don't know who your dealer is, write Thorens Company, Dept. H11.7 New Hyde Park, N. Y. 79



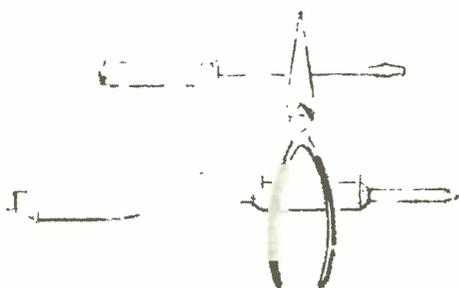
THORENS

SWISS MADE PRODUCTS

HI-FI COMPONENTS · LIGHTERS · SPRING-POWERED SHAVERS · MUSIC BOXES

*treat your family
to all the fun and enjoyment
of fine high fidelity at
one-half the price you
would expect to pay*

HERE'S ALL YOU NEED



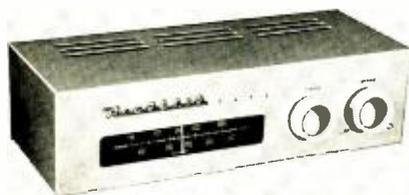
to build your own



HI-FI



FM TUNER



AM TUNER



PREAMPLIFIER

**HEATHKIT
HIGH FIDELITY FM TUNER KIT**

This FM tuner is your least expensive source of high fidelity material! Stabilized oscillator circuit assures negligible drift after initial warmup. Broadband IF circuits assure full fidelity, and 10 microvolt sensitivity pulls in stations with full volume. High-gain cascode RF amplifier, and automatic gain control. Ratio detector gives high-efficiency demodulation. All tunable components prealigned. Edge-illuminated dial for easy tuning. Here is FM for your home at a price you can afford. Shpg. Wt. 7 lbs.

MODEL FM-3A \$25.95 (with cabinet)

**HEATHKIT
BROADBAND AM TUNER KIT**

This tuner differs from an ordinary AM radio in that it has been designed especially for high fidelity. The detector uses crystal diodes, and the IF circuits are "broadbanded" for low signal distortion. Sensitivity, and selectivity are excellent. Quiet performance is assured by 6 db signal-to-noise ratio at 2.5 uv. All tunable components prealigned. Incorporates AVC, two outputs, and two antenna inputs. Edge-lighted glass slide rule dial for easy tuning. Your "best buy" in an AM tuner. Shpg. Wt. 8 lbs.

MODEL BC-1A \$25.95 (with cabinet)

**HEATHKIT "MASTER CONTROL"
PREAMPLIFIER KIT**

This unit is designed to operate as the "master control" for any of the Heathkit Williamson-type amplifiers, and includes features that will do justice to the finest program material. Frequency response within $\pm 1\frac{1}{2}$ db from 15 to 35,000 CPS. Full equalization for LP, RIAA, AES, and early 78's. Five switch-selected inputs with separate level controls. Bass and treble control, and volume control, on front panel. Very attractively styled, and an exceptional dollar value. Shpg. Wt. 7 lbs.

MODEL WA-P2 \$19.75 (with cabinet)

**HEATHKIT "BASIC RANGE"
HIGH FIDELITY SPEAKER SYSTEM KIT**

The very popular model SS-1 Speaker System provides amazing high fidelity performance for its size because it uses high-quality speakers, in an enclosure especially designed to receive them.

It features an 8" mid-range-woofer to cover from 50 to 1600 CPS, and a compression-type Tweeter with flared horn to cover from 1600 to 12,000 CPS. Both speakers are by Jensen. The enclosure itself is a ducted-port bass-reflex unit, measuring 11 1/2" H x 23" W x 11 1/2" D and is constructed of veneer-surfaced plywood, 3/4" thick. All parts are pre-cut and pre-drilled for quick assembly.

Total frequency range is 50 to 12,000 CPS, within ± 5 db. Impedance is 16 ohms. Operates with the "Range Extending" (SS-1B) speaker system kit later, if greater frequency range is desired. Shpg. Wt. 20 lbs. **MODEL SS-1 \$39.95**

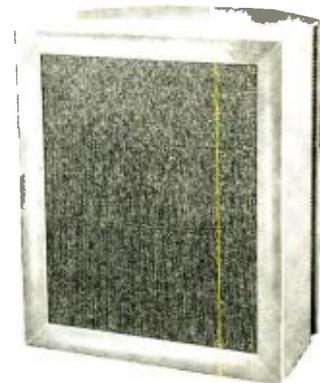


"BASIC" SPEAKER SYSTEM

**HEATHKIT "RANGE EXTENDING"
HIGH FIDELITY SPEAKER SYSTEM KIT**

The SS-1B uses a 15" woofer and a small super-tweeter to supply very high and very low frequencies and fill out the response of the "Basic" (SS-1) speaker system at each end of the audio spectrum. The SS-1 and SS-1B, combined, provide an overall response of ± 5 db from 35 to 16,000 CPS. Kit includes circuit for crossover at 600, 1600 and 4000 CPS. Impedance is 16 ohms, and power rating is 35 watts. Measures 29" H x 23" W x 17 1/2" D, and is constructed of veneer-surfaced plywood, 3/4" thick. Easy to build! Shpg. Wt. 80 lbs.

MODEL SS-1B \$99.95



RANGE EXTENDER

...and save!

**HEATHKIT "LEGATO"
HIGH FIDELITY SPEAKER SYSTEM KIT**

The fine quality of the Legato Speaker System Kit is matched only in the most expensive speaker systems available. The listening experience it can bring to you approaches the ultimate in esthetic satisfaction.

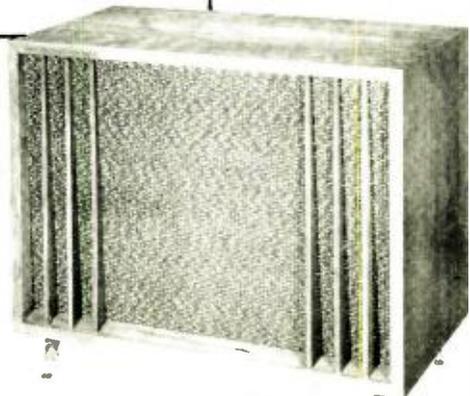
Frequency response is ± 5 db 25 to 20,000 CPS. Two 15" driver-type Altec Lansing speakers cover 25 to 500 CPS, and an Altec Lansing high frequency driver with sectoral horn covers 500 to 20,000 CPS. A precise amount of phase shift in the crossover network brings the high-frequency channel into phase with the low-frequency channel to eliminate peaks or valleys at the crossover point. This is one reason for the mid-range "presence" so evident in this system design.

The attractively styled "contemporary" enclosure emphasizes simplicity of line and form to blend with all furnishings. Cabinet parts are pre-cut and pre-drilled from 3/4" veneer-surfaced plywood for easy assembly at home. Impedance is 16 ohms. Power rating is 50 watts for program material. Full, smooth frequency response assures you of outstanding high fidelity performance, and an unforgettable listening experience. Order HH-1-C (birch) for light finishes, or HH-1-CM (mahogany) for dark finishes. Shpg. Wt. 195 lbs.

MODELS HH-1-C or HH-1-CM \$325.00 each

HEATHKITS

*World's finest
electronic equipment
in kit form...*



"LEGATO" SPEAKER SYSTEM



HEATH COMPANY
A subsidiary of Daystrom, Inc.
Benton Harbor B, Mich.



70-WATT AMPLIFIER



25-WATT AMPLIFIER



ELECTRONIC CROSS-OVER

easy-to-build designs by HEATH insure

You get more comprehensive assembly instructions, higher quality circuit components, and more advanced design features, when you buy HEATH hi-fi!

HEATHKIT 70-WATT HIGH FIDELITY AMPLIFIER KIT

This new amplifier features extra power reserve, metered balance circuit, variable damping, and silicon-diode rectifiers, replacing vacuum tube rectifiers. A pair of 6550 tubes produce full 70-watt output with a special-design Peerless output transformer. A quick-change plug selects 4, 8 and 16 ohm or 70 volt output, and the correct feedback resistance. Variable damping optimizes performance for the speaker system of your choice. Frequency response at 1 watt is ± 1 db from 5 CPS to 80 KC with controlled HF rolloff above 100 KC. Harmonic distortion at full output less than 2%, 20 to 20,000 CPS, and intermodulation distortion below 1% at this same level. Hum and noise are 88 db below full output. Variable damping from .5 to 10. Designed to use WA-P2 preamplifier. Express only. Shpg. Wt. 50 lbs. **MODEL W-6M \$109.95**

HEATHKIT 25-WATT HIGH FIDELITY AMPLIFIER KIT

The 25-watt Heathkit model W-5M is rated "best buy" in its power class by independent critics! Faithful sound reproduction is assured with a response of ± 1 db from 5 to 160,000 CPS at 1 watt, and harmonic distortion below 1% at 25 watts, and IM distortion below 1% at 20 watts. Hum and noise are 99 db below rated output, assuring quiet, hum-free operation. Output taps are 4, 8 and 16 ohms. Employs KT66 tubes and Peerless output transformer. Designed to use WA-P2 pre-amplifier. Express only. Shpg. Wt. 31 lbs. **MODEL W-5M \$59.75**

HEATHKIT ELECTRONIC CROSS-OVER KIT

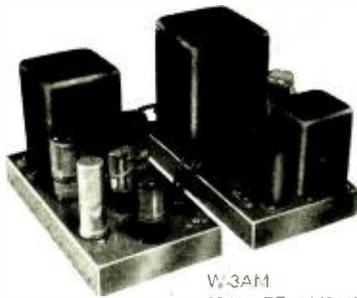
This device separates high and low frequencies electronically, so they may be fed through two separate amplifiers driving separate speakers. The XO-1 is used between the preamplifier and the main amplifiers. Separate amplification of high and low frequencies minimizes IM distortion. Crossover frequencies are selectable at 100, 200, 400, 700, 1200, 2000, and 3500 CPS. Separate level controls for high and low frequency channels. Attenuation is 12 db per octave. Shpg. Wt. 6 lbs. **MODEL XO-1 \$18.95**

HEATHKIT W-3AM HIGH FIDELITY AMPLIFIER KIT

Features of this fine Williamson-type amplifier include the famous Acrosound model TO-300 "ultralinear" transformer, and 5881 tubes for broad frequency response, low distortion, and low hum level. Response is ± 1 db from 6 CPS to 150 KC at 1 watt. Harmonic distortion is below 1% and IM distortion below 1.3%, at 20 watts. Hum and noise are 88 db below 20 watts. Provides output taps of 4, 8 or 16 ohms impedance. Designed to use WA-P2 preamplifier. Shpg. Wt. 29 lbs. **MODEL W-3AM \$49.75**

HEATHKIT W-4AM HIGH FIDELITY AMPLIFIER KIT

A true Williamson-type circuit, featuring extended frequency response, low distortion, and low hum levels, this amplifier can give you fine listening enjoyment with a minimum investment. Uses 5881 tubes and a Chicago-standard output transformer. Frequency response is ± 1 db from 10 CPS to 100 KC at 1 watt. Less than 1.5% harmonic distortion and 2.7% intermodulation at full 20 watt output. Hum and noise are 95 db below full output. Transformer tapped at 4, 8 or 16 ohms. Designed to use WA-P2 preamplifier. Shipped express only. Shpg. Wt. 28 lbs. **MODEL W-4AM \$39.75**



W-3AM
20-WATT AMPLIFIER



W-4AM
20-WATT AMPLIFIER



A-9C
20-WATT AMPLIFIER



A-7D
7-WATT AMPLIFIER

...top HI-FI performance

HEATHKITS

*World's finest
electronic equipment
in kit form ...*

HEATHKIT A-9C HIGH FIDELITY AMPLIFIER KIT

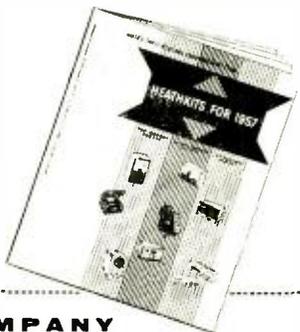
This amplifier incorporates its own preamplifier for self-contained operation. Provides 20-watt output using push-pull 6L6 tubes. True high fidelity for the home, or for PA application. Four separate inputs—separate bass and treble controls—and volume control. Covers 20 to 20,000 CPS within ± 1 db. Output transformer tapped at 4, 8, 16 and 500 ohms. Harmonic distortion less than 1% at 3 db below rated output. High quality sound at low cost! Shpg. Wt. 23 lbs. **MODEL A-9C \$35.50**

HEATHKIT A-7D HIGH FIDELITY AMPLIFIER KIT

This is a true high fidelity amplifier even though its power is somewhat limited. Built-in preamplifier has separate bass and treble controls and volume control. Frequency response is ± 1 db from 20 to 20,000 CPS, and distortion is said to be surprisingly low level. Output transformer tapped at 4, 8 or 16 ohms. Easy to build and a fine 7-watt performer for one just becoming interested in high fidelity. Shpg. Wt. 10 lbs. **MODEL A-7D \$17.95**

Model A-7E: Same as the above except with extra tube stage for added preamplification. Two additional selected inputs, RIAA compensation, and plenty of gain for low level cartridges. Shpg. Wt. 10 lbs. **\$19.95**

HOW TO ORDER ...
Just identify the kit you desire by its model number and send check or money order to address below. Don't hesitate to ask about HEATH TIME PAYMENT PLAN.



*Pioneer in
"do-it-yourself"
electronics*

HEATH COMPANY

A subsidiary of Daystrom, Inc.
Benton Harbor 8, Mich.



NAME _____

ADDRESS _____

CITY & STATE _____

*Please send **FREE** Heathkit Catalog*

This is Mr. Briggs' great

Wharfedale

SUPER 12/FS/AL
FULL RANGE SPEAKER

...and the new enclosure
designed specifically for it



Together,
they make one of
the richest-sounding
speaker systems you
can buy, regardless
of size or price!

The Speaker (Super 12/FS/AL), warmly received by quality enthusiasts, has a remarkably level response between 25 and 18,000 cycles when adequately baffled. Foam suspension and low cone resonance reduce transient distortion to an absolute minimum and eliminates irritating "boom" associated with stiffly suspended cones. Critical listeners will hear the true bass which is so seldom heard. Wharfedale's exclusive cone and carefully wound aluminum voice coil achieve amazingly clean highs, without introducing peaks in the upper middle register.

The high quality of the speaker is uniformly maintained in production since it does not rely on subsidiary diaphragm resonances, which can cause intermodulation distortion. The Super 12/FS/AL has proved superior to many expensive combinations in general listening quality and pleasing sound.

\$78.50

The Enclosure (AF/12) was also developed by Mr. Briggs . . . for the sole purpose of insuring full performance of the Super 12/FS/AL speaker. Gracefully styled, it incorporates one of the most respected of modern principles, the Acoustic Filter. It is built entirely of $\frac{3}{4}$ inch hard wood and finished in fine Genuine Mahogany, Walnut or Blond (Limed Oak). Dimension: $36\frac{1}{4}$ " x 23" x $15\frac{1}{4}$ " deep.

\$94.50

NOW ON DISPLAY AT YOUR DEALER

For full information on these and other Wharfedale speakers and speaker systems, write Dept. WS27

BRITISH INDUSTRIES CORPORATION
PORT WASHINGTON, N. Y.





Tested in the Home

Equipment reports appearing in this section are prepared by members of HIGH FIDELITY's staff, on the basis of actual use in conjunction with a home music system, and the resulting evaluations of equipment are expressed as the opinions of the reviewer only. Reports are usually restricted to items of general interest, and no attempt is made to report on items that are obviously not designed for high-fidelity applications. Each report is sent to the manufacturer before publication; he is free to correct the specifications paragraph, to add a comment at the end of the report, or to request that it be deferred (pending changes in his product), or not be published. He may not, however, change the report. Failure of a new product to appear in TITH may mean either that it has not been submitted for review, or that it was submitted and was found to be unsatisfactory. These reports may not be quoted or reproduced, in part or in whole, for any purpose whatsoever, without written permission from the publisher.

AMI Mark I System

SPECIFICATIONS (furnished by manufacturer): an integrated radio-phonograph system in a single console cabinet. **TUNER**—Harman-Kardon A-310 AM-FM chassis. **Tuning range**: AM—530 to 1650 kc; FM—88 to 108 mc. **Sensitivity**: AM—3 uv; FM—1.2 uv for 20 db quieting. **Antenna inputs**: AM—built-in ferrite loopstick plus high-impedance terminal for external antenna; FM—300 ohm input from built-in antenna or external dipole. **Frequency response**: AM— ± 3 db, 20 to 5,000 cps; FM— ± 0.5 db, 20 to 20,000 cps. **Audio section**—**Output**: low impedance from cathode follower. **Output levels**: FM—2.5 volts for 100% modulation; 1 volt for 30% modulation; AM—1 volt average. **Controls**: tuning, function selector (Off, AM, FM, FM-AFC). **Hum**: 65 db below 100% modulation. **Tubes**: 6BK7A, 12AT7, 6AB4, 6BE6, 6AL5, 12AU7, 6X4, 2—6AU6, 3—6BA6. **Phono**—V-M intermix changer with four-pole motor. **Speeds**: 78, 45, 33.3, 16.6. **Record capacity**: 10 12-in., 12 10-in., or 14 7-in. 45 rpm. Will intermix an assortment of 10-in. and 12-in. discs of the same speed. **Pickup**: GE RPX-052A with sapphire standard and diamond LP styli. Automatic shutoff after last record. Non-jamming. Idler disengages in Off position. **AMPLIFIER**—AMI Model RAA. **Power rating**: 22 watts. **Frequency response**: ± 1 db, 10 to 20,000 cps. **IM distortion**: (50 and 7,000 cps, 4:1 ratio): 2% @ 20 watts; 0.5% @ 1 watt. **Inputs**: total of five, for magnetic pickup, microphone, TV, tape playback (from external preamplifier), and tuner. **Sensitivity**: 10 mv @ 1 kc into phono input drives amplifier to full output. **Controls**: volume and AC power; bass turnover and bass (± 15 db @ 50 cycles, LP-LON, RIAA, NAB); loudness control switch (LOUD, MED, SOFT); treble rolloff and treble (± 15 db @ 10,000 cycles, NAB-LP, RIAA, LON); selector and phono scratch filter (TV, TAPE, TUNER, MIC, PHONO-Flat, 10 kc, 6 kc, 3 kc). **Outputs**: to Tape Recorder and to speaker or speakers of 2 to 500 ohms impedance. Constant voltage 70.7-volt output accommodates up to 8 external speakers. Three switched AC convenience outlets. **Tubes**: 12AD7, 5U4GB, 12AX7, 6CG7, 2—6L6GB. **SPEAKER SYSTEM**—Three-way horn-loaded. **Frequency range**: substantially flat from 45 to 16,000 cps and beyond. **Woofer**: 12-in. cone. **Magnet weight**: 35 oz. Front horn loading, augmented by resistance-controlled bass reflex vent. **Mid- and high-range speakers**: horn-loaded compression drivers. **Crossover frequencies**: 550 and 4,000 cps; 12 db/octave. **Power capacity**: 20 watts. **Impedance**: 16 ohms. **Cabinet dimensions**: 34 $\frac{1}{4}$ in. long by 22 deep by 40 $\frac{1}{2}$ high. **Finish**: light or dark Honduras mahogany, stain finished, hand rubbed. **Prices**: dark finish, \$795; light finish, \$815. **MANUFACTURER**: AMI, Inc., 1500 Union Ave., Grand Rapids 2, Mich.

The AMI Mark I combines in a single cabinet a highly respectable AM-FM tuner, a four-speed intermix record changer with magnetic cartridge, an amplifier of unusual and clever design, and a three-way horn-loaded loudspeaker system.

Everyone knows why it is inadvisable to install a good loudspeaker system in the same cabinet as the phono unit; the speaker will shake the cabinet, the cabinet will shake the phonograph, and the phonograph will pass the vibration through to the speaker, causing a vicious circle of acoustic



The AMI Mark I preassembled system.

feedback. However, in this case it just doesn't happen. The speaker cabinet is very rigidly constructed (It *should* be . . . the Mark I weighs about 250 lb.), and the phonograph assembly is shock-mounted on felt and springs to help isolate it from whatever cabinet vibrations may arise. The fact that, on our sample set, the volume could be turned up almost to

Continued on next page

TESTED IN THE HOME

Continued from preceding page

the point of amplifier overload before feedback began attests to the effectiveness of this acoustic isolation.

The AM-FM tuner is a Harman-Kardon "Theme," which embodies such convenience features as flywheel tuning (one twist of the tuning knob coasts the pointer across a third of the dial), a signal-strength tuning meter for FM and AM, and defeatible AFC. As supplied, the tuner is connected to built-in antennas for both AM and FM, and in view of our difficult receiving location I was at first inclined to consider this just a little ridiculous. I was wrong—this tuner really is sensitive. Without benefit of an outdoor antenna I was able to pull in four FM stations with good quieting, which is truly remarkable for this fringe area location. With the addition of an outdoor antenna, the Theme brought in about as many FM stations, and as well, as any tuner I've tested.

So many AM stations came in that I gave up trying to count them . . . and this in the early afternoon, too. AM sensitivity and selectivity were excellent, and there was no trace of interstation whistle. With the AFC defeated, FM tuning was sharp and definite, and the AFC had no tendency to drag the tuning off the beam, as sometimes happens when AFC as powerful as this is switched in. As is often the case, though, this AFC was included in a tuner that probably could have done without it; drifting during warmup was found to be negligible.

So much for the tuner operation. The next item in line, the record changer, is a VM unit equipped with a variable-reluctance diamond-and-sapphire pickup. The changer will intermix 10-inch and 12-inch records of the same speed, and a spindle adaptor allows it to be used with 45 rpm discs. The changer can be used for manual playing also, and it shuts itself off after the last disc, whether started automatically or manually.

The amplifier in the Mark I is designed specifically for use in AMI systems, and has some unusual operating features. Studying the control panel, the first thing you notice is the absence of phono equalizer switches. Instead of these, the pre-amplifier stage has fixed RIAA equalization, and the continuously-variable bass and treble tone controls carry disc equalization calibrations as well as db boost and cut markings. When the system is used with a high-level input, as from the tuner, these function as conventional tone controls, producing flat response when set to their mid positions. Then when the input selector is set to Phono, the normally Flat setting on the tone controls supplies the appropriate playback equalization for RIAA discs. If equalization is required for old Columbia LP discs, or for the old NAB recording curve, the tone controls can be set accordingly, and once the disc's basic equalization has been obtained, either control can be rotated further one way or the other to give whatever additional equalization may be required. This is a cute idea, and although it is less accurate and somewhat less flexible than the more conventional equalization circuits, it certainly simplifies operation of the AMI system.

The three-position loudness control switch on the amplifier gives a choice of normal operation (without tonal compensation) or medium and low-volume operation. In the reduced-volume positions, the control cuts the volume down and at the same time introduces equalization to compensate for the ear's relative insensitivity to frequency extremes at low volume levels. The front-panel volume control then provides volume variations between the three positions offered by the switch.

The measure of any high-fidelity system, whether comprised of individually selected components or purchased ready-assembled, is how it sounds. The AMI Mark I sounds very good, exhibiting low hum level and a high degree of sonic cleanliness.

The system's frequency range, by measurement, met its specifications easily, and proved to have linear response from 50

to about 2,000 cycles. Below 50 cycles, the bass starts to slip off slowly down to a little below 40 cycles, below which it drops out quite rapidly.

The bass end showed a small amount of doubling at very low frequencies, but is on the whole quite solid, deep, and well defined. Above 2,000 cycles, there is a very slight rise centered around 4,000 cps, which adds a subtle brilliance to the sound. At 6,000, output is back to normal, where it stays until 10,000 cps. Then there is a slow droop to beyond 15,000 cycles.

At this point, I should inject a plaudit and a criticism. AMI is one of the few manufacturers I have observed that rate amplifier distortion at the 1-watt power output level. Since 1 watt output is much more representative of normal *average* listening volume than is "full power output," a distortion rating at 1 watt probably is—in most cases—a better indication of how clean or how smooth an amplifier will sound than is a full-power distortion rating. The 1-watt rating strikes me as being an important omission from most amplifier specification sheets, and I was glad to see that AMI had included it.

It is also true, though, that 0.5% IM distortion at this operating level is higher than is typical of top-quality amplifiers, and this is reflected to some extent in the AMI's sound. Its high end is somewhat grainy in comparison with that of some cost-no-object systems, but its over-all definition and detail are still remarkably good. Its sound is what might best be described as forward or projected, and is considerably better from the FM radio source than from the phono, which exhibited audible rumble and sounded as if it may have had a less-than-perfect stylus assembly.

Also, since it would not be an easy task to recreate this system for shipping to the factory for service, a service manual should be included with each unit.

All in all, the AMI Mark I is a fine-sounding, highly versatile and very well put together unit. Its cabinet work is of the highest quality, and for those who are willing to pay the additional expense incurred by this caliber of cabinetry, and for the installation and convenience of a ready-assembled system, the AMI Mark I warrants serious consideration.

J.G.H.

MANUFACTURER'S COMMENT: AMI radio-phonographs provide true component high fidelity for music lovers who may not have the time, talent, or inclination to assemble a component system of similar high caliber.

The Grand Rapids cabinetry is premier furniture, that contributes to performance as well as aesthetically housing the components. It is of solid, non-resonant construction, and features mortised, doweled joinery and liberal use of glue blocks, screws, and waterproof glue, all of which contribute to rigidity and durability.

Cabinet backs are totally enclosed with wood that is identical in quality and thickness to that used in the other panels, and are completely finished to permit placement of the instrument anywhere in the room.

Current production models incorporate a Garrard RC-88 changer and the latest model tuner, and complete servicing and operating data are now being supplied with each unit. In addition, AMI equipment is listed with the Howard W. Sams organization, which supplies service agencies with repair data.

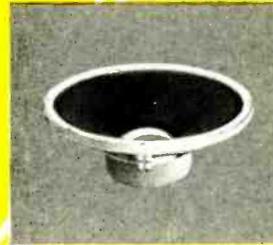
Tech-Master Model 19 Amplifier

SPECIFICATIONS (furnished by manufacturer): a single-chassis control amplifier. **Rated output:** 60 watts. **Frequency range:** flat from 10 to 50,000 cps. **IM distortion:** below 1% at rated output, below 0.25% at normal listening levels. **Inputs:** total of five, for Mag phono, Piezo phono, TV, Tape, and Tuner. **Controls:** function selector (AC Off, Phono 78, AES, RIAA, NAB, LP, Piezo, TV, Tape, Tuner); volume; concentric bass (± 15 db, 50 cps) and treble (± 15 db, 10,000 cps); hum balance and variable magnetic phono load on rear chassis apron. **Outputs:** low impedance from cathode follower to tape recorder; 4, 8, and 16 ohms to speaker. Two rear-chassis AC outlets, one switched, one unswitched. **Tubes:** 12AX7, 12AU7, 6AN8, 2-6550, 5U4GB.

Continued on page 124



unquestioned masterpieces of precision



The 200 inch Palomar telescope weighs 425 tons. Yet the distribution of weight was so carefully calculated, the bearings so cleverly contrived, the parts constructed with such meticulous precision that this great mass is moved smoothly and accurately with a 1/12th horsepower motor. Realistic reproduction of music requires loudspeakers made with the greatest precision...the kind of exquisite precision that distinguishes JBL Signature transducers. Carefully calculated tolerances, exacting assembly, original design concepts give JBL Signature speakers their extremely high efficiency, their smooth, clean sound. There is as much difference in precision between an ordinary loudspeaker and a JBL transducer as there is between a toy telescope and an astronomical observatory. For the name and address of the Authorized JBL Signature Audio Specialist in your community and a free copy of the new JBL catalog write...

"JBL" means **JAMES B. LANSING SOUND, INC.**

3249 Casitas Avenue, Los Angeles 39, California

TESTED IN THE HOME

Continued from page 122

Dimensions: 14¼ in. wide by 11¾ deep by 5¼ high, over-all. **Price:** \$129.95. **MANUFACTURER:** Tech-Master Corp., 75 Front St., Brooklyn 1, N. Y.

The Tech-Master Model 19 is an integrated preamp-control-amplifier with simplified yet flexible control facilities and a 60-watt power output rating.

Its phono input is conveniently supplied with a variable load control, for precise matching to any magnetic cartridge, and the input section is a two-stage triode preamplifier with feedback equalization, for reduced distortion. Five of the most commonly used equalization curves are selectable by the front-panel function selector switch.

Tone controls are of the conventional voltage divider type, which at intermediate positions affect over-all balance rather than the frequency extremes only. Directly following the tone controls is a direct-coupled 6AN8 amplifier and phase inverter, feeding a pair of 6550s in a tapped-screen output connection.

Considering its rather diffident specifications, I was pleased to find that our Model 19 amplifier tested out very well in



The Tech-Master 60-watt control amplifier.

most respects. Measured frequency response through the Tuner input, with the volume control at its mid position, was within ± 1 db from below to well above the audio frequency range.

Its power response was similarly outstanding; it delivered 60 watts without visible sine-wave distortion from 20 to 18,000 cycles, and was down only 1 db below 60 watts at 20,000 cycles.

High- and low-frequency stability were both very good. Measured IM distortion was 0.5% at 1 watt output and about 2% at 60 watts, including the phono preamplifier stage.

Equalization accuracy in the amplifier submitted was within about 2 db of the indicated curves, with the errors being in the direction of too much rolloff and too low turnover frequency.

Sonically, the Tech-Master Model 19 was, as was expected, clean, smooth, and transparent. Its low-frequency definition and control were outstanding (a characteristic that seems to typify high-quality high-power amplifiers), and its over-all sound was uncolored and subtly grainy. The details in complex musical material were well reproduced and, although I have heard a few amplifiers that I believe are better in this respect, it is an extremely subtle distinction, and one that would be audible only through the finest loudspeaker systems.

Some sacrifices in workmanship and materials must inevitably have been made to produce such audible quality at such a low price (things such as inexpensive knobs, some wrongly oriented, some fastened askew), and I cannot tell at this early stage how well the Model 19 will stand up under long usage. But as of the present time, this strikes me as an unusually good buy. It is a fine-sounding amplifier. — J.G.H.

MANUFACTURER'S COMMENT: We should like to underscore the ability of the Model 19 to deliver 60 watts at 20 cps. Listening tests confirm that this makes the new compact low-efficiency speaker systems perform with authority in the lowest octave of their range. Similarly, the new wide-range electrostatic speakers benefit from the Model 19's excellent high-frequency power-delivering capability.

Our tests on the Model 19 have indicated that its durability is above average. Its components are conservatively rated and transformers are of ample capacity. The 6550 output tubes, for instance, are rated at up to 100 watts output in some types of service, so they may be expected to give long life under operating conditions that demand only 60 watts output.

The minor difficulties with control knobs have been corrected in subsequent production of the Model 19.

Ferrograph Tape Recorder

SPECIFICATIONS (furnished by manufacturer): a dual-speed tape recorder with 8½ in. reel capacity. **Speeds:** Model 3A/N — 3.75 and 7.5; Model 3A/NH — 7.5 and 15 ips. **Frequency response:** ± 2 db, 50 to 10,000 cps at 7.5 ips; ± 2 db, 40 to 15,000 cps at 15 ips. **Heads:** erase and record/playback. **Head configuration:** half track with edge margins. **Speed variation:** less than 0.2% at 7.5 ips. **Timing error:** below 0.5%. **Signal/noise ratio:** better than 50 db. **Bias frequency:** 53 kc. **Sensitivity:** minimum signals, .003 volts peak into high-level input; 0.1 volts peak into low-gain input, for full recording level. **Input impedances:** 1 megohm into microphone input; 0.1 megohm into high-level input. **Rewind time:** 45 seconds for 1,200 feet. **Record level indicator:** panel meter. **Inputs:** two, for microphone and high-level source, marked Input 1 and Input 2, respectively. **Controls:** bass (0 to -18 db, 50 cycles); treble (0 to -14 db, 10,000 cycles); record/playback gain; AC on-off; speed selector; function selector; motor starting switch; motor stopping button. **Adjustments:** record level meter zero set; bias current; playback equalization; AC supply voltage; erase cutout link. **Outputs:** 0.75 volts at 1 megohm, to external amplifier; 3.2 or 15 ohms to external speaker. **Monitor amplifier power rating:** 2½ watts, undistorted. **Dimensions:** 18½ in. wide by 17½ deep by 9¾ high, over-all, with lid closed. **Weight:** 49¾ lb. **Prices:** MODEL 3A/N — \$379.50; MODEL 3A/NH — \$425; MODEL 66-N — \$399.50; MODEL 66-H — \$425. **DISTRIBUTOR:** Ercona Corp., 551 Fifth Ave., New York 17, N. Y.

After having watched tape recorders become more and more simple to operate (and often correspondingly less flexible) during the last few years, it came as a refreshing change to work with this Ferrograph unit. This is not to say that the Ferrograph requires an operator with a BS degree in engineering . . . nothing of the sort; but it definitely requires a re-evaluation of one's preconceived ideas about how to operate a tape recorder.

As an example of this, let's run through its operating procedures. The Ferrograph is normally supplied as a self-contained unit. It has its own built-in power amplifier and 10 by 6-in. elliptical speaker, which isn't at all unusual in itself, but which in this case is of considerably better quality than those normally found in home recorders. So the next few remarks will consider the Ferrograph as an entity: I'll take up the matter of external equipment later on. To play a tape on the Ferrograph, you flip the AC switch on and set the main control knob (the large one at the front left corner of the top panel) to WIND ON. This clears the tape loading slot so the tape will drop easily into place.

The reels supplied with the Ferrograph are a British type which I have never encountered before but wish I had. They are rigged up with a spring-loaded "Hublock" feature which holds the reels firmly in place without the necessity for hub retainers, yet slight pressure on a small projecting tab permits them to be easily removed or installed. Another unique (as far as I know) device on these reels is a hub clamp which grips the end of the tape that is being threaded onto the reel. The clamp is a rocker type, which opens when the other end of the rocker (part of the hub) is squeezed, and then springs back into place, gripping the tape so it won't drop out when the reel begins to take up.

After the tape has been clamped into the takeup reel, the motor-starting slide switch (beside the control knob) is moved to one side and the machine allowed to run until

Continued on page 126

Bozak...
the very best in sound



*The B-304 Stereo-Fantasy . . .
one of nine distinguished
Bozak Speaker Systems.
Hear them at your Franchised
Bozak Dealer.*

THE R. T. BOZAK SALES COMPANY • DARIEN • CONNECTICUT

NOVEMBER 1957

125

TESTED IN THE HOME

Continued from page 124

there are several layers of tape on the takeup reel. Then the STOP button (above the START lever) is depressed. The control knob is turned to PLAYBACK, the START lever moved, and the GAIN control brought up to give the desired playback volume level.

When the Ferrograph is running in either the record or playback modes, a micro-switch is held depressed by the moving tape. Should the tape break or run out, the switch automatically stops the mechanism. This is a feature found on few recorders, and its usefulness need hardly be pointed out.

To record, the tape is loaded normally, run on for a few turns, and then the control lever (with the motor stopped) is switched to RECORD. When this is done, the volume indicator (which is normally in the full-scale position) swings down to zero and allows the record level to be set before starting the recorder. The meter, by the way, is very unusual in that it has an almost instantaneous rise time but requires several seconds to return to a lower reading. Thus, when a short program peak occurs, the meter gives a fairly sustained indication of it, greatly facilitating accurate record level settings. When the level has been set, the START lever is actuated as before and the motor starts to run. The level indicator remains in circuit all the time, but the speaker is muted while the function knob is in the RECORD position. This prevents acoustic feedback from the speaker into the microphone, when the mike is being used in the same room as the recorder.

If it is desired to use the Ferrograph's speaker for monitoring, the dummy octal plug (concealed under the right hand control knob) may be wired with a 15-ohm resistor and

cuts out the stage preceding it (which is the playback equalization and preamplifier stage . . . not used when recording), so there is no possibility of the early stage introducing noise into the amplifier. The high-level input, however, is simply bridged across the following stage, with the idea that a low-impedance source going into it will effectively "short out" the earlier stages. This will be so if the high-level source is a cathode-follower or a professional low-impedance line, but if the source is at high impedance it will be necessary to insert an internally shorted "dummy plug" into the microphone INPUT 1.

Also, since the input connections are integral to the common amplifier section, they should be removed from their jacks when playing back, to prevent loss of high frequencies or total inoperation.

As it is more than likely that users of a recorder of this caliber will wish to play it through their existing high-fidelity equipment, Ferrograph's extremely comprehensive instruction booklet (56 pages) describes how this, too, may be done. Two output connections are offered; one from the secondary of the output transformer (to be terminated by a 15-ohm resistor), and one at high impedance, preceding the Ferrograph's GAIN control.

Other flexibility features include a host of playback equalization adjustments which allow the frequency response to be trimmed up to within the nth degree of flat, and a bias current adjustment to permit optimum setting for any brand of recording tape. The bias supply itself is ingeniously arranged to give automatic demagnetization of the record head each time the unit is switched from RECORD to one of the other operating modes. This nicely eliminates the necessity of keeping a head demagnetizer on hand. A commendable safety feature is the removable erase link, which can render the erase circuit inoperative when the unit is used for playback only. This will appeal to many who own expensive commercial recorded tapes.

So much for the Ferrograph's flexibility: its sound, as might be expected from the foregoing, is outstanding. The self-contained amplifier and speaker are capable of providing musically satisfactory performance, but it is understandably a far cry from what the Ferrograph can do when fed from its high-impedance output through a full-sized music system. With the bias current adjusted according to Ferrograph's instruction manual, for the tape being used, I found it difficult to tell any difference between the original and the Ferrograph's 7.5 ips duplicate, even on a direct A-B comparison. Distortion is very low, and speed regulation is strictly up to professional standards. There was no audible suggestion of wow or flutter on piano recordings, which is about as severe a test as a recorder can get.

Its hum and noise levels are quite in line with its other performance qualities, and were it not for the fact that the Ferrograph we tested used the European standard CCIR equalization curve, which is quite different from that of professional American recorders, it might have been given an unqualified recommendation for both professional and amateur users. Its tone controls permitted fairly accurate equalization of tapes recorded to the NARTB standard curve, leaving a slight dip in the 2,000 to 5,000-cycle range (an asset when using an over-bright loudspeaker). But its own tapes were quite incompatible with American professional playback equipment, none of which contains tone controls. The controls on the average hi-fi control unit would give adequate correction, but at the expense of either a slightly-peaked middle-high range or loss of extreme highs.

So as long as the Ferrograph is used exclusively with its own tapes, it is a first-class performer—beautifully put together and built to last for a long time. Unless modified to conform to the NARTB curve, its equalization incompatibility with other professional recorders could prove to be a deterrent, although tone control correction could allow accurate enough



The basic Ferrograph tape deck.

inserted into its socket. This will bring the speaker in at a lower-than-normal volume level.

For headphone monitoring, a pair of 15-ohm phones may be inserted into the 15-OHM OUTPUT jack, or a pair of high-impedance phones may be used if they are bridged with a 15-ohm resistor. The correct load must always be maintained across the Ferrograph's output, to maintain its inverse feedback circuits at their proper level of operation.

Two inputs are provided, both at high impedance. Since the Ferrograph uses the same head for recording and playback, a single amplifier channel serves both functions, with the necessary switching taking place as the function switch is operated. When recording, the inputs are connected into the amplifier chain at appropriate points: the high-level input going in one stage later than the low-level one. When the low-level input plug (microphone) is inserted, it automatically

Continued on page 128

NEW

New AM-FM Tuner puts wide band FM, wide range AM within your budget!

Completely new in styling . . . in engineering . . . in performance . . . the H. H. Scott model 300 AM-FM tuner embodies many new engineering features found nowhere else.

- Selectivity is superior to conventionally designed tuners because of the wide-band detector.
- Circuitry is completely drift-free . . . without the need for troublesome AFC.
- Cross-modulation is minimized so strong local stations do not appear at several points on the dial.
- AM section features wide-range circuitry. Reception is so good on fine AM stations you'll think you are listening to FM.

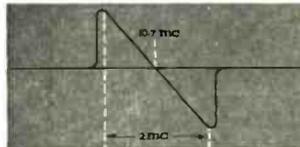


**Because of the demand for this new H. H. Scott tuner it may be temporarily out of stock. Be sure to get your order in soon.*

Shown below: H. H. Scott's new model 300 AM-FM tuner



Famous musicians like Metropolitan Opera singer Jerome Hines choose H. H. Scott components for their own homes.

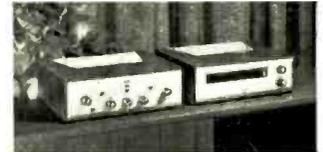


Wide-band FM circuitry eliminates co-channel and adjacent channel interference — makes tuning drift-free.



Precision-ray tuning eye makes it simple to tune precisely on both AM and FM.

When you tune the H. H. Scott 300 to a weak FM station next to a strong one, it stays in tune perfectly. Ordinary tuners using AFC rather than Wide-Band, wander from the weak station to the strong, making it impossible to tune to weak stations. Smooth acting slide-rule dial is extra-long giving better band spread, so stations are easy to separate.



The new 300 is a perfect match to H. H. Scott's Best Buy Amplifier . . . the famous "99". This 22 watt complete amplifier is only \$99.95. This means that for only \$259.90 you can have a complete H. H. Scott system.

Additional Technical Information — Model 300

FM sensitivity 3 microvolts for 20 db of quieting; 2 megacycle wide-band detector; 10 kc sharp-tuned whistle filter; outputs — main, multiplex, tape; tuned RF stage insures high sensitivity and selectivity on both AM and FM; two position AM bandwidth for Normal and High Fidelity programs; size in mahogany accessory case 15½w x 5h x 12½d. \$159.95. Choice of handsome accessory cases at \$9.95 and \$19.95.

Prices slightly higher west of Rockies.

Furniture and Accessories Courtesy Rapids Furniture, Boston.



mail coupon now!

H. H. Scott, 111 Powdermill Road, Maynard, Mass. Export Dept: Telesco International Corp., 36 West 40th Street, New York City

RUSH me my free copy of your completely new catalog HF-11 including your new hi fi guide.

NAME.....
 ADDRESS.....
 CITY..... STATE.....

www.americanradiohistory.com

TESTED IN THE HOME

Continued from page 126

equalization of commercial recorded tapes to suit most home users.

Ferroglyphs are, incidentally, available in several different models: in carrying cases, for portable recording, or as basic chassis, for custom installation. More flexibility! — J.G.H.

MANUFACTURER'S COMMENT: Since we are of the opinion that the comments in a TITH report reflect the pulse of consumer demand in the United States, all Ferroglyph recorders produced for the American market will follow the NARTB curve and, thus, will offer complete compatibility. Where the slightly smoother and lower-distortion CCIR curve is required (for example, for use in scientific study of intricate noise structures), stocks of CCIR units will be maintained to meet this demand.

In order to realize the maximum quality capabilities of the Ferroglyph, we recommend using a high-quality ribbon or moving coil microphone with it. This may be matched by means of the matching transformer which is available, and will then connect directly into input #1 on the recorder.

Sonotone HFA-150 Amplifier

SPECIFICATIONS (furnished by manufacturer): an extremely compact combination amplifier-preamplifier-control unit, with optional metal case in color of buyer's choice. **Inputs:** six; five high-level input circuits (Tuner, Ceramic Phono, Tape Aux 1, Aux 2), and one for magnetic pickup cartridge. **Controls:** six-position selector switch; combined rumble filter switch and bass tone control (+17 to -20 db, 20 cps); loudness compensation control, continuously variable from flat to 26 db boost at 20 cps; combined scratch filter switch and treble tone control (+17 to -20 db, 20,000 cps); combined AC on-off switch and volume control; level-set controls on rear chassis apron for Tuner, Tape, and Aux 1 inputs. **Outputs:** high-impedance output to tape recorder, unaffected by any control except selector switch; 8 and 16-ohm outputs to speaker. Switched AC power outlet. **Frequency response:** ± 1 db, 20 to 20,000 cps at all levels up to full power. **Rated power:** 15 watts. **Distortion:** less than 1% IM (60 and 6,000 cps, 4:1) at 15 watts. **Hum and noise:** 70 db below rated output on high-level input circuits; 60 db on Magnetic Phono input. **Damping factor:** 16. **Tubes:** 2—6AN8, 2—12V6GT, 12BW4, 1 germanium diode, and 1 selenium rectifier. **Dimensions:** 3 in. high by 12 wide by 7 deep. **Price:** \$79.50; case in color desired, \$3.50 extra. **MANUFACTURER:** Sonotone Corp., Elmsford, N.Y.

This 15-watt amplifier may not actually be the most compact one ever made with full preamplification and control facilities—but if it isn't, it certainly occupies much less space than most of its competitors. It has more eye appeal also and, in fact, has received the attentions of first-class industrial designers. You can buy it with the metal cabinet and front panel in a wide range of what the advertisements for household furnishings call "decorator colors."

Don't let its small size or slick appearance fool you, though; it will put out 15 high-quality watts over the full range of 20 to 20,000 cps. I don't know how they managed to do it, but the Sonotone people have squeezed inside this cabinet a husky output transformer with plenty of iron. There aren't many other "compact" or "flat" amplifiers that will produce full rated power at 20 cps, as you can discover by reading specifications carefully. And that is a more important specification than is generally realized.

The HFA-150 has a total of six input circuits: one for a magnetic pickup cartridge and five for high-level flat-response inputs. These five are labeled, on the back-panel receptacles and on the front-panel selector switch, Ceramic Phono, Tuner, Tape, Aux 1, and Aux 2. Input level-set controls are furnished for the Tuner, Tape, and Aux 1 circuits; they are not customarily furnished in amplifiers of this price class. Equalization for the Mag Phono input, however, is fixed, and is specified as RIAA.

In our sample we found that the bass boost and treble rolloff were both slightly less than the standard RIAA playback curve specifications. Moreover, the magnetic phono input circuit was terminated in a 170-K resistor; the proper cartridge

load must be added externally. I should have preferred that one of the input level-set controls be utilized as a variable magnetic cartridge load, and at least three equalization choices provided. Perhaps the fact that Sonotone makes hi-fi ceramic phono cartridges, but not magnetic cartridges, accounts for their evident disagreement with this point of view.

Bass and treble controls, when in their indicated flat positions, produce an over-all response that is flat within 1 db according to my measurements. The controls are conventional in action and operating range except in two respects: they do not have any effect until they are rotated about 60° each side of center, which is peculiar until you get used to it, and they each incorporate an ingenious push-button-type filter switch.

With the knobs in their normal pushed-in positions, neither filter is effective. When the bass control knob is pulled out about $\frac{1}{8}$ inch, it closes a switch and inserts a bass cutoff filter that really gets rid of rumble and low-frequency noises. Pulling out the treble-control knob brings into action a treble cutoff filter that banishes hiss and record scratch with equal effectiveness. Both tone controls are operative in their pulled-out locations. Unfortunately, the filters chop off a substantial amount of the normal frequency range too, but would not be used except on material that wouldn't suffer much from some range restriction.

In addition to the volume control, the HFA-150 has a continuously-variable loudness contour control that operates



The HFA-150 delivers "15 high-quality watts."

in an unusual and, I believe, an excellent manner. At near-maximum volume-control settings, the loudness control has no effect whatever on response. But at any given low volume-control setting, turning the loudness control from FLAT toward MAX clockwise adds progressively more bass boost. The lower the volume control is turned, the higher is the maximum boost available at any given setting of the loudness control. Thus, the loudness control acts to establish a variable loudness-compensation bass-boost characteristic for the volume control, and an infinite range of loudness-control action is available for any taste and combination of circumstances. Very good indeed.

There are 8- and 16-ohm speaker impedance taps, as well as a high-impedance output for tape recording. The latter is affected by only the selector switch.

I found that less than 5 millivolts were required at the magnetic phono input to produce full amplifier output, and that the noise and hum were acceptably low. The volume-control setting had negligible effect on high-frequency response. It did have an effect on distortion, though; to assure minimum distortion at high output levels, the level-set controls should be adjusted so that the volume control operates well beyond the halfway-up position. If full amplifier output is obtained from a magnetic pickup cartridge with the volume control at its midway position or less, an attenuator network should be used at the input.

The amplifier was exceptionally stable at both frequency

Continued on page 130

The only quality AM-FM Tuner designed for **STEREO**

There's no such thing as obsolescence with H. H. Scott's new AM-FM Stereo tuner, Model 330-C. Use it as an AM tuner; as an FM tuner; or use both sections together for simultaneous AM-FM stereo reception. Top quality reception is assured on both FM and AM by H. H. Scott's unique wide-band FM circuitry and wide range AM circuitry.

That's why if you're planning to buy a tuner there is only *one* logical choice . . . the tuner that's designed for the future . . . the H. H. Scott Stereo Tuner.



Famed musicians like Conductor Alfred Wallenstein choose H. H. Scott components for their own homes.



For FM-only installations choose the H. H. Scott FM tuner, Model 310B . . . the most sensitive, most selective tuner you can buy today. \$169.95

**Technical Specifications:
330C AM-FM Stereophonic Tuner:**

FM Section: Sensitivity 2 microvolts for 20 db. of quieting; 2 megacycle wide-band detector; wide band circuits assure freedom from drift and high selectivity; 2 1/2 db. capture ratio; automatic gain control.

AM Section: Wide range AM circuitry for reception of high fidelity AM broadcasts; adjustable band-width including wide-range, normal, and distant positions; sharply tuned 10 kc. whistle-filter.

Tuning meter on both FM and AM; outputs include: stereophonic, FM and AM monaural outputs, multiplex output, and tape recorder; dimensions in accessory mahogany case 15 1/2" w x 5 1/2" x 12 1/2" d. \$199.95. Choice of handsome cases at \$9.95 and \$19.95.

Prices slightly higher west of Rockies

The H. H. Scott 330C Stereo tuner is shown below in a Stereo system with two H. H. Scott 99 complete amplifiers Furniture and Accessories Courtesy Rapids Furniture, Boston.



mail
coupon
now!

H. H. Scott, 111 Powdermill Road, Maynard, Mass. Export Dept: Telesco International Corp., 36 West 40th Street, New York City

RUSH me my free copy of your completely new catalog [H]-11 including your new hi fi guide.

NAME
ADDRESS
CITY STATE

TESTED IN THE HOME

Continued from page 128

range extremes, and extremely uncritical of loading; even very heavy capacitive loads had an insignificant effect on the output waveform. It overloaded quite gradually, and within its power range produced nicely clean sound with a quality that might be described as the exact opposite of brittleness. Generally, I should say that the HFA-150 has a combination of really excellent features, unique at its modest price, which more than overbalance the slight inconveniences it offers to users of magnetic cartridges. — R.A.

MANUFACTURER'S COMMENT: All equalization in the HF-150 amplifier was fixed by the tolerance of the equalizer components, which give equalization accuracy to within the 2 db limit specified by the RIAA.

It was felt that, since nearly all records now use the RIAA curve, variable record equalization is not necessary in a modern amplifier. If correction is needed, the tone controls can supply it. We should like to emphasize that our decision to incorporate only the RIAA curve was not influenced by the fact that we do not manufacture magnetic cartridges.

The tone controls were designed to produce flat response over a rotational range of $\pm 30^\circ$ from the mid setting, so that the flat position would not require critical adjustment of the controls.

The cutoff filters were purposely designed to produce gradual roll-off, in order to avoid the ringing and transient distortion that usually accompany sharp response cutoff characteristics.

The input sensitivity of the HF-150 is 0.25 volts into high-level inputs and 5 mv into the magnetic phono input, for rated power output. The amplifier will accommodate without significant increase in distortion input levels of up to 20 db higher than those specified. None of the well-known magnetic pickups will overload the preamplifier, while input level controls are provided on the high-level inputs to allow the inputs to be set to below overload.

Our amplifier was designed to accept most magnetic cartridges. Since the treble rolloff is supplied by a network at the output from the preamplifier, rather than by a resistor across the pickup cartridge, the pickup termination resistance need not be varied to suit the cartridge used.

REVIEWER'S COMMENT: Several manufacturers of popular magnetic cartridges specify values of termination lower than 470K, to prevent high-frequency peaking: for examples, 27K, 47K, and 100K. If a phono preamplifier's input resistance is not made adjustable, it is usually supplied as 47K. — R.A.

Weathers Barrington Speaker System

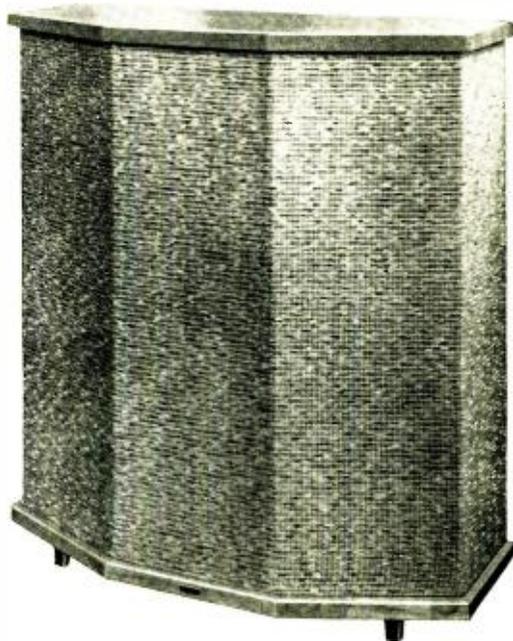
SPECIFICATIONS (furnished by manufacturer): a 12-speaker, two-way speaker system. **Frequency range:** 15 to 20,000 cps. **Power rating:** 60 watts program. **Impedance:** 4 ohms. **Speakers:** three 12-in. woofers, nine 3-in cone tweeters, installed in totally enclosed baffle. **Cabinet finishes:** mahogany or blonde; all finished panels solid mahogany wood. **Dimensions:** 47½ in. high by 40½ wide by 15½ deep over-all. **Price:** \$495 in mahogany; \$510 in blonde. **MANUFACTURER:** Weathers Industries Division of Advanced Industries, 66 E. Gloucester Pike, Barrington, N. J.

Although the infinite baffle is well suited to few woofers, most authorities agree that, given a suitable woofer, a good infinite baffle will introduce as little coloration as any enclosure can. At the same time, its loading effect on the speaker does not cease at any particular cutoff frequency, as it does for all other enclosure types. Generally, though, woofers having high midrange conversion efficiency require the use of horns or resonant enclosures to maintain this efficiency throughout the bass range, because the radiating surface of the average cone is not able to move enough air to generate deep bass.

In a woofer designed for infinite baffling, the midrange efficiency is intentionally reduced by a predetermined amount, and the cone resonance is made as low as possible. Thus the speaker creates its own bass boost down to the point of cone resonance, effectively offsetting the bass inefficiency of its limited cone radiating area, and so giving essentially linear bass response when the speaker is installed in an infinite baffle. If the baffle is well braced and internally padded, and if the speakers are inherently low in distortion, the result

is a system capable of reproducing music with excellent realism and naturalness.

Such a system is the Weathers Barrington. This uses three 12-inch low-resonance woofers, in an enclosure roughly 9 cubic feet in capacity. The enclosure is made of thick wooden



The Barrington: "a truly musical reproducer."

panels (estimated at 1 inch), and is extremely well braced and entirely filled with loosely-dispersed glass wool. The latter minimizes standing waves and imposes additional acoustic damping on the woofers, to prevent excessive overshoot on heavy bass transients. One woofer is mounted on each of the front panels of the enclosure, and the entire top front edge of each panel is lined with three tiny cone-type tweeters. This arrangement gives widened angular dispersion, minimizes point-source tweeter effects, and produces a large apparent source size.

Oscillator tests on the Barrington showed truly remarkable smoothness and cleanness from 1,000 down to 40 cycles. Below 40 cycles, output began to slip gradually, a small broad peak showed up at 32 cycles, and response went out rapidly below that. Response above 1,000 cycles rose smoothly to about 2,500, and continued very gradually upward to about 8,000. Then it was audibly flat to beyond 12,000, and started drooping gradually out to a little above 16,000 cycles, where my ears gave out. Further tests with a microphone indicated very good contribution to at least 20,000 cycles. I could not detect (by ear) any significant peaks throughout the system's entire range.

As a musical reproducer, the Barrington's sound is definitely on the bright side, although it is one of very few bright-sounding speakers I have heard whose smoothness and lack of distortion made it easy to listen to. Its over-all sound is huge and enveloping, and its reproduction of sonic detail is exceptional. Overtones are smooth and natural, musical timbres are accurately reproduced, and the bass range and definition are superb.

This is not, however, a small-room speaker; heard at close range it has a somewhat glassy-sharp sound. It performs best in a large, softly decorated room, wherein its high frequencies can do a little bouncing around before they reach the listener. For someone who wants a truly musical reproducer, the Barrington is an excellent choice. — J.G.H.

VERSATILE

Most Versatile Complete Amplifier on the Market

This entirely new amplifier... latest model of the H.H. Scott 210 series gives you unlimited versatility. To name just a few features: front panel speaker selector switch; tape monitor switch on front panel; entirely new chassis and 36 watt power stage using 6CA7 tubes for better cooling and improved performance; complete tape recording facilities. The new chassis is designed for maximum accessibility of all external connections.

The 210F includes a completely new Dynamic Noise Suppressor with *separate* controls for low frequency and high frequency noise suppression. This exclusive H.H. Scott development suppresses the rumble from old record changers... the scratch from worn records... *without* blocking the music.



Famous musicians like guitarist Andrés Segovia choose H. H. Scott components for their own homes.

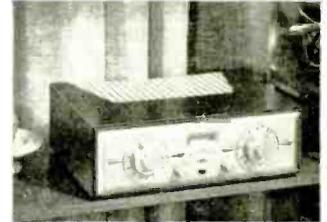


Three position speaker-selector switch lets you use either of two speaker systems, or both at once.



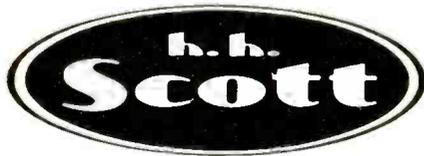
Completely redesigned chassis packs more power into a limited space. This new design keeps parts cooler for longer operating life.

If you use a tape recorder, the 210F gives you almost unlimited versatility. Included are two special output connections; instantaneous monitoring switch on front panel; NACTH (tape playback channel for pre-recorded tape).



Perfect companion to the 210F is the famous H.H. Scott 330C AM-PM Stereophonic tuner... the only quality tuner on the market designed for either monaural or stereo operation. \$199.95

ADDITIONAL TECHNICAL INFORMATION: Input facilities: two low level magnetic inputs, three high level inputs — tuner, tape, TV; Frequency response flat from 19 cps to 35 kc; harmonic distortion less than 0.5%; first-order difference-tone intermodulation less than .25%; total noise and hum 80 db below full output; speaker output 3 to 24 ohms; dimensions in accessory mahogany case 15½" w x 5h x 12½" d. \$189.95. Choice of handsome accessory cases \$9.95 and \$19.95. Prices slightly higher West of Rockies.



Shown below: The New H. H. Scott 36 Watt 210 F complete amplifier

Furniture and Accessories Courtesy Rapids Furniture, Boston.



H. H. Scott, 111 Powdermill Road, Maynard, Mass. Export Dept: Telesco International Corp., 36 West 40th Street, New York City

RUSH me my free copy of your completely new catalog HF-11 including your new hi fi guide

NAME.....
 ADDRESS.....
 CITY..... STATE.....

mail coupon now!

www.americanradiohistory.com



What makes

harman kardon

High Fidelity so special?

"We found the Harman-Kardon units we tested—the Theme, Trend, Festival and Solo to be honestly rated and living up to their specs in all ways. We were particularly impressed by the extreme stability of the FM tuners, particularly the Theme and Festival. Without AFC there was absolutely no discernible drift from a cold start. The Trend was also noteworthy for the power output it delivered over the full audio spectrum. The units were certainly an excellent value in their price class."

From a report by the authoritative Audio League

What makes Harman-Kardon high fidelity so special?

1. The Way It's Designed: Every Harman-Kardon tuner, including the relatively inexpensive Overture II (T-12), employs a full Armstrong circuit with Foster-Seeley discriminator and Automatic Frequency Control. Compare this with the less expensive, less effective ratio detector circuits used in so many tuners today. The remarkable new Harman-Kardon Inter-Mode FM front end (used in the T-1010 and TA-1010) achieves the practical limits of FM sensitivity: it provides more gain, eliminates fading, and is superior to other circuits in impulse noise rejection. Most installations will perform excellently with only a 48" lead for an antenna.

All Harman-Kardon amplifiers incorporate the H-K "Controlled H" output circuitry. This significant development in audio engineering makes it possible to house a powerful amplifier in a truly compact enclosure. Because "Controlled H" amplifiers draw power only in proportion to the requirements of the program material, they create less heat than conventional units of half their power. They are, therefore, less subject to component failure due to excessive heat. (Today's Recital II puts out "a more power than the first Recital, yet it draws 30% less power than the original.)

Consider the FM and AFC controls on an H-K tuner. When tuning FM, do so with the function selector switch in the "AFC-OFF" position. When the tuning meter indicates you've tuned as well as you can *manually*—snap on the AFC. *Automatically*, the accuracy of tuning is improved by a factor of 10 to 1. It's as though you had a magnifying glass in the tuning meter and could make the critical adjustment, which the AFC control makes *automatically*.

All Harman-Kardon instruments are extraordinarily sleek and handsome in appearance. The cage and control panel are finished in brushed copper; the knobs and escutcheon frame in matte black.

2. The Way It's Made: Printed wiring is used in every Harman-Kardon model. Eliminating human variables in production, this process literally prints the interconnecting wiring of the instrument by etching it on a laminated phenolic sheet. Electrical components are fastened to the sheet by automation equipment and the sheet is then dipped into a bath of solder. In this way, each element is locked into its one best position. This process, perfected and proven in the Guided Missile and Earth Satellite programs, places emphasis on precision, reliability and quality—an emphasis essential in genuine high fidelity.

The laminations in H-K's own specially designed output transformers are made of the most expensive grade of steel—grain-oriented XXX-P. This quality construction guarantees absolute stability and freedom from distortion.

Every Harman-Kardon unit must pass no less than 18 test and inspection stations during production. Our Quality Control group also runs exhaustive re-tests on no less than 10% of all completed units. This additional testing is further assurance of H-K quality and reliability. And Harman-Kardon backs this up with a full year's guarantee on each unit.

3. The Way It Performs: Here is the final test of a high fidelity instrument. And here is where Harman-Kardon is so demonstrably special: tuners which approach theoretical perfection: amplifiers which deliver audio power with startling ease, lack of distortion and freedom from hum.

Here's a dramatic indication of performance: Quality Control records indicate that in a recent production run of the Trend II (A-1010) amplifier, over 85% were 11 db better—that's five times better—than our advertised hum specs.

All H-K sensitivity specs are stated in "hard" microvolts. This means that our tuners are measured with an antenna connected to them (measured therefore under conditions of actual operation). Some companies publish sensitivity specs in "soft" microvolts. Such tuners are measured *without* an antenna connected and this process results in apparently more attractive—but *unreal* specifications.

Were H-K tuners measured in soft microvolts, the published specifications would read approximately twice as good as they now do. The T-1010, for example, would claim FM sensitivity of better than .95 microvolts instead of our conservative, published specification of 1½ microvolts. Consider this when next studying specifications on tuner sensitivity.

The way it's designed; the way it's made; the way it performs. This, we think, merits the claim "special."

THE CUSTOM LINE



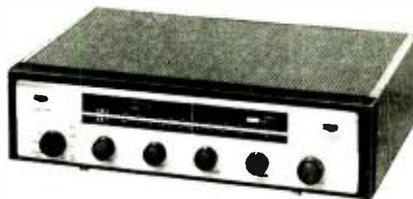
THE TREND II amplifier delivers 40 watts (60 watt peak) of hum-free, distortion free power. Features include: speaker selector switch; rumble filter; loudness contour selector; variable damping factor control; separate record and tape equalization and enormously effective treble and bass tone controls.

The Trend II, Model A-1040 \$125.00



THE THEME II AM-FM tuner, ideal companion for the Trend II. Features: Armstrong FM with sensitivity at theoretical maximum; variable AFC; variable automatic interstation noise gate; illuminated tuning meter; FM rumble filter; dual cathode follower outputs with adjustable level control; only two simple front panel controls.

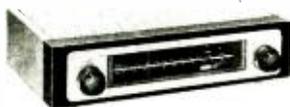
The Theme II, Model T-1040 \$140.00



THE FESTIVAL II combines the operating features and performance characteristics of the Theme II tuner and Trend II amplifier in one magnificent unit. Here is the finest expression of high fidelity thought and design in a graceful, compact instrument only 16 7/8" wide x 14" deep x 4-5/16" high—including runners.

The Festival II, Model TA-1040 \$250.00

THE DELUXE LINE



THE COUNTERPOINT II, an FM only tuner, is an exact physical match for the Melody II amplifier. This highly sensitive new tuner includes a discriminator balance tuning meter; variable AFC; variable automatic interstation noise gate; FM rumble filter; cathode follower output with adjustable level control.

The Counterpoint II, FM-100 \$99.95



THE MELODY II amplifier produces 20 watts of undistorted power from the exclusive "Controlled H" circuit. Despite its high power output, it runs cooler than a conventional 10 watt amplifier. Features: speaker selector switch; rumble filter; separate tape and record equalization.

The Melody II, Model A-120 \$99.95



THE RECITAL II, selected as an outstanding example of American design for official U.S. exhibit at the Milan Triennale, world's most important exhibition of industrial design. Combines finest features of Melody II and Rondo. Represents the wisest balance of operating features, performance and price yet achieved in a single chassis receiver.

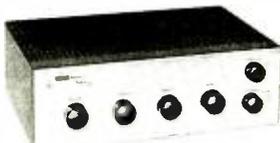
The Recital II, Model TA-120 \$189.95



THE RONDO tuner is the AM-FM tuner mate for the new Melody. Features: Armstrong FM with AFC and rumble filter; superheterodyne AM with 10 KC whistle filter; dual cathode follower outputs with adjustable level control; built-in ferrite loopstick antenna.

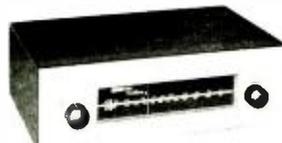
The Rondo, Model T-120 \$99.95

THE STANDARD LINE



THE PRELUDE II all new, low cost, high quality 12-watt amplifier, provides remarkable performance for the price. Features: 4-position contour control; 3-position speaker selector switch; input for tape playback provides correct equalization without additional preamplifier.

The Prelude II, Model A-12 \$59.95



THE OVERTURE II AM-FM tuner, ideal mate for the Prelude II. Provides unusually fine performance at low cost. Printed wiring assures optimum front end performance, stability and quality control. Features: Armstrong FM with AFC; Broadband Superheterodyne AM with AVC and Ferrite antenna. Flywheel tuning.

The Overture II, Model T-12 \$84.50



THE SOLO II, combined tuner-amplifier-preamplifier has the principal operating features and performance characteristics of the Prelude II and Overture II. A 3-position speaker selector switch permits choice of speaker A or B or both; The Solo II is styled in copper and black. It is 13 1/2" deep x 14 5/8" long x 4 1/2" high.

The Solo II, Model TA-12 \$139.50

Prices slightly higher in the West

harman kardon

INCORPORATED
WESTBURY, L. I., N. Y.



WEATHERS FM PICKUP SYSTEM

THE STANDARD FOR COMPARISON IN HIGH FIDELITY PICKUPS

Originally designed for broadcasting and precise sound engineering purposes, WEATHERS FM Pickup has been so advanced in design and construction, that it *can be treated like any ordinary phonograph arm under constant home use*. It is the "perfect beginning" to professional sound reproduction with high fidelity for everyone! Play your records once or a thousand times and with WEATHERS you'll enjoy professionally perfect high fidelity that's distortion-free, carefree!



Perfectly balanced for perfect record tracking

WEATHERS FM Pickup System is the only pickup designed and balanced at a stylus force of ONE-GRAM. For this reason, it perfectly traces all the minute record engravings which produce delicate overtones and represent sound with true fidelity. It causes no flexing of groove side-walls, thereby improving response to high frequencies without increasing surface noise.



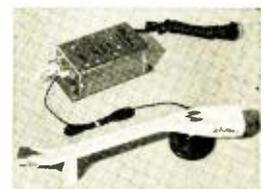
Saves records... preserves Hi-Fi qualities

Improper stylus force can ruin high fidelity qualities of your records at the very first play. WEATHERS, the lightest, professional touch, shows no record wear even after a thousand plays. Your favorite records, your valuable records will last a lifetime—and still sound new! A sapphire stylus on a Weathers pickup will last longer than a diamond stylus on ordinary pickups.



Distortion-free . . . carefree

WEATHERS FM Pickup System is free of all common causes of sound distortion. It does not pick up hum from motors. It tracks perfectly even if your turntable is tilted to a 45° angle, no leveling necessary! Accidentally dropped, WEATHERS pickup floats with feathery ease onto your record. Weathers pickup is shock-mounted...eliminates mechanical vibration and acoustic feedback.



MORE than a pickup, WEATHERS offers more to HI-FI!

WEATHERS tone arm and pickup is a complete FM system, a virtual miniature FM radio station. Its sole purpose is to pick up and transmit impulses from your record. Your record practically does NO work when played with WEATHERS pickup. The result always is a flat response from 20 to 20,000 cycles.

WRITE FOR WEATHERS FREE BOOKLET ON HI-FI FACTS AND RECORD CARE TODAY!

Weathers

Industries, Div. of Advance Industries, Inc.
64 E. GLOUCESTER PIKE, BARRINGTON, N. J.
Export: Joseph Plasencia, Inc., 401 Broadway, New York 13, N. Y.



A Hi-Fi Primer

by John H. Newitt

THE PREVIOUS ARTICLE discussed, in a general manner, the fundamental factors that determine the performance of sound equipment. This month the degrees of fidelity found in present-day equipment will be described, and correlated with the requirements of various classes of listener. The intention is to help readers develop their own standards of high fidelity. This is of great importance since "high fidelity" is an arbitrary term; no firm standards presently exist. Manufacturers do, if they wish, have the legal right to pass off low-grade equipment under the name of high fidelity. It is, therefore, up to the reader to categorize himself so that he can select his equipment realistically.

FOR MOST LISTENERS, the cost of high fidelity is of some importance. It may be well to discuss this matter as a first step. An interesting observation on the subject is that *good equipment is usually expensive, but equipment isn't necessarily good just because it is expensive.* In general, if you buy the most expensive units, your chances of getting high quality are better than if you buy inexpensive components. But if you know what you're doing and know what your requirements are, you can usually select moderate-cost units and combine them to make a system that will outperform more expensive units assembled without good system-planning. It is to be strongly emphasized that you should avoid very inexpensive equipment. Bargain equipment, unless it is actually genuine high-grade equipment left over from a last year's stock, or something of the sort, can turn out to be a complete waste of money. This is not to say that a very cheap tuner has no merit whatever for background listening. But in general, for serious high-fidelity listening, moderately-priced equipment should be selected as the minimum.

On the other hand, the very highest-priced components are not usually necessary for the average listener, since he is then paying too much for insignificant increments of improvement. Classing myself as an average listener, I realize that musicians and those with superior musical training hear things that I do not, and thus will demand better than average performance in their systems. The average listener, however, will find it most difficult if not impossible to discern the audible differences between very high-grade professional equipment and a carefully-integrated system built from reputable nonprofessional equipment. This does not mean that no differences exist; it simply means that the differences are quite subtle at the top of the fidelity scale, and the group that can detect them thins out considerably as the uppermost quality bracket is approached. It is certainly true, in any case, that audible quality differences are small and price differences great in such areas.

This is not true with the lower-grade units. Most listeners can easily detect differences between low-grade equipment and moderately-priced good units. The perfectionists may argue among themselves without decisive result in the high-grade range, but it is pretty difficult to refute the obvious quality differences between equipment at the bottom end of the scale

and the higher-priced medium-grade counterparts. It is, therefore, quite important for a listener, unless he has unlimited funds, to determine just where in the high-fidelity quality range he can notice significant differences in performance between one system and another. Even if he is able to discern minute differences among the very expensive units, he should ask himself whether a slight improvement is worth the price to him. For example, it may double the cost of an otherwise good system to produce a 30-cps organ pedal note relatively free from distortion. If this note occurs only once or twice on a single record of his collection, the added system cost is hardly justified. A professional musician may, however, have a different feeling about this, as may a perfectionist to whom money is no object.

It should now be quite evident that high fidelity is, and perhaps always will be, a matter of individual opinion and choice. As may be realized from this discussion, the law of diminishing returns applies accurately to the high-fidelity situation. A glance at Fig. 1 depicts this principle. The average cost-conscious individual should stop where the curve starts to rise sharply, since it is here that he gets his highest dollar value. The curve should be taken only as a general indicator; it has been mentioned earlier that it is possible to increase the effectiveness of medium-quality components by means of careful system assembly.

EXACT technical reproduction of the original studio performance might be called true fidelity. Something closely approaching true fidelity has been obtained experimentally (for concert overflow audiences), but it is quite impractical to think seriously about true-fidelity response for home-listening

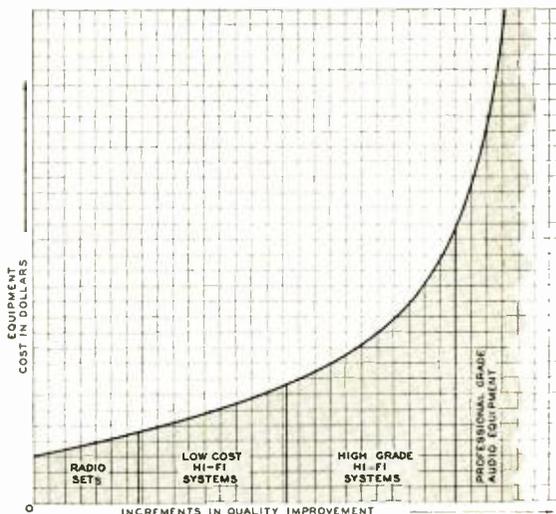


Fig. 1. Chart showing how each audible improvement in sound quality tends to become more expensive than the preceding one.

purposes, at least where large-scale music is concerned. To realize just what is involved in true-fidelity reproduction, consider the following:

1) Orchestral music does not come from a single point but is produced over a wide physical area; it is spatially distributed. This means that more than one microphone would have to be used to pick up the performance. Individual sound channels and loudspeakers must then be used to redistribute the sound at the point of reproduction to approximate the spatial conditions of the performance room. A multi-channel system of this type is called a stereophonic system. Each channel conveys a slightly different coloring of the piece being played, and much realism is preserved by incorporating this stereophonic¹ effect.

2) The room of reproduction should generally resemble the studio room in acoustic specifications; otherwise, the same modes of vibration and degrees of sound absorption and reflection will not obtain.

3) In addition to fulfilling the conditions above, the reproducing chains must have no discernible distortion. At first, this requirement may seem rather simple with present-day equipment. Exact reproduction, however, involves precise compensation of the falling frequency characteristics of the transducers (microphones and loudspeakers). Approximate compensation, so that the reproduced result sounds "good," is no great chore (since it can be made by ear) but exact compensation to achieve exact reproduction is most difficult. It requires laboratory measurement and painstaking acoustic testing.

A good way to view this situation is to think of true fidelity as being an exact reproduction of the original studio sound patterns. High fidelity then should be a close approach to this perfection but not necessarily perfection in the technical sense. In high fidelity, the reproduction should be free from distracting distortion, and should be capable of reproducing fully the volume and frequency ranges of the musical instruments involved. High-fidelity equipment is not adjusted to rigid and highly precise technical standards; it is simply adjusted until it suits the ear of the listener. This approximate adjustment will be very little different from an exact adjustment to the ears of most listeners.

The preceding discussion was concerned mainly with the possibility of attaining perfection in the reproduction of the original program material. Listener enjoyment is something different, and should also be taken into account. Unless you are a critical musician or hi-fi enthusiast, exact reproduction may not be the thing you would find most pleasing. The trained musician expects to hear the familiar sounds of well-known instruments reproduced with as much accuracy as possible. The average listener, not so conditioned, might find artificial balances more pleasing. After all, musical instruments are basically mechanical, and have certain physical limitations. Historically, the sounds of these instruments have been accepted as standard by musicians, and differences from these standards can rightly be considered as a form of frequency distortion. The average listener, however, might possibly find that he likes certain modifications of the standard characteristics. This amounts essentially to creating a "new" electronic instrument since the result certainly isn't one of the accepted standards. But the fact that this new instrument may sound out of balance to a musician does not necessarily mean that it is unpleasant.

The frequency imbalance (called frequency distortion from a technical viewpoint) discussed above is the only form of distortion that is not universally agreed upon as being undesirable in a sound system. All other forms of distortion are undesirable to both the average listener and the musician. The whole effort in high-fidelity practice is to eliminate or to suppress such distortions. The degree to which nonmusical

distortion is eliminated or suppressed is one measure of the fidelity of a system. Again, it should be realized that the term "high fidelity" may encompass quite a range of discernible distortion, especially since there are no rigid standards. It is thus up to the cost-conscious listener to determine just how much distortion he will tolerate. He must also know how to select equipment that will not exceed his chosen value of distortion. Future articles of this series will attempt to discuss enough of the detailed characteristics of the various high-fidelity components to allow you to make such determinations. Remember that fidelity is not a measure of frequency response alone; fidelity is a combination of sufficiently wide frequency response and low distortion.

IT CAN BE APPRECIATED now that evaluation criteria differ for different listeners. Some will be found who have hearing deficiencies or who have so little interest in sound quality that the ordinary home radio is completely satisfactory to them. To other listeners, the basic appreciation for finer musical reproduction exists but requires a little time for development after an initial exposure to high fidelity. Very often a person in this category has come to regard "radio" music as more or less standard, and doesn't realize what he has been missing until he listens to a live orchestra. Sometimes the initial reaction to hi-fi sound of such a listener is unfavorable, and only after a few hours' exposure does he begin to realize that he has been missing something in radio reception. Others, perhaps, have always realized that radios are substandard and have only put up with them as a necessary evil. The reaction of these listeners to a high-fidelity system is immediately favorable.

To a musician, a high-fidelity system, even the best, is not an unfamiliar experience, except that it is accomplished without musicians and instruments. Musicians may have some objections to systems average listeners would rave about. Such things as the spatial distribution of the sound source, scraping of the violin bow, and valve noises of instruments are but part of a picture that the musician expects. These and many other subtle sounds are needed to produce the feeling of realism in his mind, even though he may not be able to pinpoint them in his criticism of a system. It is obvious that the very best system is barely acceptable to the musician whereas the average listener, not having such a sensitive reaction, would perhaps be hard put to tell the difference between such a system and one having far less fidelity.

The net result of all deviations from true fidelity, taken singly or together, is an effect called "listening fatigue." This is a well-recognized psychoacoustic factor, and has been the subject of many listener tests. Whether we are musicians, discriminating listeners, average listeners, or even "radio" listeners, listening fatigue will gradually build up when sufficient amounts of nonmusical distortion² are present. Known and measurable amounts of distortion in the reproducing chain have been shown by extensive tests to cause listening fatigue that will either induce the listener to ignore the music being played or, in more extreme cases, will compel him to shut off the source. It is known that a high-fidelity system having very little distortion can be enjoyed for hours at a time, whereas one having distortion above certain levels will become annoying, consciously or subconsciously, in a relatively short time. A demonstration of the listening fatigue effect can be made by suddenly turning off a radio that has been playing for several hours. Listeners should then be asked if they knew what was being played just before it was turned off. In many cases, they will not even know whether music or speech was being played! With a good high-fidelity system, one can really listen to music. Lesser systems should be relegated to background or short-item listening applications.

¹Stereophonic sound is a general term that refers to the use of more than one channel, and is so used here. Two-channel stereo only is practical for home use, but is not consistently as realistic as three- (or more) channel stereo.

²Nonmusical distortion is defined here as being every kind of distortion except frequency distortion. Nonmusical distortion generates components that are not in harmonic relation to the music being produced, and thereby effects an altered or discordant quality to the reproduced result. It is the discordant quality that listeners of all classes unanimously reject.

All "high fidelity" amplifiers do not sound the same. Newcomb amplifiers sound better. Granted, an amplifier, by itself, does not produce any sound. So, to describe the end result of improved amplification, we use the term "listenability." Newcomb amplifiers have superior listenability because they are balanced for use with the other components in your high fidelity system. They are designed to help deliver the best sound your complete system is capable of producing.

Specifications only begin to describe an amplifier's performance. Units with identical printed "specs" often sound entirely different to the human ear. Newcomb amplifiers and tuners meet and exceed all specifications for similar units. Beyond this, after developing a basically superb amplifier circuit, Newcomb engineers have concentrated on endowing their products with less distortion, lower hum, more effective tone controls, better loudness contour, and more precise record compensation. Listenability is improved by subtle circuit refinements, careful selection of parts, jealously guarded quality control, reworking of the final assembly until it meets Newcomb standards—the highest in the industry. Dependability of a degree that is most extraordinary in such sensitive instruments is one of the important plus values that result from this care in manufacture. Insist that you listen to Newcomb with your own ears before you buy. Don't regret later that you missed an opportunity to own the best.

NEWCOMB

THE NEWCOMB COMPACT 1020



is a power amplifier-preamplifier-control unit all combined in one arrestingly beautiful, compact cabinet. The 1020 is the most flexible, most distortion-free and hum-free, most dependable and trouble-free of all amplifiers in the compact field. Separate bass and treble record compensators permit 36 different playback curves. The 1020 has the unrivalled Newcomb loudness contour control... 7 inputs... high gain preamp... average listening level distortion of less than 0.05%... is conservatively rated at 20 watts—as the peak power output of 50 watts indicates. Like all units on this page, the 1020 is styled with a brushed brass finished face plate and case the color of champagne dusted with gold.

listenability

THE NEWCOMB COMPACT 200



is an FM-AM radio tuner that combines the greatest sensitivity with hitherto unheard of stability and dependability. The 200 delivers a signal that is refreshingly clean, precise and full. Velvety smooth flywheel tuning... tried-and-true, trouble-free, fast acting tuning eye... multiplex jack... sensitivity—2 microvolts for 30 db of quieting... temperature compensated oscillators... automatic frequency control and AFC defeat switch... 10 volts maximum output... cathode follower permits placement 200 feet from amplifier. Designed to become a permanent furnishing in the home of the most discriminating music lover.

THE NEWCOMB COMPACT 712



combines on one chassis all electronic components for a first quality high fidelity system. Included are compatible AM-FM radio tuner, sensitive preamplifier, clean 12 watt power amplifier, separate bass and treble tone controls, rumble filter, 6 position compensation. Newcomb's loudness contour control, multiplex jack. This is without question the most listenable and most beautiful combination unit on the market. The 712 sounds better, cleaner, more lastingly satisfying. It is more stable and dependable. Case is included in purchase price.

Write for free catalog and name of the Newcomb Audio Specialist dealer nearest you.

Since 1937 Hollywood's leading producer of precision products for the control and amplification of sound. **NEWCOMB AUDIO PRODUCTS COMPANY** Department W-11 6824 Lexington Avenue • Hollywood 38, California

A LIMITED NUMBER OF DEALERSHIPS IN A FEW AREAS ARE OPEN. WRITE FOR DETAILS

New... by **GRAY**



DUAL *viscous-damping*

Even OLD records sound better with Gray's New
DUAL Viscous-Damped High Fidelity Tone Arm . . .

Dual Viscous-Damping and complete static balance around the vertical pivot **GUARANTEES** maximum tracking stability—produces fuller, rounder, more natural sound reproduction.

The principle of single pivot Viscous-Damping creates advantages first introduced by GRAY in the 108B and 108C High Fidelity Tone Arms. They are recognized by audio engineers and radio stations everywhere.

Now after three years of experimentation, the GRAY research staff has discovered that DUAL Viscous-Damping, with a different degree of damping on both the vertical and horizontal pivots, brings new life to old records and a new dimension in sound reproduction.

The secret is simple: DUAL Viscous-Damping permits MAXIMUM compliance resulting in best reproduction. Thus the sound is clear and lifelike. The GRAY DUAL Viscous-Damped Arm **GUARANTEES** Concert Hall performance.

Our price of only \$34.00 is high enough to reflect the top quality precision workmanship that distinguishes the GRAY TONE ARM from all others, and yet low enough for almost any budget. You cannot buy a better arm at any price. Get yours today at your local High Fidelity Dealer.

FEATURES

- ✓ Designed for ALL records up to 12" in diameter.
- ✓ Sealed viscous-damping on BOTH vertical and horizontal pivots.
- ✓ Can be used with ALL popular cartridges.
- ✓ Counter-balance weight permanently adjusted at factory.
- ✓ Single hole mounting on turntables.
- ✓ Cartridge slide plugs for easy removal.
- ✓ Stylus force adjustable from zero to 15 grams — eliminates cartridge weights.
- ✓ Please write for complete details on all these outstanding features and many others too numerous to mention.

THE **GRAY** MANUFACTURING CO., 20 ARBOR ST., HARTFORD, CONN.

AUDIO FORUM



Are Highs Really Necessary?

SIR:

This may sound like a rather naïve thing to ask, but I'm going to ask it anyway.

What is the highest frequency that a human ear can perceive? And, assuming that the limit is, say, 15,000 cycles, what is the advantage of buying a speaker capable of reproducing to 20,000 cycles?

It strikes me as a waste of money to buy cycles that no one can hear.

Robert Brooks
Waukegan, Ill.

It is generally considered that the upper hearing limit of a young person is about 20,000 cycles, although this range will diminish progressively with advancing age.

By age thirty, a man's hearing is likely to extend to around 17,000 cycles, and at sixty it may be limited to 9,000 cycles or below. Hearing range in young women is about the same as that of their male contemporaries, but the ladies retain their upper range longer than do men. This is supposedly the reason why they seem able to hear upper-range distortion that men cannot detect.

For practical purposes, then, it might be assumed that a reproducing system having flat response out to 15,000 cycles will serve the needs of all but the youngest listeners, but there is where the misunderstanding occurs.

To begin with, we must recognize the difference between the frequency range that is necessary for good reproduction, and the range that must be exceeded before there ceases to be an audible improvement in the reproduced sound. Actually, all of the instruments of an orchestra can be reproduced with recognizable accuracy through a system having a 5,000-cycle upper limit. We might say, then, that response to 5,000 cycles is all that is really needed, but this is obviously not the sole criterion for judging upper-frequency range limits.

Extension of the 5,000-cycle high-frequency range to 10,000 cycles will improve instrumental timbres, transients, and detail. Extension to beyond 10,000 cycles will have little audible effect on timbre, but will continue to improve transient response and reproduction of sonic detail. It is, however, reasonable to assume that a person whose hearing

is totally limited to the range below 10,000 cycles will not hear any sonic improvement when further extension takes place in the reproducing system.

The most important consideration, however, is the fact that a reproducer having a 15,000-cycle limit does not extend smoothly to 15,000 cycles and then cut off sharply; its response tends rather to start drooping well before its rated limit, so that by 15,000 cycles its output may have dropped to less than a half of its midrange output. It has also been observed that most tweeters have response peaks of increasing severity and sharpness at frequencies approaching their upper response limit. Both of these factors . . . diminishing output and increasing peakiness near the upper response limit . . . support the contention that a speaker system which is to reproduce properly the range to 15,000 cycles must be capable of reproduction extending to beyond 20,000 cycles.

Speaker Flutter

SIR:

My system consists of a Bogen DB-130 amplifier, Garrard record changer, and an Altec 600-B speaker and Electro-Voice triaxial speaker in separate cabinets.

Recently I have been having trouble with what appears to be excessive speaker cone vibration on certain records. At first I thought it might be acoustic feedback, but this does not seem to be the case.

Could you give me some idea of what might be causing this?

W. H. Tyler, M.D.
Muskegan, Mich.

Excessive cone vibration or "flutter" may be caused by marginal acoustic feedback, excessive turntable rumble, a defect in the power amplifier, or a combination of any of these. Try moving your record player or one speaker system into another room temporarily. If the condition is aggravated or reduced, you are getting acoustic feedback from the speaker to your turntable. Try shock-mounting the turntable on sponge rubber or, better still, move the turntable and preamplifier to another location, preferably against an outside wall of the house.

If you can feel mechanical vibration when you place your fingers lightly on the turntable motor board, your changer

should be serviced to minimize its rumble content.

If neither of these measures solves your problem, your amplifier is probably suffering from low-frequency instability, and should be repaired or replaced with one having better low-frequency stability characteristics.

Square Wave Testing

SIR:

What is the purpose of a square wave test?

There is not, as far as I know, any similar waveform occurring in music or speech, so why should an amplifier's square wave performance be considered a criterion of its performance on music?

W. R. Brown
Scranton, Pa.

A square wave test is a means of determining simultaneously a component's frequency response, high- and low-frequency stability, and phase-shift characteristics.

Even though a square wave is not typical of any musical tone, it has been found that a component's observed reaction to square waves, when correlated with its measured distortion, stability, overload characteristics, and (in the case of a power amplifier) damping factor, will give an accurate picture of how the component will handle musical program material.

Although there was for some time a tendency to discredit engineering measurements in favor of the "ear" criterion, more recent findings suggest that the tests themselves were not so much at fault as were their interpretation and their limited scope.

Stridance and Fuzziness

SIR:

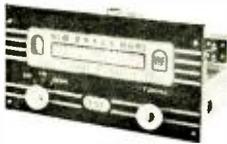
I am persistently bothered with a raucous, tearing sound that accompanies fortissimo recorded passages. This makes loudly-played violins sound strident and shrieky, and adds a harsh, fuzzy edge to certain vocal passages, particularly from soprano voices.

I notice this to some extent even when listening at fairly low volume levels, but at high levels it is positively unbearable.

Continued on next page

FANTABULOUS

IMPORTED BRITISH FM TUNER
FOR UNEXCELLED RECEPTION
DYNAMIC "V" BEAM TUNING INDICATOR



Compare Our Specifications With Other Tuners Costing Up To Twice Our Price. Reception To 150 Miles. Factory Wired and Tested.

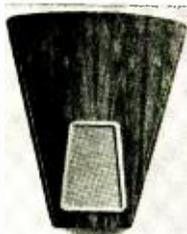
Sensitivity: 5 microvolts for 20 db quieting; 1.8 uv for 30 db. Frequency response: 20-20,000 cps \pm 2 db. Inputs: 200 OHM balanced. RF band width 200 KC. Stability: only 20 KC. Stable after 1 minute. 6 Mullard high gain, low noise tubes; 10 tuned circuits. Front end completely shielded in a solid casting. Better than FCC requirements. Frequency range: 88 to 108 MC with 0-100 logarithmic scale. Grounded grid RF amplifier & reflex converter completely sealed — eliminates microphonics. Output level control: styroflex & ceramic condensers used throughout with carbon deposited pistons. "V" beam tuning indicator. Illuminated. Unbreakable precision-calibrated dial assembly. Phone input connection set is off when phone is on. 1 year warranty on all parts defects. Tubes carry standard 50 day. 110/125V AC; 50-60 cycles; 50 watts, 10 1/2" wide; 5 3/4" high; 6 3/4" deep, 12 lbs.

AIREX'S LOW INTRODUCTORY PRICE \$44.95

Wood cabinet (Mahogany or Blende) **\$8.95**

TSL Concert Soundcorner

Now you can add a true Hi-Fidelity 2-way speaker system to your present amplifier at now low cost without sacrificing floor space. These units are ideal for use in Stereo systems with 2 separate speakers as desired on the same wall. Excellent for extending your present loudspeaker system, or can be used to replace your present speaker in your radio or phonograph. Units are mounted on the corner of the wall as part of the structure.



CARLTON



WALDORF

Uses Lorenz LP215 bass speaker, Lorenz LP105 tweeter unit and associated cross-over network. Units are mounted on a beautifully finished multiple ply bonded hardwood in mirror polished walnut. Carlton model has gold frame with neutral color grill cloth to blend in with any wall color and is washable. Every unit is fully guaranteed to give you the finest in listening pleasure. Specifications: Size: 27" high, 24" wide at top and 11 1/2" at the bottom. Frequency range: 35 to above 17,000 cps. Power rating: 17 watts. Impedance: 8 ohms. No intermodulation distortion. Comes complete ready to use. A product of British craftsmanship.

AIREX'S LOW INTRODUCTORY PRICE \$44.50

either model

If you are building a Hi-Fi System, SEND US YOUR LIST OF COMPONENTS. We will give you a PACKAGE QUOTATION ON THEM.

All merchandise is brand new, factory fresh & guaranteed. Mail & phone orders filled on receipt of certified check or 80% of items as a deposit. Balance C.O.D., F.O.B. N. Y. Prices & specifications subject to change without notice.

AIREX RADIO CORP.
64-HF Cortlandt St., N. Y. 7, CO 7-2137

AUDIO FORUM

Continued from preceding page

Its effect on my wife and me is, in fact, much the same as that of someone scraping a razor blade across a pane of glass.

This to me is not high fidelity. I cannot enjoy listening to my records, and I am too considerate to inflict this horror on even my most unmusical guests, except as a ploy to encourage their departure.

Can you suggest what might be causing this shrillness? I have a Garrard changer, GE pickup, Scott amplifier and preamplifier, and a Jensen triaxial speaker.

Another question, while I'm at it: what can be done to remedy needle talk? With my amplifier's volume control turned down, I can hear needle talk all the way across the room during loudly recorded passages.

Leslie Travis
Pittsfield, Mass.

Several things might be causing the high-frequency distortion you hear from records:

First, since you point out that needle talk from your phonograph is plainly audible throughout the room, this is bound to be adding to the severity of the fuzziness you hear from your speaker. Your record player should be housed in a cabinet with a closable lid, or should be moved into another room or into a convenient closet. You should also return your LP phono stylus to GE for inspection: the stylus may be damaged, or its damping blocks may have become stiff with age.

Second, check the length of the lead between your record changer and the phono preamplifier. If this exceeds about 4 feet in length, it should be shortened. An excessively long interconnecting cable can introduce a sharp peak into the upper frequency range, thus accentuating noise and distortion.

Third, the balancing controls on your loudspeaker system should be carefully readjusted to make sure they are not feeding too much level to the midrange or high-frequency drivers.

Fourth, your amplifier should be checked by the factory or by a qualified service agency, and if it does not meet its distortion or high-frequency stability specifications, it should be repaired or replaced.

Fifth, your supertweeter may be introducing severe peaks or distortion into the upper frequency range. If so, it should be repaired or replaced with a smoother one.

Infinite Baffles

SIR:
What is the optimum size for an infinite baffle? Also, how do I know

whether or not a particular loudspeaker is suited for installation in such a baffle?

Roy R. Kubn
New Haven, Conn.

The air confined within a totally enclosed speaker cabinet or infinite baffle is alternately compressed and rarified by the motions of the speaker cone installed in it, so the air acts as a restraining force on the cone's movement. The smaller the enclosed volume of air, the more restraint is imposed on the speaker, and since this added stiffness reduces the compliance of the cone's suspension, it raises the speaker's natural resonance frequency.

A direct-radiator loudspeaker's output diminishes at a constant rate below its resonance frequency, so anything which raises this resonance will automatically restrict low-frequency response. For this reason, an infinite baffle should ideally be made as large as possible.

The effect of an enclosure of a given size is to raise by a certain percentage the speaker's cone resonance, and this increase is to some extent determined by the cone's natural compliance or freedom of motion. A highly compliant cone assembly will be more affected by air loading than will a less compliant one, although the lower the speaker's free-air resonance, the less significant will be the increase.

For example, if two 12-inch speakers having similar cone compliance, but free-air resonances of 30 and 45 cycles respectively, are installed in a 10-cubic-foot totally enclosed cabinet, both will have their resonance frequencies increased by about 10%. This will raise the low-resonance speaker to around 33 cycles, but the higher-resonance speaker will move up to almost 50 cycles . . . a significant change, and one that will result in audible restriction of bass range.

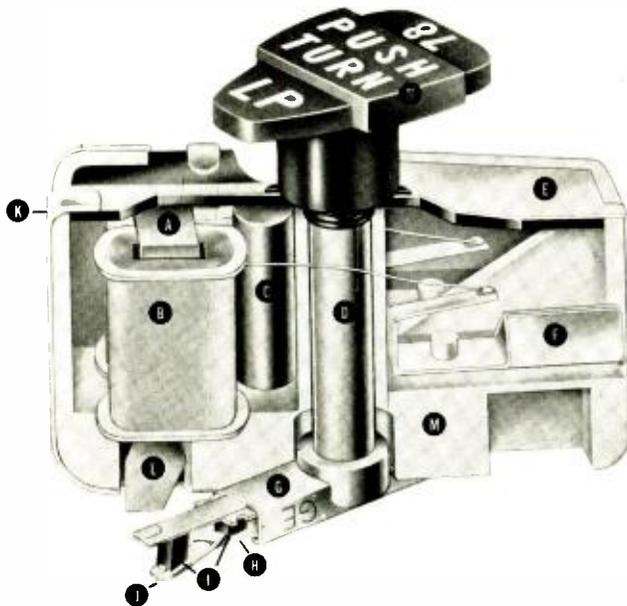
The optimum size for an infinite baffle is normally 20 cubic feet or more capacity. A totally enclosed cabinet may be as small as 6 cubic feet if the loudspeaker's free-air cone resonance is very low, while some speakers having extraordinarily low resonance (10 cycles or below) may demand the use of a very small enclosure in order to maintain adequate loading on the cone.

Any loudspeaker having a low free-air cone resonance (45 cycles or lower) will operate satisfactorily in an infinite baffle, although it may be necessary to use high-efficiency speakers in multiples if good bass balance is to be maintained. A single loudspeaker for use in an infinite baffle should be designed with its middle and upper ranges reduced in efficiency, relative to the bass range. This is to compensate for the loss in bass that results from using a small radiating surface.

Continued on page 142

NEW G-E VR_{II} CARTRIDGE

increased compliance...4-gram tracking force
...frequency-range 20 through 20,000 cycles



- Ⓐ Highly permeable laminations
- Ⓑ Hum-cancelling wound coils
- Ⓒ Alnico V Magnet
- Ⓓ Pivot Post
- Ⓔ Electrostatic Shield
- Ⓕ Plug-in Terminals
- Ⓖ "T"-Channel
- Ⓗ VR_{II} Clip-In-Stylus
- Ⓘ Special G-E Damping Blocks
- Ⓚ Stylus Jewel
- Ⓛ Mu-Metal Electromagnetic Shield
- Ⓜ Magnetic Pole Pieces
- Ⓝ Plastic Body
- Ⓟ Triple Play Knob



A dramatic new design to bring out the best in every Hi-Fi system

Full-Range Reproduction . . . General Electric's new VR_{II} magnetic cartridge makes possible faithful reproduction from 20 through 20,000 cycles. Crystal clear reproduction from the lowest fundamental to the highest harmonics.

4-Gram Tracking Force . . . Lateral compliance of the VR_{II} has been extended to 1.7×10^{-6} cm per dyne, permitting a tracking force of only 4 grams to minimize record and stylus wear.

Instant CLIP-IN-TIP Stylus . . . Stylus replacements can be made instantly at home without removing cartridge from tone arm. There is no need to discard an entire dual assembly when only one tip is worn.

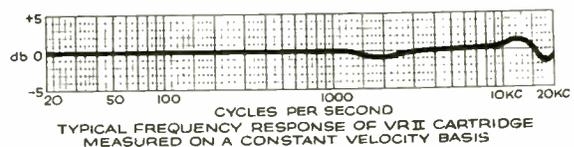
Electrostatic Shielding . . . In the VR_{II} cartridge a new electrostatic shielding prevents pickup of electrostatic interferences and hum. This shield also grounds the stylus assembly, thus preventing the build-up of electrostatic charges from the surface of the record.

Lightweight, Lifetime Construction . . . The new VR_{II} has been reduced in size and weight, with a new

stylus guard. Terminals and knob have been improved. The G-E VR_{II} is built to withstand a lifetime of usage under the most exacting conditions.

Frequency Response . . . See typical curve below.
Output Voltage . . . Nominal, 22 millivolts at 10 cm per sec. at 1000 cycles
Horizontal Compliance . . . 1.7×10^{-6} cm per dyne
Inductance . . . 520 millihenrys nominal
Resistance . . . 600 ohms nominal
Weight 8 grams (single type); 9.5 grams (dual type)

For further information write to: Specialty Electronic Components Dept., Section HF11-1157 West Genesee Street, Auburn, New York. In Canada: Canadian General Electric Company, 189 Dufferin Street, Toronto 3, Canada



GENERAL  ELECTRIC

PROOF OF Excellence

EICO HF-61A
MASTER-CONTROL PREAMPLIFIER



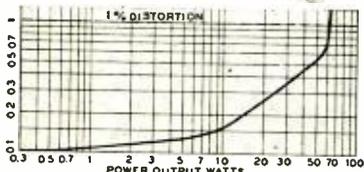
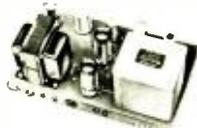
KIT \$24.95
WIRED \$37.95
(powered by any EICO power amplifier)

HF61 KIT \$29.95
(with Power Supply) WIRED \$44.95

"...the HF-61's performance rivals that of the most expensive preamps. There are inputs for several types of phono cartridges; five phono-equalization curves; a tape output which follows the filters but precedes the tone-control stages; inputs for tape recorder, tuner, TV, and an auxiliary; AC sockets for four other pieces of equipment; the Compentrol type of loudness control with a separate level control; the excellent tone-control action of the Baxendall circuit; a hum adjustment; and low-impedance main output. All in all, here is an example of a high level of engineering skill, which has managed to achieve fine performance with simple means and low cost."

Joseph Marshall - AUDIOCRAFT, April, 1957

HF60 60-WATT Ultra-Linear POWER AMPLIFIER with ACRO TO-330 Output Xfmr
KIT \$72.95
WIRED \$99.95



IM distortion vs. power output as measured by AUDIOCRAFT.

"As far down and as far up as we are equipped to measure, the frequency-response specifications were met easily. Square-wave response was nearly perfect with any kind of load: resistive, inductive, or capacitive. The only way we could make the amplifier show noticeable high-frequency ringing was to operate it with NO load at all. Low-frequency stability was excellent also. . . . Listening tests confirmed the fine instrument test results without question. Our HF-60 produced firm, well-defined bass and clear, sweet treble on the finest speaker systems available. It clipped momentary overloads very well and recovered quickly, and this gave listeners the impression of tremendous reserve power. In our opinion, it is one of the best-performing amplifiers extant; it is obviously an excellent buy."

AUDIOCRAFT Kit Report, July, 1957.

Also Available:

HF50 50-WATT Ultra-Linear Power Amplifier with extremely high quality Chicago Standard Output Transformer. Identical in every other respect to HF60 and same specifications up to 50 watts.

KIT \$57.95 WIRED \$87.95

HF52 Integrated 50-WATT Ultra-Linear Amplifier and Preamplifier-Control Section on one chassis. All preamp features of HF61 less scratch and rumble filters. Power amplifier section essentially identical to HF50.

KIT \$69.95 WIRED \$109.95

Prices 5% higher on West Coast
IN STOCK at your neighborhood distributor
Write for free Catalog H-11.



33-00 NORTHERN BLVD.
LONG ISLAND CITY 1, N. Y.

AUDIO FORUM

Continued from page 140

If a particular loudspeaker is well suited for infinite baffle installation, its manufacturer will usually supply specific recommendations to this effect.

Stereo Tape

SIR:

Your July editorial, "Don't Be Amazed," prompts this query. I have been exposed to stereophonic tape reproduction, and was impressed to the point where I am exploring its possibilities for my home.

I consider good music an essential part of living, and stereo seems to be the means for providing as realistic reproduction as possible. Mine is not exactly a problem of how little I must spend, but on the other hand, I regret that I am not in the Ampex stereo console class, much as I would like to be.

Before purchasing, I need some questions answered, and after reading your magazine, I felt that you could provide authoritative answers to some of my questions.

Is stereo the next step in recorded music, or is it perhaps a passing fad, or destined to appeal only to a small group?

Will the tapes resist wear as well as records, with good care?

How far apart should stereo speakers be for good reproduction?

Is it absolutely necessary to purchase two speakers for stereo, or could I use a TV set for one of the sound channels, providing it is a good set?

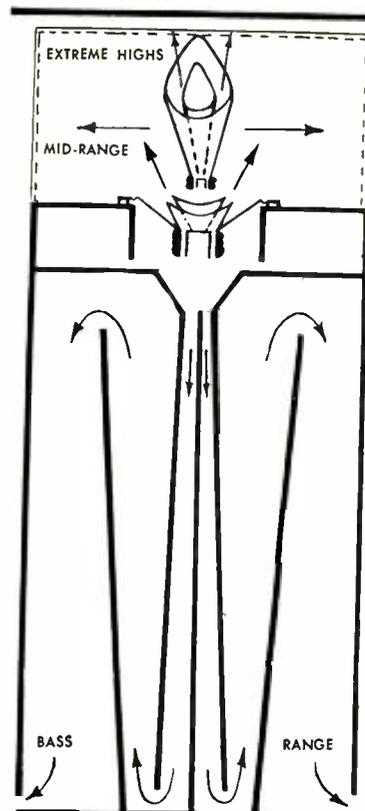
Is it conceivable that a satisfactory stereo disc will shortly be on the market?

R. E. Anderson
Omaha, Neb.

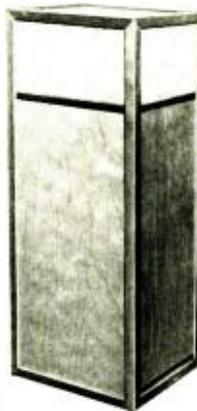
Stereo does not appear to be a transient fad. Its advantages are quite marked, and it is based on reasonable principles. As long as it remains as expensive as it is, however, its appeal is likely to be restricted to audio hobbyists and sonic perfectionists, but if the price of good-quality stereo should come down, it will probably be purchased by many people who simply like to hear good music well reproduced.

Unless erased or thoroughly mutilated, a tape will outlast a disc. We have not as yet heard of any cases of tape wearing out through repeated playing, although its plastic base may become fragile as it dries out over a period of several years. Assuming that it is handled and stored properly, there does not seem to be any practical limit to its life, and it is not subject to the scratching or dust-fouling that can ruin discs.

Stereo speaker placement depends



EICO proudly presents . . .
a major break-through in
speaker system development



a new combined horn and direct-radiator system having uncolored transient response, superb damping, and non-directional sound distribution. Includes built-in LC dividing network and balance control.

Frequency Response: essentially flat 45-20,000 cps; useful response 30-40,000 cps.

Rated Impedance: 16 ohms.

Efficiency: can be driven satisfactorily from good amplifiers having a power output as low as 10 watts.

Rated Power Handling: 30 watts integrated program material.

Dimensions: 36" high, 15 1/4" wide, 1 1/2" deep. Weight 45 lbs.

Finishes: hand-rubbed mahogany, walnut, or blonde.

Price: \$129.95 net

If you appreciate the difference between artificial "hi-fi" and truly natural sound, listen to the EICO New Standard Speaker System at your local distributor. For complete data, write for free Bulletin HX-11.

BOOTH 519, N. Y. High Fidelity Show.



33-00 Northern Blvd.
Long Island City 1, N. Y.

Prices 5% higher on West Coast

a high quality system at low cost... from **EICO**



NEW!
FM TUNER
HF90

KIT, less cover \$39.95*
WIRED, less cover \$65.95*
Cover \$ 3.95
*excise tax incl.

Newly-designed, extremely sensitive, low-noise "front end", supplied in a cast housing completely pre-wired, pre-aligned, ready to use. Employs temperature-compensated components and advanced circuitry to completely eliminate need for AFC. Drift less than 2 parts in 10,000 from cold start. Radiation suppressed far below FCC standards. Also features new DM-70 traveling tuning eye. Sensitivity, unapproached among FM tuner kits, of 1.5 uv for 20 db quieting**. Input 300 ohms, IF bandwidth 260 kc, detector peak separation of 600 kc. Freq. resp. 20-20,000 cps \pm 1 db. Audio output 1 V for 10 uv input with 75 kc deviation. Hum 60 db below 1 V. Cathode follower and multiplex outputs. Flywheel slide-rule tuning, AGC, stabilized low limiting threshold for excellent performance from weaker signals, broad-band ratio detector for improved capture ratio and easier tuning, full-wave rectifier and heavy filtering, very low distortion. Uses 1-EGCS/6AQ5, 3-6AL5, 1-6CA, 1-DM70, 1-6X4. Flexible "low silhouette" design adaptable to any panel thickness for console installation; optional cabinet. 11WD: 3 3/4" x 12" x 8 1/4". Operates from 110-125 VAC, 60 cps line.
**Typical unit, measured with Marconi TF 955A/2 FM-AM signal generator.



12-WATT
Williamson-Type
HIGH FIDELITY

INTEGRATED AMPLIFIER HF12
with Preamplifier, Equalizer and Control Sec
KIT \$34.95 **Wired \$57.95**

Compact, beautifully packaged and styled. Provides complete "front-end" facilities and true high fidelity performance. Direct tape head and magnetic phono inputs with NARTB (tape) and RIAA (phono) feedback equalizations. 6-tube circuit, dual triode for variable turnover bass and treble feedback-type tone controls. Output Power: 12 w cont., 25 w pk. IM Dist. (60 & 6000 cps @ 4:1): 1.3% @ 12 w; 0.55% @ 6 w; 0.3% @ 4 w. Freq. Resp.: 1 w: \pm 0.5 db 12 cps-75 kc; 12 w: \pm 0.5 db 25 cps - 20 kc. Harmonic Dist: 20 cps: 2% @ 4.5 w; 1/2% @ 2.5 w; 30 cps: 2% @ 11 w; 1/2% @ 6 w; 40 cps: 1% @ 12 w; 1/2% @ 9 w; 2000 cps: 1/2% @ 12 w; 10 kc: 1% @ 10 w; 1/2% @ 4 w. Transient Resp: excellent square wave reproduction (4 usec rise-time); negligible ringing, rapid settling on 10 kc square wave. Inverse Feedback: 20 db Stability Margin: 12 db. Damping Factor: above 7, 20 cps - 15 kc. Sensitivity (input for 12 W): Mag. Phono. - 9 mv; Tape Head - 6 mv; Tuner, Aux. 0.5 v. Hum & Noise Level (below 12 W): Mag. Phono - *60 db; Tape Head - *55 db; Tuner, Aux - 75 db. Speaker Connections: 4, 8, 16 ohms. Tone Control Range: @ 10 kc, \pm 13 db; @ 50 cps, \pm 16 db. Tubes: 2-ECC83/12AX7, 1-ECC82/12AU7, 2-E184, 1-EZ81. Mounts in or out of cabinet. Size: HWD: 3 3/4" x 12" x 8 1/4", 13 lbs.
*includes effect of compensation.

TWO-WAY
SPEAKER SYSTEM
HSFI \$39.95
complete with
FACTORY-BUILT
CABINET



Jensen heavy-duty 8" woofer & matching Jensen compression-driver exponential horn tweeter. Smooth clean bass & crisp, extended natural highs. Overall response: \pm 6 db 70-12,000 cps. Power-handling capacity: 25 w. Impedance: 8 ohms. Bookshelf size: 23" x 11" x 9". 25 lbs. Wiring Time: 15 min.

IN STOCK at your neighborhood distributor.
Write for free catalog **H-11**
EICO 33-00 NORTHERN BLVD.
LONG ISLAND CITY 1, N. Y.
Prices 5% higher on West Coast

largely upon the radiating characteristics of the speakers and the shape and acoustics of the listening room, so it is not possible to generalize about the "optimum" placement.

Best results are obtained from stereo sources when both channels are of high quality and are identical in all respects.

Stereo records have been successfully produced in the laboratory, and may be available to the public within the next year or so.

Speakers for Stereo

SIR:
I am planning on buying a high-fidelity system, and would like to include facilities for playing stereo tapes.

Since I'm starting from scratch, I would like to know which would give me the best results: two medium-priced speaker systems and power amplifiers, or one expensive channel and a moderately-priced second channel for use only on stereo sources? I have read that both stereo channels should, ideally, be identical in all respects, but I must face the fact that I can't afford to buy or to accommodate two mammoth speaker systems in my typical living room. So, will two smaller systems, used together for monaural sources, sound as good as one large system?

Bruno Kettlinger
New Brunswick, N. J.

Several personal factors will determine which of the alternative systems you mentioned would best suit your needs.

Assuming that all the speakers in question are chosen for top quality in their price (and dimensional) class, the two identical smaller speakers can give a large apparent source size on monaural program material, and will give best blending and center fill-in from stereo material. The combination of a large system and a very modest one can give wider range, smaller apparent source size, and greater smoothness from monaural sources (used through the larger system only), but will be less satisfactory on stereo program material, when both speakers are used.

If you intend to do most of your listening to stereo, the identical small systems would probably be your best choice. Then, when you are listening monaurally, both small speakers may be connected together to give improved bass response, improved over-all smoothness, and wide apparent source.

If you expect to listen mainly to monaural programs, your best choice would probably be a large system plus a smaller one whose balance (not necessarily range) is closely similar to that of the main system.

two more **BEST BUYS...**
from **EICO**



20-WATT
Ultra-Linear
Williamson-Type
INTEGRATED
HIGH FIDELITY
AMPLIFIER HF20

complete with Preamp-Control Section

KIT \$49.95 **WIRED \$79.95**

During its first year, the HF20 has received consistently high praise from users - has become established as the outstanding value in amplifiers of this power class. Employs an output transformer capable of handling far in excess of its rated 20 watts, a full Ultra-Linear Williamson power amplifier, and the finest pre-amplifier-control facilities. Rated Output: 20 w (31 w pk.) IM Distortion (60 & 7,000 cps @ 4:1): 1.3% @ 20 w. Harmonic Distortion: below 1% from 20-20,000 cps within 1 db of 20 w. Freq. Resp.: \pm 0.5 db 15-30,000 cps at any level from 1 mw to 20 w; no peaking or raggedness outside audio range. Square Wave Resp.: 20-20,000 cps essentially undistorted. Sens.: 4 mv on mag phono & 4 v on tuner, etc., for 20 w output. Hum & Noise: 60 db below 20 w on mag phono, 75 db below 20 w on tuner, etc. 5 feedback equalizations for I.P.s & 78s, 4 hi-level switched inputs (tuner, tv, tape, crystal), unused inputs grounded to eliminate cross-talk; 2 low-level inputs for proper loading with all cartridges. Low distortion variable crossover feedback tone controls: \pm 15 db @ 50 cps & \pm 15 db at 10 kc, with mid-freqs. & volume unaffected. Hum bal. control. DC superimposed on tube filaments to eliminate cathode-heater leakage as hum source. Centralab printed circuit "Compentrol." Loudness control & separate level set control on front panel. Extremely fine output transformer: interleaved windings, tight coupling, careful balancing, grain-oriented steel. Speaker Connections: 4, 8 & 16 ohms. HWD: 8 1/2" x 15" x 10", 24 lbs. Matching Cover E-1, \$4.50.



NEW! 30-WATT
High Fidelity
POWER
AMPLIFIER HF30

KIT \$39.95 **WIRED \$62.95**

Four E181 output tubes in push-pull parallel; high power sensitivity eliminates need for extra driver stages, permitting Williamson-type circuit with large inverse feedback and high stability margin. 6 lb. output transformer, extensively interleaved windings & grain-oriented steel laminations. Surge-free, high reliability power supply using two EZ81 full-wave rectifiers. Power take-off socket for EICO HF61A Preamplifier. Rated Output: 30 w (47 w pk.) IM Distortion: (60 & 7,000 cps @ 4:1) 2% @ 30 w; 0.83 @ 20 w; 0.35% @ 10 w. Harmonic Distortion: below 1% from 20-20,000 cps within 1 db of 30 w. Freq. Resp.: \pm 0.1 db 15-30,000 cps & \pm 1.5 db 15-100,000 cps, at any level from 1 mw to 30 w; no peaking or raggedness outside audio range. Square Wave Resp.: 20-20,000 cps essentially undistorted. Inverse Feedback: 20 db. Stability Margin: 15 db. Damping Factor: above 10, 20 cps to 20 kc. Sens.: 1.24 V for 30 w. Hum: 80 db, below 30 w. Speaker Connections: 4, 8, and 16 ohms. HWD: 5" x 12" x 7", 17 lbs. Matching Cover E-3, \$4.50.

EICO 33-00 NORTHERN BLVD.
LONG ISLAND CITY 1, N. Y.
Please send FREE catalog and name of neighborhood distributor or high fidelity specialist.

Name.....
Address.....
City..... Zone..... State.....
Prices 5% higher on West Coast H-11

**THE 3 WAY
SPEAKER YOU
MAY NOT
BE ABLE
TO OBTAIN**

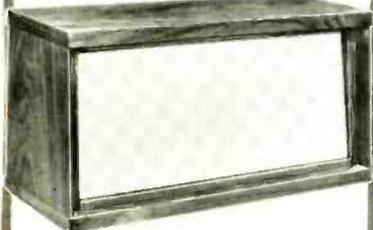
UNTIL now the GSC-2 has been available from us *only on order* at our own New York City high fidelity salon or through a few selected dealers. Since each GSC-2 is custom made and not factory produced — the supply of these fine instruments must, therefore, always be limited.

The GSC-2 is the only 3-way speaker system selling for under \$100 that offers a range of 35-20,000 cycles.

This custom made speaker system offers the ultimate in sound reproduction enhanced by a magnificent walnut cabinet. Each detail has been attended to with painstaking care by skilled craftsmen.

The chances are that you won't be able to acquire a GSC-2 in your city. However, if you would like to know if there is a high fidelity salon in your locality handling the GSC-2 please write to us.

If you prefer — and don't mind waiting 3 to 4 weeks for delivery — we will create one for you and send it to you with the assurance that if you're not completely satisfied you can return it for a complete refund of the purchase price. Please accompany your request with a check or money order for \$85.00.



GSC-2 Speaker System*

Compact speaker system, employing a specially constructed 9" woofer, 3" dual tweeter and crossover network to be used independently as a bookshelf or hanging unit. Engineered to achieve superb, life-like reproduction in a small enclosure. Ideal for reproducing stereophonic sound. Extra heavy 1 1/2" wood construction to eliminate vibration, slapping front panel to improve speaker rotation and reduce back pressure, and employing special Helmholtz resonator principle with friction loading.

Specifications:

35 to 20,000 cycles.
Crossover . . . 3000 cycles per second.
Impedance . . . 8 ohms. Power . . . 15 watts.
Dimensions . . . 21" wide, 12" high, 9" deep.
Finishes . . . Satin lacquer or Danish oil walnut.

*Des. Patent Pending. **\$85.00 Complete**

Write for our illustrated brochure showing our complete line of custom made units for high fidelity and television sets.

GRAY SOUND CORPORATION
218 EAST 57th STREET
NEW YORK 22, N. Y.

NATURAL HISTORY

Continued from page 47

Fortunately the source of program material is so vast that boredom need never occur so long as free choice of program obtains for the individual; but the instant accessibility of the masterworks and the greatest performances of them places all other music in continuous competition with the very finest productions of mankind. It takes many years of careful exploration into the more remote areas of the recorded literature to develop the perspective which enables the listener to recognize how truly monumental the familiar "standards" really are. A refreshing experience is to hear such a work after many years of careful avoidance of it.

Another rather unfortunate effect of this wealth of program material is the fact that eventually it takes a rare and shocking combination of sounds to attract the attention of the jaded ear. Those composers who think in terms of new sound effects and exotic tone colors really have a difficult job to come up with anything really remarkable along these lines. The very fact that they have at their command such an enormous variety of noise-making apparatus places them in the position of the ass in Buridan's fable, which starved to death in the midst of riches. The truly advanced composers in this category are manufacturing sounds directly on tape, without necessarily involving any audible sound generator. In some respects this might be considered to be the purest form of creation, inasmuch as the product is transmitted almost directly from the mind of the composer to the ear of the listener. (A logical extension of this technique might record the stimulus in such manner that it could be reproduced directly as nerve currents in the listener's brain, thereby dispensing with all intermediate steps!)

The possibility of using modern acoustical techniques in the creation of new musical instruments is obvious, and much enthusiastic work has been done along these lines. Most of the resulting instruments are called "electronic organs," and this description is probably as good as any. In the early days of the electrical age, many musicians felt that it would be possible to synthesize all orchestral sounds by means of such instruments. It is now generally realized that this is impossible, since the true character of orchestral music, at least of the traditional type, lies in the very fact that it is produced in concert by many players acting as one. Random noises cause an important part of the satisfaction derived from instrumental music, although instrumentalists and conductors spend much time in "sandpapering"

Continued on page 146

**DON'T LET
TURNTABLE
RUMBLE
DEFEAT YOUR
HIGH FIDELITY
SYSTEM**

**NOW RUMBLE
50 db • BELOW
N.A.R.T.B
STANDARD
REFERENCE
LEVEL***

*Reference velocity of 7 cm/sec. at 900 cps corresponds to National Ass'n of Radio & Television Broadcasters' standard reference level.

**METZNER
Starlight
HIGH FIDELITY
TURNTABLE**



The incomparable Starlight has been brought even closer to dreamed-of total silence in operation and now actually exceeds even the most rigid professional standards. In fact, if checked by the reference level used by some turntable manufacturers, it would show as much as 80 db signal-to-rumble ratio! And all this at no increase in price!

- ★ Illuminated Stroboscope — reads while the record is playing
- ★ Continuously variable speed control — precise settings for all 4 speeds.
- ★ Wow & flutter less than 0.2% RMS. Again better than NARTB standards

Model 60 **\$59.50**
(less base and arm)

Model 672 (Illustrated):
Complete unit with model 60 turntable, base and push-button transcription arm . . . \$97.00
Model 07 push-button transcription arm . . . 22.50
Model 002 (blonde) and Model 004 (ebony finish) 1" laminated hardwood base . . . 17.50
Prices include Fed. excise tax where applicable.

**METZNER
ENGINEERING CORP**
1041 N. SYCAMORE AVE., Dept. HF-11
HOLLYWOOD 38, CALIF.

THE NAME IS FAIRCHILD

HIGH FIDELITY PRODUCTS BEARING THIS NAME WERE DESIGNED BECAUSE...DISTORTION IN MUSIC IS INTOLERABLE

There are many ways to spell it out. We can speak of quality in sound, clean reproduction, presence, fidelity—and even high fidelity. But, it is doubtful whether these words convey or define anything more specific than this one essential fact: *distortion in music is intolerable.*

Consequently, if we want to enjoy music we must avoid distortion. And inasmuch as distortion is not part of music, but originates within the reproducing system, we must select reproducing components as free from distortion as the present advanced state of the art will permit.

Much work has been done by companies such as Fairchild. For more than 30 years, Fairchild Recording Equipment

Company has been engaged in the development and manufacture of high quality professional equipment for the recording and broadcast industries. In this pursuit, Fairchild has acquired invaluable engineering 'know-how' regarding the designs and techniques for achieving well-nigh distortion-free equipment. The growing interest in high fidelity has simply necessitated the channelling of this knowledge into the design of components physically more suitable for the home.

Strangely enough, we do not consider the outstanding quality of our equipment to be an unusual accomplishment. We've been doing it for years...and for the obvious reason that *distortion in music is intolerable.*



FAIRCHILD Moving Coil CARTRIDGE—A dynamic phono cartridge of proven and noticeably superior performance. Reputed to be the finest in the field. Its smooth response over a wide frequency range is directly attributable to inherent designs—structural as well as electrical—which have been painstakingly embodied in this superb transducer in an all-out effort to achieve record reproduction without distortion.

Model 225A—1.0 mil diamond stylus for microgroove records

Model 225B—2.5 mil diamond stylus for professional transcriptions and 78 rpm records. Each \$37.50

Model XP-3—a new experimental designed for the incurable perfectionist—with 0.75 mil diamond.

FAIRCHILD Transcription ARM—The arm is essential to the optimum performance of a cartridge. The Fairchild Transcription Arm was designed to provide the perfect setting for the Moving Coil Cartridge. It offers the assurance that the faithful performance of the cartridge will not be contaminated with the many forms of distortions created by friction inertia, side thrust, poor tracking, resonance, and other causes arising from faulty arm design.

Model 280A—for records up to 12" in diameter. \$37.50

Model 281A—for records and transcriptions up to 16" in diameter. \$39.95

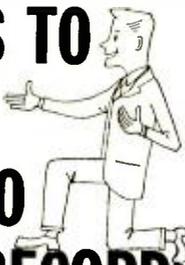
FAIRCHILD 245 PREAMPLIFIER—A cartridge may produce a faithful electrical replica of the recorded music only to have preamp distortion destroy it. The new Fairchild 245 was developed in order to fill the need for a truly high quality, distortion-free preamplifier for use with the Fairchild Moving Coil and other magnetic cartridges. The 245 meets this requirement admirably—without superfluous gadgetry. Its noise and distortion content is so extraordinarily low, it is doubtful whether any other preamp can equal—much less surpass—its performance. \$89.50

FAIRCHILD 255A AMPLIFIER—Having provided a cartridge, an arm and a preamplifier to insure the finest reproduction, there remains only the power amplifier, the final essential link before the loudspeaker takes over. The 255A is a high quality basic power amplifier. Its stability is unusually high, and its use with today's new speaker systems is highly recommended. Frequency response is virtually flat, from 20 to 20,000 cycles at full 30-watt power output, and distortion at this output is less than 0.4% harmonic, and less than 0.5 intermodulation. As revealing as these figures are of the unique quality of the 255A, the ultimate, the most convincing and most gratifying test is to hear it perform. \$124.50

Complete equipment specifications are available on request. Ask your dealer about the new FAIRCHILD E/D electronically driven turntable—the most exciting new development in high fidelity.

FAIRCHILD RECORDING EQUIPMENT COMPANY 10-40 45th Avenue, Long Island City 1, N. Y.

7 WAYS TO MAKE LOVE TO YOUR RECORDS



GIVE THEM DIAMONDS!

Genuine Columbia diamond tip needle gives records longer life, makes them sound better. Certified as perfect by Columbia engineers. Precision made for all phonographs.



TAKE THEM OUT MORE OFTEN!

Columbia brings you the most beautiful record carrying cases in America—perfect for party-going, weekending, traveling and storage. Available in three sizes to hold either 7", 10", or 12" records. Each case holds from 50 to 60 records with index. Available in blue-and-white, charcoal-and-gray, black-and-gray, gray-and-red, or brown-and-tan.



GIVE THEM A HOME OF THEIR OWN!

These beautifully designed Columbia record racks are built to hold both 7" and 12" records. 40 and 50 record capacity. Support jacketed records without warping or pinching. Luster-lacquered brass finish for lasting beauty.



KEEP THEM GOING ROUND IN CIRCLES!

45 rpm spindle converts your phonograph so it plays records of every speed—16, 33, 45, 78 rpm. Just slip it on the turntable and the records are ready to play.



GIVE THEM FUR!

Columbia's sable-soft brush cleans records as they play. Improves sound, protects records. Guaranteed not to scratch delicate record surfaces. Practically weightless. Fits all tone arms.



BE PROTECTIVE AT ALL TIMES!

Columbia electrostatic spray cleans your records, lubricates grooves, protects against record and needle wear, banishes annoying static crackle. Contains silicones. Single application lasts several months.



HELP THEM STAY YOUNG-LOOKING ALWAYS!

Columbia electrostatic cloth keeps records almost like new. Eliminates static as it cleans. Removes dust, dirt, grime, helps keep records from becoming scratched. Contains silicones.



Experience "Listening in Depth" on 1958 Columbia Phonographs—\$29.95 to \$1.995

Enjoy the Sound of Genius on Columbia Records

COLUMBIA ACCESSORIES

Available at better record stores everywhere
Prices are suggested list. © Columbia Marca Reg.

NATURAL HISTORY

Continued from page 144

them out. No serious music composed expressly for electronic instruments has been successful, although these devices have been in existence for over forty years. Again, it may be that the facility of tone generation by electronic means has removed the hurdles which forced earlier composers into such prodigious leaps.

Before the war some lively development work was sponsored by manufacturers of musical instruments of the traditional type. An effort was made to improve the intonation and ease of blowing of the standard wind instruments, and some progress was made along those lines. Musicians are difficult to sell on "scientific" approaches to instrument construction, however, seeming to prefer some mystical explanation of their behavior. Scientists, on the other hand, fail to credit the unbelievable sensitivity of the highly gifted musician, who always seems to hear and feel things to which the measuring equipment is deaf, dumb, and blind. Successful completion of such research requires physicists who are musicians of extraordinary merit, and musicians who are no mean acoustical experts. Above all is required a management willing to invest money in work it cannot follow, and the results of which are virtually intangible. Such a situation does not prevail on this earth.

Since there is little commercial reward for such work, substantial funds for its prosecution are never available. A few enthusiasts with the requisite technical ability continue to investigate musical instruments, but most of the work is centered upon obtaining information rather than in attempts at sweeping improvements—perhaps naturally. As a friend once remarked to me, it is pretty hard to improve on a device like the violin which has had three hundred years of field testing. Just because they lacked electronic tools is no reason to suppose that instrument makers of the past have been lacking in analytical power or technical ability. Indeed it is sometimes a blow to the modern ego to discover how very skillful and how very learned these old boys were. Nearly all our fancy modern electronic acoustical measuring equipment has done so far is to give us some notion of why musical instruments are as good as they are. Improvements on existing forms, it would seem, can only be minor ones.

If any electronic sound generating devices are to produce really worthwhile musical instruments, there will be required a strong common devotion on the part of the designer of the instrument, the player of the instrument, and the composer of music for the instrument.

Continued on page 148

THREE for



NEW 60-WATT AMP-PREAMP

An integrated high-power amplifier package for the budget-minded audio perfectionist—complete with low-distortion preamp in a single low-slung unit of striking elegant appearance. You have at your command 60 watts of undistorted power at any audio frequency from 20 to 20,000 cps. IM distortion is 0.25% or less at ordinary listening levels. Preamp provides compensation for all recording characteristics.

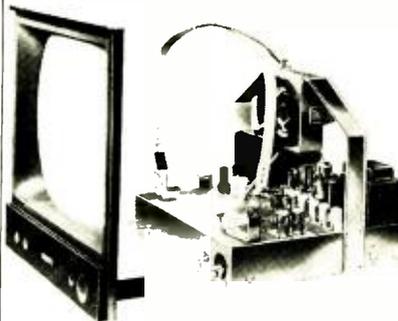
Model 19 \$129.95



NEW 25-WATT AMP-PREAMP

A top-quality medium power amp-preamp of unsurpassed quality. Only the most advanced high-fidelity circuitry and the finest available components are used in this superb new Tech-Master unit. Performance is identical to the model 19 up to rated power of 25 watts. Equalizer has RIAA position, with exclusive Tech-Master calibrating feature on treble control for accurate compensation as AES, NAB, Orig. LP and "S" characteristics.

Model 21 \$99.50



The "VIDEOPHILE"

A high-fidelity TV tuner for hi-fi owners who want to enjoy the sound quality of their own hi-fi system plus equivalent picture quality, not provided by mass-produced TV sets. The picture fidelity of the "Videophile's" powerful 28-tube 630 circuit chassis matches audio quality of the finest sound installations. Noise-free sound take-off for feeding into external audio system. Undistorted FM signal at ratio detector stage is fed through cathode follower for matching any amp circuit. Features AFC Hor. Hold; 5 microvolt sensitivity, cascade tuner; age and area control.

Model 630-5T for 21-27" pix tubes \$249.50

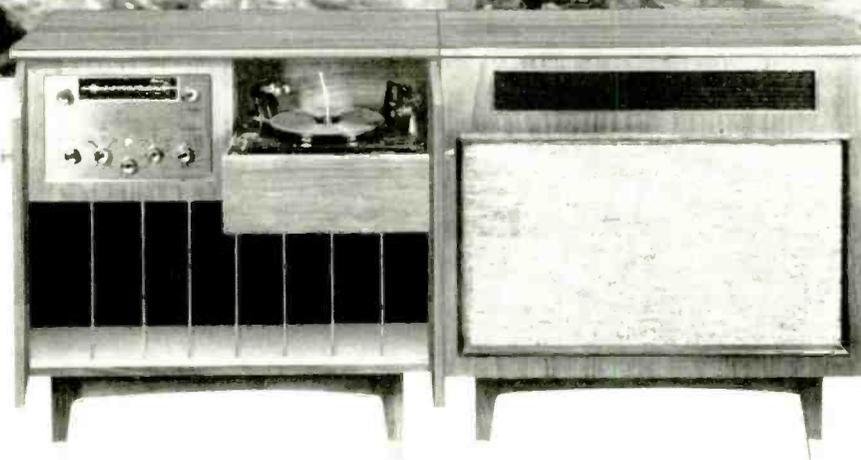
See ALL THREE at leading Radio Parts Distributors or write to

 **TECH-MASTER CORPORATION**
75 Front St., Brooklyn 1, N.Y.

HIGH FIDELITY MAGAZINE



*From Decca Records
album *Orychus and
Eurydice**



There's a new level of excitement when you hear the AMI precision high fidelity instrument for the first time. There's a great, glowing surge of pleasure that is almost shock when the music fills every corner of the room. This is the *new* sound, the golden sound—full-throated fortissimos, delicate, lyric pianissimos that reproduce every nuance of a masterful performance. It is music at its finest as only the perfectly engineered AMI integrated components system can recreate it. AMI—one of the world's great sound systems.



For name of your dealer and literature please write AMI Incorporated, 1500 Union Avenue, S.E., Grand Rapids 2, Michigan. Chicago. Zurich.

COMING . . . to your city HIGH FIDELITY MUSIC SHOWS

See and hear the latest in HIGH FIDELITY
from leading high fidelity manufacturers . . .

Don't miss these public showings of Hi-Fi Equipment . . . from the most economical units for the budget-minded to spectacular home music theatres . . . compare and enjoy them all. Components and complete systems will be displayed.

THREE DAYS OF CONTINUOUS DEMONSTRATIONS 1 P.M. to 10 P.M.

1957 | Seattle November 8, 9, 10 New Washington Hotel
St. Louis November 22, 23, 24 Statler Hotel

1958	January 10-12	Minneapolis	April 11-13	Newark
	January 31- February 1, 2	Milwaukee	April 25-27	Indianapolis
	February 21-23	Cleveland	September 4, 5, 6	Cincinnati
	March 7-9	Pittsburgh	October 3-5	St. Louis
	March 9-16	Miami	October 17-19	Kansas City
	March 28-30	Buffalo	November 1-3	Denver
			November 14-16	Seattle

Rigo Enterprises, Inc. 500 North Dearborn Street, Chicago 10, Illinois

NATURAL HISTORY

Continued from page 146

It is possible that the first proponent of a worthwhile device would be all three of these people in one. It would be a miracle if his musical work were anything more than merely very interesting; it would be his inspiration to more talented composers that might result in their producing some valuable art music for this hypothetical new instrument. One hopes that such a cycle may initiate itself in the not too distant future, but it is certain that unless the difficulties are very great the artistic achievement will be nothing special.

In 1920 Leon Theremin created a large stir with his electronic tone generator, and the instrument is still in use. To be sure, its specialty now seems to be making sound tracks for psychological thrillers in Hollywood, but it was a serious attempt to develop something new. What I know of experiments with electrical tone generators and rhythm generators has convinced me that unpredictable random effects must be a part of any satisfying device. Furthermore, the player must have full control of the attack and decay of the tone in addition to the obvious pitch and loudness functions. If the tone is simple, as in the piano and organ, there must be many of them possible at a time; complicated tones such as those produced by strings and voices will satisfy when used merely for a single line. Above all is the fact that all "beautiful" musical sounds vary in harmonic composition from register to register and even from semitone to semitone. The mechanical "sameness" of the sounds of electronic instruments produced so far has doomed them to failure.

The successful electronic instrument will relieve the player of physical effort, as much as possible. Music making is hard work, made to seem more so nowadays by contrast with what is happening in other fields. Long hours of practice will always be necessary on any instrument, and progress will be faster where fatigue is minimized. The instrument must be so complex that its full possibilities are never realized; but it should be playable at once without making obscene sounds. It must yield results in accordance with the effort and talent expended upon it, and it must be capable of solemnity. If possible, the player should not appear ridiculous when performing, although our conventional instruments do not stand up well under objective visual scrutiny. Above all, the instrument must not be imitative; it must be instantly recognizable by the initiate for what it is. It must excite good composers and attract a following of virtuoso players and interested listeners. It seems as if our electro-acoustic knowledge should make this possible. Perhaps it will.

Superb Craftsmanship
Magnificent Performance



quality designed by **GRADO**

We announce with pride the development of a custom crafted phonograph cartridge of revolutionary design...THE GRADO CONSTANT IMPEDANCE MOVING COIL TRANSDUCER. This unit for the first time reproduces the peerless quality of the master tape. The Grado is precision made by master watchmakers to the highest electronic standards.

Used by leading audio manufacturers and research technicians as a laboratory standard.

Audiophile Net Price \$45.00

GRADO LABORATORIES • 4614 SEVENTH AVENUE • BROOKLYN 20, NEW YORK
EXPORT DIV. • 25 WARREN ST. • NEW YORK 7, N. Y.



plenty.....

to this 12" extended range Wigo (\$59.50) ...

you can add cone tweeter array (\$20.00) — or buy the complete two-way system initially (\$79.50)

Prices slightly higher West of Rockies

25 to 18,000 cps.



....their exclusive

**"CLIMATE-PROOF-
CONSTANT RESPONSE**

voice coil and cone suspension" assures you of constantly fine sound quality ... whether you're in Maine or Florida! Cast aluminum frame and hyperbolic cone design mark the Wigo as a *premium quality* speaker. All this ... plus the fact that the Wigo way is a wonderful way for your hi-fi system to grow up! It lets you enjoy the best quality *now* ... and all the quality you'd ever want *in the future!* It's worth listening to a Wigo! Write for catalog.

expand further with other Wigo additions ... 8" mid-range Wigo



16" super-woofer



wonderful **WIGO** speakers

United Audio Products (Div. of United Optical Mfg. Corp.), 202 East 19th Street, New York 3, N. Y.

DYNAKIT

Amplifier Kits

A proven circuit of finest sound quality in a new deluxe 60 watt model and standard 50 watt model



MARK III 60 watts 79⁹⁵*
4, 8, 16 ohm outputs net

The new Mark III includes all the sensational attributes of the popular Mark II plus these outstanding deluxe features

- ★ 60 watts at less than 1% distortion. Instantaneous peak power of 140 watts, 1M less than .05 at average listening levels.
- ★ Choke filtering and low noise circuitry reduce hum and noise to 96 db below 60 watts.
- ★ New rugged KT-88 tubes and other heavy duty parts used conservatively.

MARK II 50 watts 69⁷⁵*
8, 16 ohm outputs net

The Mark II is the best buy in high power high fidelity kits

- ★ Ease of assembly due to uniquely simple circuitry and printed circuit construction with factory-mounted parts.
- ★ Highest stability using patented stabilizing networks with minimum number of phase shifting stages. Suitable for all loudspeaker systems including electrostatic.
- ★ Dyna Biaset (patent pending) for simplified adjustment and complete freedom from effects of unbalanced components. No balancing adjustments required to meet published specifications.
- ★ Dynaco Super-Fidelity output transformer with patented para-coupled windings. This is the finest available transformer of its type for the most critical audio uses.

Available from leading Hi-Fi dealers everywhere
Descriptive brochure available on request.

DYNA COMPANY

617 N. 41st Street, Philadelphia, Pa.

Slightly higher in West

Export Division: 25 Warren St., New York 7, N.Y.

RENATA TEBALDI

Continued from page 49

appearances were with the San Francisco Opera and the trip gave her her first sight of New York. Her Metropolitan debut was made in *Otello*, January 31, 1955, opposite Del Monaco; and the triumphs of that season—which also included *La Bohème*, *Andrea Chénier*, and *Tosca*—have been repeated each year since. Her *Traviata* is one of the sensations in the history of the Metropolitan. Nine times she sang Violetta in New York in the last third of the season, never to less than a packed house, and eleven times on the seven-and-one-half-weeks tour. Each time she came up from the taxing role bubbling and fresh as her dimples.

The word "spinto" is absent from Webster but if you require a definition take yourself to the next Tebaldi performance. No one since Muzio so fills the lyrico-dramatic category—and the voice is growing in size with the seasons.

In three years at the Metropolitan she has cancelled only one performance, when she had an ear infection, delaying for a season her first New York *Aida*. Fatigue is unknown to her. She goes through every rehearsal full voice. The conductors marvel. "That is what comes of knowing how to sing," one assistant said. "Every sound she makes is beautiful. She is the living embodiment of what we mean by *bel canto*."

A lot has been said (too much in fact—some of the reviewers wrote as though she had been guilty of embezzlement or dope peddling) about her taking "*Sempre libera*" down a tone as though transposition were something new and scandalous. A fair gauge of greatness is the number of fools who become self-appointed censors in the presence of it. Sometimes her tempos lean a little toward deliberation, though this is not always the case. Her aforementioned "*Selva opaca*" moves more apace than any on record. A given aria may vary from time to time, certainly a great artist's privilege. On her last "Telephone Hour" of the season she threw the control booth into a tailspin by taking everything faster than had been anticipated. Timings had been taken from her records. She finished off each number fifteen to forty seconds sooner.

Five feet ten inches tall and built accordingly, she is physically probably the least likely candidate for consumption since Tetrazzini sang *Traviata*—but that is all right too. At first you can hardly believe she is wasting away as Mimi, but nobody in our time has given quite the meaning to "*Il primo bacio dell'aprile è mio*" that Tebaldi does. It is like hearing the phrase for the first time. And before the evening is over her conquest is complete. Her singing

Continued on page 152

TRUTH in REPRODUCTION

(Reading Time—60 seconds)

Just what *should* a loudspeaker do?

Should it provide a startling reproduction? Or, should it provide as *accurate* a reproduction of the original performance as is humanly possible?

This is an issue that arises in our listening studios whenever a LOWTHER Loudspeaker (TP1, Model R, or Acousta) is compared with the other great names in speakers. Most people immediately recognize the LOWTHER kind of reproduction as much more truthful. But some of them are troubled—they hear things (in their own words) they aren't prepared to hear... rustling noises in the orchestra, bad string attacks, fluffed notes, etc.—on source material they are familiar with, and which they thought was almost perfect. Many of them, too, comment on a vastly different kind of space perspective—on the placement of orchestral voices in deep space—rather than on the edge of the speaker, as with other designs.

Obviously, these are the distinguishing marks of LOWTHER accuracy in reproduction—which leads to a greater faithfulness to the original playing and its acoustic environment, so much so that people liken the effect to true binaural reproduction, as heard in the concert hall.

Let it be admitted that some people react against this "truth in reproduction"—which explains why ELECTRONICS also features other fine loudspeaker systems, with differing qualities.

Therefore, the services of an organization like ELECTRONICS are important to you in your search for better reproduction. Our highest recommendation in loudspeakers, naturally is the LOWTHER. But our consulting service (a no charge extra here) may recommend a different approach for *you*, drawing upon our vast experience and background in evaluating customer likes and needs. Before you invest precious money in new equipment of any sort, avail yourself of this fund of experience, backed by the most meaningful "satisfaction guarantee" currently available.

Write for the brochure on Lowther products, or other recommendations based upon your individual needs.

ELECTRONICS

of City Line Center, Inc.
7644 City Line Ave.
Philadelphia 31, Pa., U.S.A.

World Market-Place for Finer
High Fidelity Components

what
could
be
more
exciting



to a
high
fidelity
enthusiast?

new
GLASER-STEERS **GS** *Seventy Seven**

the fully automatic record changer with turntable quality performance

At last — what every audiophile has been waiting for — the convenience of a fully automatic record changer with the performance quality of a transcription turntable.

The new GS-77 provides a quality of performance unsurpassed by turntables up to double the price. Flutter and wow are virtually non-existent. Rumble has, for all practical purposes, been eliminated. And as for automatic conveniences — it is, without doubt, the most advanced record changer of our time.

There is more originality in the GS-77 than in all other changers combined! See for yourself.

'SPEEDMINDER'...the amazing GS-77 feature that automatically selects correct turntable speed, and gives you record and stylus protection no other changer can equal.

You simply set the indicator to **'SPEEDMINDER'** and automation takes over . . .

- with the standard groove stylus in play position, the changer automatically plays at 78 rpm.
- with the microgroove stylus in position, the changer automatically intermixes and plays 33 and 45 rpm records without regard to speed, size, or sequence.

TURNTABLE PAUSES during change cycles and doesn't resume motion until next record has come into play position and stylus is in lead-in groove. Eliminates record surface wear caused by grinding action of record dropping on moving disc—a common draw-back in other changers. And the change cycle lasts only 5 seconds — fastest in the field.

* Trademark

† Patents Pending

Every feature* spells—Greater Convenience and Better Performance — The ARM is shock suspended and damped, effecting complete acoustical isolation from deck plate and motor and practically eliminating resonance. An accessible vernier control adjusts stylus pressure to match any cartridge requirements. Once adjusted, the variation of stylus pressure between the first and tenth record on the table does not exceed 1 gram. Transcription arm convenience includes: finger lift for manual play, as well as indicator to facilitate location of stylus in groove. The MOTOR is 4-pole induction, dynamically balanced, hum shielded and shock mounted — all to assure accurate, constant speed, and smooth operation.

The IDLER and other rotating parts are precisely centered and mounted on low friction bearings. Idler automatically disengages in 'off' position. Prevents flat spots and wow. **MUTING SWITCH** and R/C filter network squelch all annoying sounds.

The GS-77 is absolutely jam-proof — built for years of trouble-free performance. A single knob controls all automatic and manual operations. The changer is pre-wired for easy installation, and is dimensioned to replace most changers.

less cartridge and base — **ONLY \$59.50**

Styling of the new GS-77 is gracefully simple — enhanced by its ebony and brushed gold finish and oyster white turntable mat. For a thrilling experience — see it — hear it at your high fidelity dealer. Descriptive literature available on request. Dept. HF-11

GLASER-STEERS CORP. 20 Main Street, Belleville 9, N. J.
In Canada: Glaser-Steers of Canada, Ltd., Trenton, Ontario.
Export Div.: M. Simons & Son, Co., Inc., New York 7, N. Y.



Why Buy?

Twice the RUMBLE
Twice the FLUTTER
Twice the WOW for
Twice the PRICE

When you
can have

Half the RUMBLE
Half the FLUTTER
Half the WOW for

HALF THE PRICE

For exceptional performance, choose either of these professional quality Component turntables:

The Duo-speed... a two-speed, belt-driven turntable \$49.50
The Professional Junior... a single speed, belt-driven turntable \$39.50

For full details and name of dealer write:

COMPONENTS

CORPORATION
Department J

DENVILLE, NEW JERSEY



RENATA TEBALDI

Continued from page 150

—and acting—of the first act of *Bohème* on television are among the best that medium has yet afforded in the realm of opera.

On her curtain calls she does something never before seen on the stage of the Metropolitan Opera House. She closes and opens her outstretched palms in that quick, charming gesture Italians make instead of waving when they say good-by. It means, "come back." Some in the audience unfamiliar with this custom wondered if she were milking the applause, but they were disarmed just the same. And the free are she describes when she flings her right arm to the galleries must be the most beautiful gesture of a public figure since Eisenhower first made his big wingspread from the back of an open car coming in triumph up Broadway.

Her deportment is not always so beguiling. She was also the first Metropolitan prima donna in memory to make the Italian sign of feminine disapproval. The right index finger goes up and waves from side to side to the accompaniment of "Ts, ts—ts, ts—ts, ts." This sound has been heard within those sacred walls since. With Tebaldi it usually has to do with matters of costume and the lower jaw can become quite set. There was a minor crisis over one of the dresses in *Traviata* but it smoothed itself out and she is wearing some of the loveliest gowns yet seen on a New York stage. By and large she is as agreeable as healthy, and a joy to work with.

On tour she travels *en suite*—Mamma Tebaldi, a secretary, and a maid—four people, eighteen pieces of luggage, some of the latter gargantuan. The red-caps take one look and would run in



the opposite direction, but for the yeoman service of Frank Paola, musical secretary and company manager of the Metropolitan, in his diva's behalf. The caravan is like that of an Eastern potentate. The range of possessions is complete. One of Mamma Tebaldi's belongings to make the entire trip was a sad little sprig of ivy in a pasteboard ice cream cup.

The Met's annual spring tour is, for most participants, a succession of Lucullan orgies. "Remember," Serafin once dressed down his frog-voiced troupe in

Continued on page 154

It's AM! It's FM! It's SW! Chapman ffr* GLOBEMASTER HI-FI TUNER



- Excellent sensitivity and selectivity with drift-free tuning
- Worldwide shortwave bands
- Fine tuning with Mullard Tuning Eye
- High quality wideband ratio detector
- Preset volume control
- Twin outputs including 600-ohm cathode follower
- 300-ohm balanced and 75-ohm unbalanced FM aerial inputs

Available in America for the first time, a fine example of England's custom craftsmanship. Fulfills the most demanding requirements of audio perfectionists. Excellent circuitry assures noise-free reception of even weakest signals without interference or distortion... delightful performance. FM Sensitivity: less than 4 mv for 20 db quieting at 22.5 kc deviation and 30% modulation on 300-ohm antenna. Selectivity: 200 kc bandwidth at -3db, 250 kc bandwidth at -6 db. Three short wave ranges from 12.5 meters (2.4 mcs) to 250 meters (1.1 mcs).

Chassis only — \$149.95

Finished hardwood cabinet, mahogany or blonde korina — \$17.95

Custom craftsmanship limits our production to moderate quantities. At quality hi-fi dealers, or order direct.

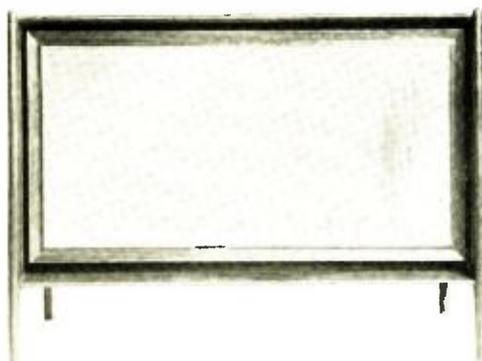
* Full Frequency Range (total FM bandwidth of 45 kc. assures maximum fidelity)

ERCONA CORPORATION
(Electronic Division)

551 Fifth Ave., Dept. 93, New York 17, N. Y.

HIGH FIDELITY MAGAZINE

are you sure you have the best?



FRONT VIEW



SIDE VIEW

Consider the one forward step by which sound reproduction could be vastly improved:

A servo-mechanism that will feed data from speakers to amplifiers and correct distortion even before it begins.

Even the finest conventional sound systems distort . . . the distortion coming from room acoustics, cabinet resonances, and especially the loudspeakers. All this could be dramatically reduced — actually, could have been reduced years ago — by this one change!

The servo principle has been used for years in automation, where servo-mechanisms check output to keep it correct. Obviously, audio engineers have recognized it, too; some have even incorporated a few of the servo-speaker principles in their own sound systems. Yet the speakers and amplifiers available to you have continued to be offered in their conventional form, year after year. *Until Integrand.*

Just off the drawing board, the Integrand is the first complete amplifier-speaker system employing servo techniques. Distortion? The Integrand system permits less distortion in the overall sound than a good amplifier alone will produce under laboratory test conditions! Sound reproduction from the Integrand Servo-System is very, very near the ultimate . . . and very, very superior to any conventional system. Both stereo and monaural systems are available.

There are many other remarkable differences in the Integrand which contribute to superior sound reproduction. Integrand does far more than slash previous distortion levels. Among other new features: Original speaker design. Transformerless, direct coupled amplifiers, one to power each of the three matched speakers. Fully transistored amplifiers and crossovers. Full stereo sound. And an unconditional guarantee for 2,000 hours of operation (about five years).

To get the whole story, you'll want to write for complete specifications, test data and a folder reprinting what the experts are saying about this new system. And you'll want to listen to the Integrand, so we'll send you the name of the audio dealer near you. Write to:

BRAND PRODUCTS, INC. Dept. Q11, Westbury, New York

Marketing organization for Integrand Corporation

I N T E G R A N D[®]
S E R V O S P E A K E R A M P L I F I E R S Y S T E M



Is your pickup a
GROOVE DIGGER?

Ordinary hi-fi pickups—even new models—are often highly destructive to records and styli. The chief reason is their poor compliance and large dynamic mass.

ESL electrodynamic cartridges can greatly prolong the life of your valuable records—and styli, too. Minimum lateral compliance is 6.8×10^{-6} cm/dyne (two to seven times that of most leading pickups), and dynamic mass is only one one-thousandth of a gram.

Not only does the ESL in this way save many times its own cost, but it also sounds better—far better. It can reproduce your records with a naturalness and clarity you've never before experienced. Hear its superiority at your dealers, and write for details.



FOR LISTENING AT ITS BEST
Electro-Sonic Laboratories, Inc.

Dept. H • 35-54 Thirty-sixth Street • Long Island City 6, N.Y.

Concert Series cartridge \$35.95 • Professional Series arm and cartridge \$106.50 • Dust Bug \$5.95

Fun for everyone
at the New **General Oglethorpe**
HOTEL AIR • CONDITIONED
GOLF CLUB • COTTAGES

One of the world's finest resorts offers every facility and activity—swimming, tennis, boating and salt water fishing . . . 18-hole championship golf course at door . . . dancing nightly in the beautiful Riverside Room . . . social director—organized activities and entertainment.
Choice of American or European Plan.

COMPLETE FACILITIES FOR GROUPS AND CONVENTIONS
On Wilmington Island near historic **SAVANNAH, GEORGIA**
LOYD BUMPAS, General Manager
Write today for FREE illustrated Brochure or see your Travel Agent

RENATA TEBALDI

Continued from page 152

Atlanta, "we are also here to sing!" Miss Tebaldi took no part in such debauches. Toward the beginning she attended one ball, barely stayed until supper was served, and went home. Thereafter there were no more parties; but by no means was she ungracious to the local sponsors or the press. On the contrary, she received all comers and never refused an interview or a photograph except when her stern self-imposed rule dictated otherwise.

It was her first tour in this country and far from an easy one—seven thousand miles in little more than seven weeks. She took it in stride. There were more than the expected number of cancellations on the part of other and senior members of the company, but if Tebaldi suffered so much as a sore throat nobody ever knew it. Young artists might well take the lesson of her regimen.

Early to bed, she was usually the first performer in the theater. The business of the evening was not only why she got up in the morning but the reason she was born. Invariably she was the last to leave and never until the last fan's program had been signed. At night her flowers were pushed into the hotel corridors just as in a hospital. The lovely tributes must steal none of the air from the one they honored. In the morning most of them were loaded into a taxi and, like Tosca's, went off to the nearest church altar. Sunday Mass was an obligation, but there were also frequent visits to church in between, a must on performance days.

A string of dolls adorns the top of her dressing room mirror. In Toronto she was seen fondling a toy bear bought for her in the lobby gift shop of the Royal York Hotel. Before she sailed for Italy last summer she treated herself to something she had wanted for years, a real little dog.

Tebaldi probably talks less about herself than any prima donna on record. It is impossible to draw her out. The answers come in monosyllables and sometimes not at all. Regarding her private life it is always a firm "Niente." In New York she and her mother occupy a small but comfortable apartment at the Buckingham Hotel, the haven of a number of prominent musical folk, on West Fifty-seventh Street at Sixth Avenue. Her mother prepares supper for her after performances. She never goes out after the opera. Often she takes a two-o'clock luncheon, and a big one, at La Scala, an amiable rendezvous in West Fifty-fourth Street. Occasionally she lets herself go and has a martini before dinner and a chocolate sundae afterward, but not often. She has shed twenty-five pounds since she first appeared on the New York horizon three seasons ago.

Even though extracting answers is like pulling teeth, a Tebaldi interview is vastly rewarding. Only at close range do you realize how authentic is her beauty, how wholesome and direct her charm. One is driven to the clichés of nineteenth-century poetry in describing her. Her eyes have caught the blue of the Adriatic sky and sea; her skin can be described only as alabaster and the light underneath never goes out. Her laughter is frequent and hearty and unforgettable.

For someone who professed an undying hatred of the Metropolitan and never missed the opportunity to say so, Toscanini displayed a surprising interest in the weekly broadcasts. "Casino" was his name for the house. If you don't know the meaning of that word ask an Italian—but be careful whom. When a feeler was sent up to Riverdale a few years back as to the possibility of the Maestro's appearing one last time on the podium where America first beheld his genius, he shrieked, "The Metropolitan! I will conduct on the ashes of the Metropolitan!" He is said on occasion to have spit into the loudspeaker, and the drawing rooms of Park Avenue rocked with the invective he poured on singers and conductors. Nevertheless, come Saturday afternoon, he was glued to the radio.

Sunday evening, March 13, 1955, Tebaldi had been commanded to dinner at Villa Pauline. The Maestro was in mellow mood. There were recollections of Parma. Before that most savage of audiences Tebaldi sang her second performance in opera. She had so little money she stayed with the porter of the theater and his wife. Was the restaurant still there where the students of the conservatory ate, the old man wanted to know. His lovely guest assured him it was. "I lived on bread and soup," the Maestro reminisced. "I sold my curler to buy scores."

"Scetti, cara," he said. It was the day after Tebaldi's broadcast of *Otello*, and the old man could restrain himself no longer. "You took two breaths at the end of the *Are Maria*." So-and-so," and he mentioned the name, "takes three but it should be done in one."

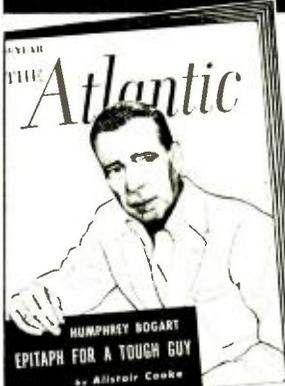
"Maestro," Tebaldi smiled with the sincerity which is her most endearing quality. "if you were conducting I could—and would—do it in one."

After a Wednesday matinee of one of the Lunts' naughtier comedies, a Scarsdale matron was overheard to say to her companion, another Helen Hokinson type, "It is nice to know they are married." This feeling somehow applies to Renata Tebaldi. The public knows she is a nice girl and rejoices in it. The adulation accorded her sometimes borders on what Henry Adams describes as the cult of Mary in the Middle Ages.

Age of anxiety or not, our era has its compensations.

HALF PRICE

for a trial subscription that brings the world's foremost writers in every field into your home



For a fraction of its regular price you can "discover" and enjoy America's most distinctive magazine. The world's best writers, and great thinkers and doers make THE ATLANTIC America's most fascinating and informative periodical. Thousands of smart ATLANTIC readers enjoy each month the best combination of news, fun, information and adult entertainment available anywhere today. Invite THE ATLANTIC into your home for a few months at a spectacular saving, and see for yourself how much real reading enjoyment is packed between the covers of each issue.

Recent Contributors Include:
 Agnes De Mille · Walter Lippmann · Thornton Wilder · Robert Mosek · Sir Orbert Sitwell · Sumner M. Slichter · Archibald MacLeish · Agnes Newton Keith · Henry Cabot Lodge, Jr. · Frances Parkinson Keyes · Catherine Drinker Bowen · John Hersey · John Masefield · Bertrand Russell · J. Frank Dobie · James B. Conant · Christopher Fry · Rebecca West · Al Capp · Paul Hoffman · Clarence Randall · John P. Marquand · and Many Others

SEND NO MONEY — Mail this coupon today

HALF PRICE TRIAL—The regular subscription price of The ATLANTIC is \$7.50 a year, or \$5.00 for eight issues. By accepting this offer now, you will receive 8 issues for just \$2.50—a \$5.00 value, saving you one-half the regular price. Return this coupon to The Atlantic, Boston 16, Mass., TODAY!

OFFER EXPIRES IN 20 DAYS

THE ATLANTIC, Dept. Z-27

8 Arlington St., Boston 16, Mass.

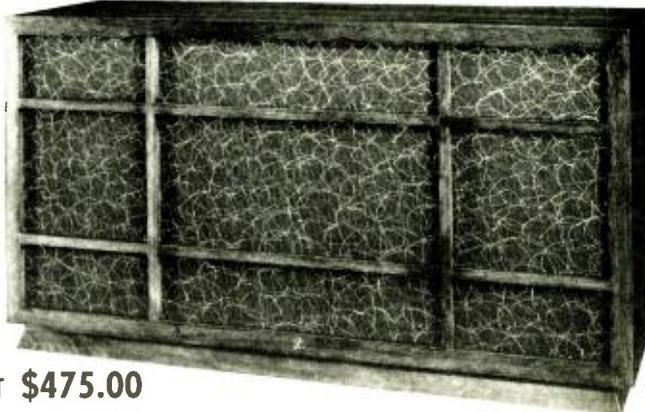
Please enter my half price trial subscription to The ATLANTIC for 8 months and bill me for \$2.50.

Name _____

Address _____

THE FRAZIER *New Yorker*...

DESIGNED TO BRING LIFE-LIKE QUALITY IN WIDE RANGE



NET \$475.00

New plateau in hi-fi! *Living sound*... from the Frazier New Yorker. A true exponential horn with 20-cycle taper rate... folded to house compactly the amazing 202" air column. With an extension of frequency response (30 to 17,000 cycles) which picks up bass notes as low as 20 cycles and soaring string notes... without coloration or "hangover." Even piano and tympani reproduce unbelievably life-like!

The New Yorker crosses over at 800 cycles, using 12DB per octave.

Heavy copper coils and paper condensers are used in the network. Cabinets in dark mahogany, fruitwood-finished mahogany, blond Korina, walnut or ebony. 200 lbs. shipping weight. 48" x 26" x 16 3/4" (front to back).

Write for nearest dealer:


International Electronics Corporation
 2649 BRENNER DR. DALLAS 20, TEXAS

P. O. BOX 13302



marantz

★
...the ultimate goal
of the
critical listener

Audio Console

preamplifier with cabinet \$171*

Power Amplifier

\$198*

Electronic Crossover

\$90*

*slightly higher west of the Mississippi

write for literature

marantz company

25-14 Broadway Long Island City 6, N. Y.

GOING STEREO

Continued from page 55

possibly an old console containing a radio-phonograph can be mustered into service. A radio technician, or you if you're accustomed to tinkering with sound equipment, can readily install a switch that permits the second stereo channel to be fed to the volume control and thence to the following amplifier and speaker of the radio or console. (In working on an AC-DC radio, which does not have an isolating transformer between it and the 117-volt line, precautions should be taken against shock.)

The various ways of adding stereo to a monaural system or assembling a stereo system from scratch are too numerous to list. This is so because each of the elements in my block diagram is available not only individually but also in various combinations, often designed specifically with stereo in view. Several of these combinations which simplify the task of assembling a stereo system will be described briefly.

A few suitable tape decks (transport mechanisms), including a stereo head but no electronics (playback amplifier), are available, among these being the Pentron and Viking. The choice of complete stereo tape machines, including electronics, is greater.

Several audio control units, and some amplifiers and tuners with preamp-control sections, now contain an input circuit designed expressly for tape-head connection. In the same manner as for a magnetic phono cartridge, they furnish the amplification and equalization required by a playback head, thus eliminating the need for a separate tape amplifier. If you install a stereo playback head in a monaural tape machine, then, the machine's playback amplifier can be used for one stereo track, and the other track can be connected to the tape input in your control unit. If more than two or three feet of cable are used between the head and control unit, however, high-frequency response may suffer.

For the audiophile who has a monaural sound installation, a unit such as the Bogen ST-10 "tape adapter-amplifier" can supply all the additional electronics required for the conversion to stereo. It contains two tape-playback amplifiers and a single power amplifier. One playback amplifier feeds the power amplifier in the ST-10, while the other feeds your original monaural system. Pentron's CA-15 is a dual-playback amplifier that fills the basic electronic needs for conversion except for a second power amplifier.

A more elaborate unit such as the Bell 3DTG supplies all the electronic requisites of a stereo system, if you're building from the ground up. It has two tape amplifiers, two power amplifiers, and dual radio and phonograph inputs for these

this.....

makes
this

when you buy
the fabulous

AUDAX TONEARM KIT

A screwdriver... 15 minutes of your time... and the fabulous Audax tonearm kit — that's all you need to own your own compass-pivot Audax Professional Tonearm at a big saving! You'll find accurate assembly of this exclusive kit a very simple affair — with assurance that the final result will be as fine as factory-assembled units! Use any cartridge with your Audax arm. Thrill to the wonderful new difference it makes in your high fidelity system! See your dealer right now!

12" Tonearm Kit \$14.55 16" Tonearm Kit \$17.55

AUDAX • Div. of Rek-O-Kut Co., Inc., Dept. RA5, 38-19 108 St., Corona 68, N. Y.

HIGH FIDELITY MAGAZINE

stereo sources; it is also a true control unit, for it includes gain, tone, and loudness controls, an input selector switch, and several features particularly useful in a stereo installation, such as a speaker reversal switch.

Finally, there are combinations that incorporate a control and power amplifier in the same enclosure as the speaker. Examples are the Ampex and American Electronics units.

PROFESSIONAL two-channel tape equipment has been equipped for some time with in-line (stacked) stereo heads. Such a playback head actually consists of one head mounted directly above another, the two sections operating on the upper and lower halves of the stereo tape. Moderately priced equipment has, until recently, favored the staggered arrangement, utilizing regular playback heads spaced 1 1/4 inches apart and mounted to operate on different vertical halves of the tape. The staggered arrangement is fast disappearing, and the 1957 stereophile is well advised to avoid it.

From the standpoint of the tape recording company, the in-line head is superior with respect to ease of editing the tape. From the user's point of view it facilitates azimuth alignment (maintaining the gap of the head exactly perpendicular to the direction of tape travel, in order to preserve high-frequency response), for he has only one head to orient instead of two. Moreover, the in-line head is the only means of exactly preserving phase differences between the two channels, which many contend is vital to the stereo effect.

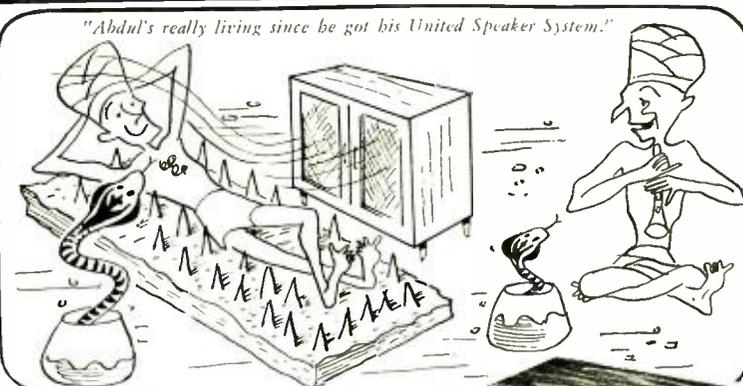
In the early development of the in-line head, its chief disadvantages were high price (one in-line head cost substantially more than two regular heads), and a considerable interaction between the two sections of the head. While this interaction (crosstalk) is of little or no consequence in stereo, it can be disturbing when only one section of the dual head is used to play a half-track monaural tape, since it brings in a whisper of the totally unrelated material on the other track. Manufacturing advances have reduced the cost of in-line heads and diminished crosstalk to negligible proportions, although the purist may still prefer a separate standard head for monaural use.

A stereo system should, if possible, include a master gain control, which simultaneously governs both channels (see diagram). This is a distinct advantage of integrated stereo systems or of dual electronic units such as those of Bogen, Pentron, and Bell.

Having to change level by means of separate controls for each channel can be disconcerting, for this disrupts inter-

Continued on next page

"Abdul's really living since he got his United Speaker System."



HI, FI and HANDSOME.....

New decorator designed, precision crafted cabinet and speaker system in selected woods, hand-rubbed to a glowing patina. Choose rich African Mahogany, Swedish Birch or Pewter Walnut*. SPECIFICATIONS: 8 1/2" AccuSonic Woofer and 3" integral cone Tweeter, 45-16,000 cycle freq. resp.; resistance loaded enclosure for maximum bass. DIMENSIONS: 24"x24"x15 1/2" deep. Write for literature.



AccuSONIC SERIES X-100.... 99.⁵⁰ in Walnut 104.50



the X-200 horn-loaded speaker system \$198.

United SPEAKER SYSTEMS

34 NEW STREET • NEWARK, N. J.

Your **RECORD COLLECTION** deserves **THE VERY BEST!**



RECOTON DIAMOND NEEDLES

World Famous for Quality

RECOTON CORPORATION
52-35 Barnett Ave., Long Island City 4, N. Y.

In Canada: Quality Records, Ltd., Toronto

Before you buy a Stereo system
read Crowhurst's

STEREOPHONIC SOUND

World-famous audio authority Norman H. Crowhurst's new book is the first true assessment of this exciting new medium for realistic sound. "Stereophonic Sound" adds a new dimension to high fidelity and to audio reproduction of all types. The book is devoted to the theory of stereophonic sound, the differences it can make in listening pleasure, what goes into making it successful, and what is needed to bring out the best in the various systems available or likely to be available. It covers such systems as binaural, two- and three-channel stereophonic, stereosonic, and coded stereophonic, and the use of these systems with radio, disc, tape and other media. It applies all this information to selecting the proper loudspeakers and other components for the best home stereo reproduction. The book also covers stereo systems and techniques used for motion pictures. This book will give you the right approach to stereo and save you hundreds of dollars by guiding you to the choice of the right equipment.

≡209.....only \$2.25

You'll get so much more out of your
Hi-Fi equipment with these Rider Books:

HIGH FIDELITY SIMPLIFIED (3rd Edition)

by Harold D. Weiler

Gives you the complete up-to-the-minute hi-fi story, and answers all questions about tuners, changers, amplifiers, tape recorders, speakers, record players, etc. No other book like it!

≡142.....only \$2.50

REPAIRING HI-FI SYSTEMS

by David Fidelman

Deals with finding the troubles and repairing the faults in hi-fi equipment. Encompasses the repair of tape recorders, record players, changers, AM and FM tuners, preamps, amplifiers and loudspeakers. Typical troubles are analyzed and repaired through a system of logical steps. Will save time and money!

≡205.....only \$3.90

HI-FI LOUDSPEAKERS & ENCLOSURES

by Abraham B. Cohen

This hi-fi classic answers all your questions about loudspeakers and enclosures, design, cross-over networks, construction of own networks, etc.

≡176, leather finish MARCO cover.....only \$4.60

≡176-H, cloth bound.....only \$5.50

GUIDE TO AUDIO REPRODUCTION

by David Fidelman

For the audio enthusiast with a technical background. Treats design, construction, assembly and testing of sound reproduction systems and components.

≡148.....only \$3.50

HOW TO SELECT & USE YOUR TAPE RECORDER

by David Mark

For the user of magnetic tape recorders — and to serve as a guide in selecting a machine that most suitably meets individual requirements. Illustrates actual set-ups for the many different applications of tape recorders. Read this book before you buy a tape recorder . . . it will save you many dollars!

≡179.....only \$2.95

HOW TO SERVICE TAPE RECORDERS

by C. A. Tutthill

Discusses the tape recorder and its operation. Explains the types of circuits, drive mechanisms, troubleshooting and repair.

≡167.....only \$2.90

ORDER TODAY! These books are sold by electronics parts jobbers and bookstores. If your dealer does not have the books you want, mail this coupon to us.

John F. Rider Publisher, Inc.
116 W. 14th Street, New York 11, N. Y.
I have enclosed \$_____ Please rush the
books I have circled. _____
209 142 205 176 176-H 148 179 167
Name _____
Address _____
City _____ Zone _____ State _____
Canadian prices approx. 5% higher. HF-11

GOING STEREO

Continued from preceding page

channel balance, which is vital to the stereo effect and may have been attained through considerable care. As experimentation by the user will reveal, best results may or may not be obtained by equal level on each channel for each tape. Once the correct balance for a given installation or for an individual tape has been ascertained, it is certainly convenient to be able to vary the overall gain without upsetting the balance.

In determining correct balance between channels a balance control is also useful. This maintains the joint total output of the two channels virtually constant while the level of one is varied with respect to the other. Still another refinement is the inclusion of master bass and treble tone controls, each governing both channels. Balance and master tone controls are supplied in the Bell 3DTG.

You can put together a stereo system at very little cost, but this does not signify that component quality is less important in stereo than in monaural reproduction. In the early excitement many observers, including high-fidelity experts, thought that stereo was far less demanding than conventional reproduction in terms of wide frequency response, low distortion, and speaker quality. Longer exposure to the new sound, however, has demonstrated that these factors are just as important in stereo. True, for moderate-grade equipment stereo can add substantial pleasure. But this is true for high-grade equipment, too.

Most of us have enough of a problem getting one high-quality speaker system of substantial size into our homes. Two may prove to be inadmissible. Fortunately, in recent years there have come forth some remarkable speaker systems that are physically small but excellent in quality.

An interesting approach toward a speaker system that is small yet adequate in frequency response is reflected in the Ampex amplifier-speaker combination, wherein the frequency characteristic of the amplifier is specifically tailored to compensate for the decline in speaker output at the low and high ends of the audio spectrum.

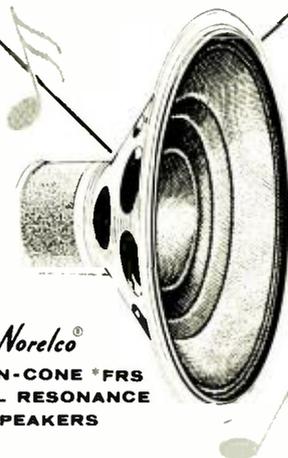
AUTHORITIES generally agree that best stereo results are produced by matched speaker systems. The importance of matching stems from the fact that even the best speakers deviate appreciably from flat response. A given frequency may appear in both channels of a stereo source at slightly different levels. However, the discrepancy in output of two unlike speakers at this fre-

Continued on page 160

FULL FIDELITY MUSIC ENJOYMENT

TWIN-CONES IN A SINGLE

F.R.S. SPEAKER
COVER THE
AUDIBLE RANGE



Norelco®
TWIN-CONE *FRS
*FULL RESONANCE
SPEAKERS

In a single speaker, Norelco has created an unusually efficient sound radiator. These twin-cone speakers incorporate a small cone for reproducing high frequencies and a large cone for lower frequencies. Both cones operate in conjunction from a single voice coil—producing balanced sensitivity and uniform sound for all ranges. Arrangement of both cones reflect and diffuse the sound while moving in phase to provide even sound distribution.

A deep air gap within a homogeneous magnetic field provides unusually large movement of the voice coil resulting in distortion-free reproduction over the entire frequency range. Impedance does not diminish with higher frequencies and volume is practically constant throughout the whole audible range.

Send today for your catalog on Norelco® FRS Twin-Cone Speakers. It contains specification data, sound distribution curves, frequency characteristics on these speakers as well as the new Norelco Speaker Enclosures.



Send to Dept. K11 for more details

NORTH AMERICAN PHILIPS CO., INC.
High Fidelity Products Division
230 Duffy Ave. Hicksville, L. I., N. Y.

HIGH FIDELITY MAGAZINE

music listener's bookshop



Save yourself time and trouble by ordering your books directly from us. Just fill in the coupon below and mail it to us with your remittance.

Three recent books by three experts

HANDBOOK OF SOUND REPRODUCTION

By **EDGAR VILLCHUR**, inventor of AR loud-speaker systems and president of Acoustic Research, Inc.

Here is A-1 information about all aspects of sound reproduction, acoustics, and the necessary components. Written by one of the foremost authorities in the field, the book is organized in a way similar to home training courses. It fully covers a difficult technical subject in a manner which will provide pleasure and profit to the high-fidelity enthusiast. \$6.50 **249**

HIGH FIDELITY: THE WHY AND HOW FOR AMATEURS

By **G. A. BRIGGS**, designer and manufacturer of Wharfedale loudspeakers.

"... holds something for everyone. For the amateur, for whom it was written, it holds a bit of everything, in suitably compressed form, and must inevitably leave him with a feeling that he has acquired a general working background to the whole subject. . . . It deserves a wide readership, and I am certain it will secure it."—**HI-FI NEWS** (England) \$2.95 **250**

UNDERSTANDING HI-FI CIRCUITS

By **NORMAN H. CROWHURST**

Here the audiophile will find the answers to questions often confusing. The chapters are: special output stages, feedback, damping, inverter and driver stages, input stages, matching, equalization, speaker distribution and crossovers, loudness and volume controls, tone controls. Hard cover, \$5.00 **254**
Soft cover, \$2.90 **255**

Continuing best sellers

HIGH FIDELITY RECORD ANNUAL: 1956

Edited by **ROLAND GELATT**. The second volume of *High Fidelity Record Annuals*. Included in this collection are reviews of classical and semiclassical music and the spoken word which appeared in **HIGH FIDELITY** Magazine from July 1955 through June 1956. Comparisons with recordings of previous years are emphasized. A performer index is included. \$4.50 **237**
HIGH FIDELITY RECORD ANNUAL: 1955 \$4.95 **201**

MAINTAINING HI-FI EQUIPMENT

By **JOSEPH MARSHALL**. A much needed book on the specialized approach necessary to service high-fidelity equipment. The author discusses not only electronic faults, but the mechanical and acoustical defects which cause a hi-fi system to function less than perfectly. The book is clearly written and well indexed. Hard cover, \$5.00 **232** Soft, \$2.90 **233**

HIGH FIDELITY: A PRACTICAL GUIDE

By **CHARLES FOWLER**, Publisher, **HIGH FIDELITY** Magazine

Whether your budget is small or large, whether you are a beginner or a devotee from way back, this complete and definitive guide can help you get the most enjoyment out of your high-fidelity system.

Here is the practical expert advice needed by everyone who has, or expects to have, a high-fidelity system. Starting with an introduction to sound, the author then describes the various links in the hi-fi chain, explaining their features and specifications so as to provide the most helpful criteria for evaluating, and for selecting and matching components. \$4.95 **234**

Now available — the revised edition of *Greene & Radcliffe's* extremely popular

THE NEW HIGH FIDELITY HANDBOOK

A complete, practical guide for the purchase, assembly, installation, maintenance, and enjoyment of high-fidelity music systems. Includes the latest information on equipment, 250 illustrations, diagrams, and plans. \$4.95 **251**

"... Messrs. Greene and Radcliffe, two gentlemen whose knowledge of hi-fi is only slightly less than awesome. Whoever said that 'reading maketh a full man' was right — at least as concerns this book. Read it through, and you will arise full of knowledge." — *Deems Taylor*

WHAT TO LISTEN FOR IN MUSIC

By **AARON COPLAND**. The revised edition of a book which made it possible for thousands to increase their enjoyment of music through creative listening. \$3.95 **247**

THE FORMS OF MUSIC

By **SIR DONALD TOVEY**. Written by one of the most literate and profound of modern interpreters of music these essays are drawn from those articles which Tovey prepared for the *Encyclopaedia Britannica*. Paper, \$1.35 **239**

Book Department
HIGH FIDELITY Magazine
Great Barrington, Mass.

I enclose \$ for which please send me, postpaid, the books indicated by the circled numbers below. (No C.O.D.s or charge orders, please.) Foreign orders sent at buyer's risk. Add 55¢ per book for postage on foreign orders except Canadian.

Binder 7b \$2.95 each
Unmarked binders \$2.75 each
HIGH FIDELITY RECORD REVIEW INDEXES — 50¢ each
 1954 1955 1956

NAME	.....	201	247
	.....	232	249
	.....	233	250
ADDRESS	.....	234	251
	.....	237	254
	.....	239	255

**BUILD THE SUPERB
PERI-50**
50 WATT—
100 WATT PEAK

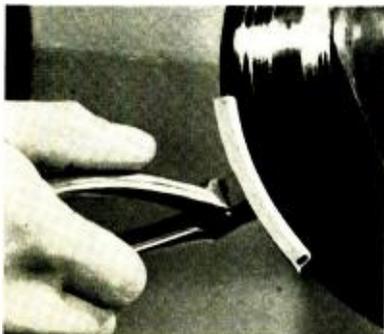


\$69.75
CALIF. RESIDENTS
ADD 4% SALES TAX

The DEEP-ETCHED copper circuit board replaces all wiring and guarantees that every PERI-50 AMPLIFIER built will perform exactly like the laboratory original—whether built by amateur, audiophile or electronic engineer!

ORDER DIRECT FROM
PRINTED ELECTRONIC RESEARCH INC.
4212 LANKERSHIM BLVD. NO. HOLLYWOOD, CALIF.
CHECK OR MONEY ORDER COD.
SEND FREE BROCHURE DEPT. A-3

Name
Address
City Zone State



LOOK

No Hands

Keep your valuable records new with the MIRAGRIP Record Pliers.

- No marks
- No scratches
- No thumbprints

A precision instrument. Beautifully made by British craftsmen. THE IDEAL Hi-Fi CHRISTMAS GIFT only 4.95 postpaid

Clip this ad—send with check or M. O. Include name and address. N.Y.C. residents please include 15 cents sales tax.

Hi-Fi HQ

150 east 46th st./new york 17, n.y.

GOING STEREO

Continued from page 158

quency may be such as to alter markedly the relative level of two channels, quite possibly to the extent of reversing the apparent direction of the sound.

While dispute continues about the primary cause of the stereo illusion—time delay, phase and amplitude differences, change in waveform due to interposition of the head, etc.—it is agreed that the stereo effect derives principally from the frequencies above 800 cps or so. Therefore, it appears that the need for close matching is limited to the treble units of a speaker system. Savings in effort, expense, and space are possible as results of not having to be too much concerned about matched response at the low end.

In the final analysis, the stereo illusion depends upon speaker placement. An early view favored the corner location, with the speakers facing inward. This has given way to the recommendation that, for better distribution of the highs, the speakers face straight down the room, and be situated in the corners if they are against a narrow wall or at intervals if against a wide wall. The relative size of these intervals is a subject for experimentation, although it is usually suggested that they be equal. Another suggestion is that if the speakers are located at intervals, one may try facing them outward at an angle of about 45°. The last arrangement is sometimes employed when all speakers are in one housing.

You can experiment with speaker location in many other ways. For example, one speaker might face straight down the room while the other is angled inward or outward. Or the speakers might be placed against different walls at various angles, which may be helpful if the room furnishings or contours are unsymmetrical. But you don't need to feel that you will be confronted with a needle-in-the-haystack problem of finding the one correct speaker arrangement out of many possibilities. Ordinarily, the stereo illusion does not vary critically with slight changes in spacing between speakers or their angle relative to each other. Moreover, facing the speakers straight down the room is apt to yield good results in nearly every case, since recording engineers have this kind of setup in mind when they place their microphones.

It is fun, if you have the time and facilities, to do fairly extensive experimentation. But bear in mind that the improvement you seek just *might* be obtainable by sitting elsewhere in the room, or by changing the relative levels of the two channels.



TRADER'S MARKETPLACE

WHOLESALE CATALOG 10: Recorders! Tapes! Typewriters! Radios! Towers, Box 155, Philadelphia 5, Pa.

FOR SALE: Marantz Audio Console! \$125.00. J. M. Edelman, M.D., 700 Commerce Bldg., Baton Rouge, La.

FOR SALE: Genuine Klipschorn, laboratory model, style B. Original cost \$593. Sell \$475. J. M. Edelman, M.D., 700 Commerce Bldg., Baton Rouge, La.

UNHAPPY WITH "HI" hi-fi prices? So alright already... Write already. Key Electronics Co., 120 Liberty St., New York 6, N. Y. Evergreen 4-6071.

LEARN WHILE ASLEEP with your recorder. Amazing book gives full instructions. \$2.00. Guaranteed. Research Association, Box 610-HF, Omaha, Neb.

SPEAKER CABINETS. Manufacturers' over run—brand name enclosures, genuine mahogany, completely finished, with, or without speakers. 50% off audiophile list. Write for details. Custom Craft, P. O. Box 304, Jasper, Indiana.

WANTED: ELECTRO-VOICE FM boosters. State condition and price. Charles V. Thayer, Breezy Hill Rd., Springfield, Vermont.

HIGH FIDELITY 1-50, \$25, plus postage. C. M. Carter, 8-239 Colony St., Winnipeg 1, Manitoba, Canada.

CANADIAN HI-FI speaker system kits, superb performance, complete, including famous British loudspeaker, pre-finished. Lowest prices. Free brochure. Radius Co., P. O. Box 349, Dunnville, Ont., Canada.

TAPE RECORDER MECHANISMS wanted. Manufacturers please send specs to Box HF, The Publishing House, Gt. Barrington, Mass.

CONCERTONE TWR-2595 portable with amplifier and speaker. Best offer takes. Jim Norris, Rt. 11, Box 684, Ft. Worth, Tex.

ALTEC 604 SPEAKER in beautiful mahogany Altec enclosure. Perfect. \$95.00. W. Barrow, Box 636, Tryon, N. C.

6 ELEMENT BROAD BAND FM antennas. All seamless aluminum. \$10.95 ppd. Wholesale Supply Co., Lunenburg, Mass.

HIGH FIDELITY, issues 1-26 except 11, \$25.00. Express collect. Dr. N. B. Baroody, 1315 Madison Ave., Florence, S. C.

FAIRCHILD 225A CARTRIDGES, new in factory sealed cases. \$37.50 net, yours at \$27.50. A. Gebaide, 356 South 1st St., Brooklyn, N. Y.

GOODMANS 8-1200 ARU speaker enclosure kit—already built. Brand new condition. Walnut finish. \$65.00 plus shipping charges. The Publishing House, Box EW, Gt. Barrington, Mass.

ALL COPIES HIGH FIDELITY 1-54, \$40 plus shipping. A Schanes, 1717 Kennedy Dr., Camden, S. C.

TAPE RECORDERS, TAPE. Unusual values. Free catalog. Dressner, 69-02K, 174 St., Flushing 65, N. Y.

HIGH FIDELITY SPEAKERS REPAIRED. Amprite Speaker Service, 70 Vesey St., N. Y. 7. BA. 7-2580.

FOR SALE: First 45 issues of HIGH FIDELITY. Make offer. Harry A. Kraftson, 314 Cynwyd Rd., Bala-Cynwyd, Pa.

WHAT NICER GIFT for the apple of your eye than a diamond stylus or stylus microscope; or a tape of enchanting holiday or classical music by the masters. Gift wrapped for Christmas. Tape Recorder Sales. 433 South Wabash Ave., Chicago 5, Ill.

SALE: 78 R.P.M. RECORDINGS. Send stamped, addressed envelope for first list. Rareties. Ellie Hirschmann, P. O. Box 155, Verona, N. J.

FREE MONTHLY HI FI BULLETIN. Write for quotations on any components. Sound Reproduction, Inc., 34 New St., Newark, N. J. Mitchell 2-6816.

TAPE RECORDERS: hi-fi components, tapes at wholesale prices! Free catalogue. Carston, 215-H E. 88 St., N. Y. C. 28.

PROFESSIONAL DIRECTORY

• CALIFORNIA •

EVERYTHING IN HI-FI SOUND EQUIPMENT

FEATURING **AMPEX** WORLD'S FINEST TAPE RECORDERS
MAGNETIC RECORDERS

SANTA MONICA SOUND
12436 Santa Monica Blvd.
West Los Angeles 25 GRanite 8-2834

• NEW YORK •

FOR THE TOPS IN VALUE AND THE BEST TRADE-IN ON HIGH FIDELITY EQUIPMENT
Check with Arrow!

ARROW ELECTRONICS INC

65 Cortlandt St., New York 7, N. Y. Digby 9-4730
525 Jericho Turnpike, Mineola, N. Y. Pioneer 6-8686

• PENNSYLVANIA •

Stereophonic Tapes
Save Time & Money
All Brands over 300 Titles
1200 ft. Plastic Recording Tape \$1.59
Write for complete catalog & prices
We mail everywhere

Hi-Fidelity Electronic Sound Corp.
368 Montgomery Ave.
Merion Station, Penna.

• CANADA •

IN MONTREAL . . . IT'S

PECK'S
FOR HIGH FIDELITY

All the better high fidelity components at not prices. Also a wide selection of Equipment Cabinets and Speaker Enclosures.

TREVOR PECK CO. LIMITED
1498 Sherbrooke St. West, Montreal, Que.

the finest in Hi-Fi
featuring **ElectroVoice**
HIGH FIDELITY COMPONENTS

SOUND CORPORATION

820 W. Olympic Blvd. • L.A. 15, Calif. • RI 7-0271



TAPE RECORDERS
EXCEPTIONAL VALUES
HI-FI COMPONENTS
NATIONAL BRANDS
WRITE FOR FREE CATALOGUE

CARSTON 215 HM E. 88 ST.
NEW YORK 28, N.Y.

• GREAT BRITAIN •

HI-FI FROM BRITAIN

We stock the finest British Hi-Fi equipment available, and export it to all parts of the world. The cost of this precision built equipment will amaze you. Send for our Special Export Catalogue.

CLASSIC
ELECTRICAL CO. LTD.
352-364 Lower Addiscombe Rd., Croydon, Surrey, England

Since 1944

HOLLYWOOD ELECTRONICS
HI-FI COMPONENTS EXCLUSIVELY
featuring **ElectroVoice**

7460 MELROSE AVENUE
Los Angeles 46, Calif. • WE 3-8208

FREE STEREO TAPE CATALOGUE
No Club Membership Required
MAXIMUM SAVINGS

CARL FISCHER INC.
WORLD-FAMOUS MUSIC PUBLISHERS
Dept. H1, 165 W. 57 St., N.Y. 19, N.Y.

send for famous Bulletin G . . . it's free!

HIGH-FIDELITY HOUSE

Most complete stock of Audio components in the West

Phone: RYan 1-8171
536 S. Fair Oaks, Pasadena 1, Calif.

CUSTOM INSTALLATIONS
Sound Reinforcement & Television Systems for the discriminating

Featuring **HOME AMPEX** SALES RENTALS SERVICE
PROFESSIONAL MAGNETIC RECORDERS

Specialized equipment built to order
AKG Microphones — ALTEC Consoles
OPEN EVENINGS

Hi-Fi HQ
150 E. 46th St., N. Y. C. - PL 5-2650



CHRISTMAS SEALS



• ILLINOIS •

ALLIED HI-FI STORES

ALLIED RADIO CORP.
100 N. Western Ave., Chicago 80, Ill.

EVERGREEN ALLIED HIGH FIDELITY, INC.
2025 W. 95th St., Chicago 43, Ill.

VOICE AND VISION, INC.
921 N. Rush St., Chicago 11, Ill.

ALLIED HIGH FIDELITY STORES, INC.
602 Davis St., Evanston, Ill.

WEST SUBURBAN ALLIED HIGH FIDELITY, INC.
7055 W. North Ave., Oak Park, Ill.



UNHAPPY WITH "HI" HI-FI PRICES?

Write us your Hi-Fi Needs

KEY ELECTRONICS CO.
120 LIBERTY ST.
NEW YORK 6, N.Y.
EVERgreen 4-6071

• NEW JERSEY •

4 Highlights of Concerts, Livingstons, Omegatapes and Replica libraries plus maximum savings on all Stereo Tapes from most complete stock anywhere! All for \$9 full year membership

STEREO TAPES FREE

STEREOPHONIC MUSIC SOCIETY, INC.
303 Grand Ave., Palisades Pk., N.J.

• OHIO •

IN CINCINNATI AND THE TRI-STATE AREA

- COMPETENT ENGINEERING
- COMPONENTS AT NET PRICES
- SERVICE ON ALL HI-FI COMPONENTS

Customcrafters, Inc.
2259 Gilbert Ave., CA 1-3153 - Cincinnati 6, Ohio
"A Component or a Complete System"

CHANGE OF ADDRESS

If you plan to move soon, please notify us six weeks in advance. Give old address as well as new, clipping stencil imprint from wrap-per of last copy received.



MISS BLANCHE THEBOM... star of the Metropolitan Opera Company and the new Scott Custom High-Fidelity Portable Phonograph



A distinguished name—a new idea!
Liberty Presents

THE **SCOTT**
Custom

Portable HIGH-FIDELITY PHONOGRAPH with
DETACHABLE SPEAKER LID

Employing the basic principle of High-Fidelity Reproduction—the speaker placed separately, away from the changer and amplifier—this marvelous new instrument will reproduce your finest symphonic and operatic recordings, as well as all your popular records, with "presence" rarely heard even in expensive consoles. Comes in handsome Kalistron finish—black, brown, eggshell, or gray. Price, including **DIAMOND NEEDLE** **19950**



Write for free brochure.

450 MADISON AVE. AT 50TH ST., N. Y.
975 MADISON AVE. AT 76TH (Hotel Carillo) N. Y.
795 MADISON AVENUE AT 67TH ST., N. Y.
228 EAST POST ROAD, WHITE PLAINS, N. Y.

LIBERTY Music Shops

LIBERTY Music Shops

AUDACIOUS OCULIST

Continued from page 58

must have been fully aware of the Chevalier's reputation among fellow Londoners of his own eminence, yet he chanced his sight with this unsavory charlatan.

The London *Chronicle* of August 21, 1758 carried a provocative poem entitled *On the Recovery of the Sight of the Celebrated Mr. Handel by the Chevalier Taylor*, which, in suspiciously familiar language, reports a conversation between Apollo and Handel's beseeching friends. The fourth stanza reads: "Strait Apollo replied: 'He already is there; / By mortals called Taylor and dubb'd *Chevalier*: / Who to Handel (and thousands beside him) shall give / All the blessings that sight in old age can receive.'" Was this one of the Chevalier's usual plants? The seventh stanza, echoing Taylor's stock reply to his critics, throws indirect affirmation on the suspicion: "Hence the barking of Envy shall now soon be o'er/, And Jealousy raise her false cavils no more; / For the Wise will think Facts, the most stubborn of Things, / When testit[ied] too by Dukes, Princes, and Kings."

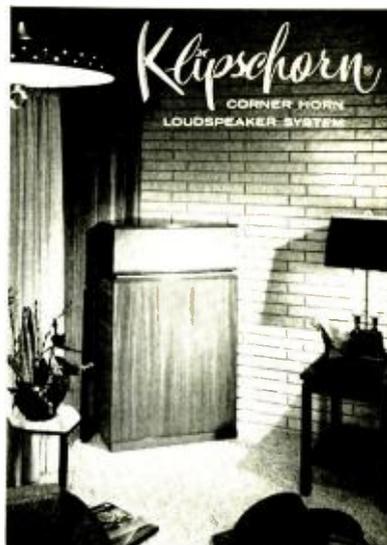
No witness has recorded the meeting between Handel and Taylor, between the enormous hulk of a blunt, uncouth German and the slim, elegant, artful dodger of an Englishman—more the shame in view of the untold serio-comic dramatic possibilities of the encounter. The only attested fact is that Taylor operated on Handel (surgery again not detailed). The massive Saxon went home to die eight months later, on April 14, 1759, of either a coronary occlusion or a cerebral hemorrhage. Just a few hours before his death he had collapsed while receiving a thunderous ovation for a pre-Easter performance of his *Messiah*.

Here, too, there is no evidence of Taylor's responsibility for his patient's death. The old court musician, already seventy-four, had continued to work,



half-blind, for eight months post operatively before succumbing to an inexorable arteriosclerosis. In fact, Taylor himself may have been a victim—of his very ethical predecessors. There has long been medical conjecture that Handel developed glaucoma secondary to Drs.

Continued on next page



**WHY KLIPSCHORN
SYSTEMS NEVER
BECOME OBSOLETE**



When you buy a KLIPSCHORN loudspeaker system you have the assurance that you have made a permanent investment in fine sound reproduction. The corner bass horn is basic—the design optimum. The straight-axis exponential midrange horn is demonstrably the only suitable form—and again the design is optimum.

Improvements continue to be made, of course, as in drivers and crossover networks. And, as new models of these are developed, they are tested in our research laboratory. When found to represent advances over previous models they are incorporated into new KLIPSCHORN systems. They are also made available to owners of old systems for modernization.

But these changes will not affect the basic structure of either bass or midrange horn or the outward appearance of the entire system.

As a result, all KLIPSCHORN systems may be kept up to date with future developments. In the same way, all existing systems, from serial number 13, may be brought up to 1958 performance by the replacement of one or more components.

That's why you can buy your ultimate loudspeaker now—with a KLIPSCHORN system.

KLIPSCHORN systems from \$470 to \$797—SHORTHORN systems from \$185 to \$429.

KLIPSCH & ASSOCIATES
HOPE, ARKANSAS

**FOR A SOUND
INVESTMENT ...
USE A QUALITY CRAFTED
DIAMOND STYLUS**

only **\$10**

Our skilled diamond craftsmen convert your present needle to a genuine, unconditionally guaranteed diamond needle! Send or bring your replaceable needle, check or money order for \$10. Specify either 33 or 78 rpm. If desired, new shaft supplied, \$2.75 additional.

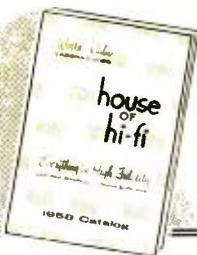


DIAMOND STYLUS CO.

Dept. HFN.
31 WEST 47 STREET
N. Y. 36, N. Y.

FREE!
1958 CATALOG

Hundreds of
Bargains in Hi-Fi
From the Nation's
Leading
Manufacturers!



COMPLETE STOCKS
ONLY 10% DOWN - EASY TERMS
TOP TRADES OFFERED



WORLD RADIO
house of hi-fi
34th & Broadway
Council Bluffs, Iowa

Please Send Your FREE 1958 CATALOG!

Name: _____

Address: _____

City & State: _____

AUDACIOUS OCULIST

Continued from preceding page

Sharpe's and Bramfield's operations; if so, Taylor inherited a difficult situation where, without modern diagnostic instruments, a differential diagnosis between glaucoma and cataract may have been impossible. In this instance at least, the Chevalier may have been innocent of medical hysteresis and guilty only of an honest mistake.

Despite Handel's obvious blindness following his surgery, however, the Chevalier's hypomanic genius drove him to mark the composer a success. He con-



tinued his peregrinations through England, at once confounding his critics and delighting his patients, spreading good cheer and doubtful light among his countrymen. Then, in 1761, having brought his monumental three-volume travail to a successful *accomplissement*, he quit England, never to return. His first intent was to reap the delightful Continental fruits of his previous sowings unencumbered by professional matters, but the call of quackery was too seductive, until 1768 when an ironical blindness brought his performances to a reluctant halt. Helpless, perhaps even contrite, his submanic genius spent, he retired to the serenity of a convent in Prague, where he died, unobtrusively, in 1772.

However dubious his surgical mortality record may be, the Chevalier John Taylor is not guilty of the deaths of either Handel or Bach. In all impartiality, his record may even match those of more ethical colleagues. That he added to the lore of the uproarious eighteenth century, no one can doubt; that he contributed to the legacy of robust laughter inspired by the genuine rogue is undisputed fact. Therefore, the best — and the worst — that may be said of him is a paraphrase of one critic's opinion: "He was a coxcomb, but a coxcomb of parts."



Rauland

"Golden Series" HI-FI

The "GOLDEN CREST" 20-Watt Amplifier...with continuously variable contour control for Fletcher-Munson correction...

one of a complete line of advanced design high fidelity tuners, amplifiers and components...

hear these quality RAULAND units at your Hi-Fi dealer or write for details...

RAULAND-BORG CORPORATION

3515 W. Addison St., Dept. F, Chicago 18, Ill.

Buy Hi-Fi Diamond Needles At Lowest Cost Today

Liberty mfrs. and sells direct to high fidelity lovers every type phono needle made at low Liberty Net (L.N.) prices. Specially designed for Hi-Fi, they have longest life and lowest possible distortion.

Below are our most popular needles listed by name of cartridge and model number. (Cartridge is part that needle fits in.) This information is usually on cartridge itself. If you needle is different than these, or you are not certain what needle you have, fill in information requested at bottom of ad. We will supply you with proper needle.



- #1 SONOTONE—Comb diamond & sapphire needles. Fits all 2T Cartridges. For 3T cartridge order #1A. LNS1195.
- #2 C1—modernizes cartridges RFX D47 to 063. Comb diamond & sapphire LNS1195. Dual diamond LNS1195. Replacement top only—diamond LNS995. sapphire LNS149. #3 fits cartridges RFX D40 to 046, 061, 063, 90. Single diamond LNS995. sapphire LNS149.
- #4 MURPHY—fits cartridges 560133 to 560170. Diamond and sapphire needles LNS1195.
- #5 BOSTON—single diamond, fits all DT-60 series, RA 284 series, RFX4 cartridges. LNS995.
- #6 SLOAN—single diamond for cartridges P30 to P94 and all W series cartridges. LNS995.
- #7 BIFATIL—Comb diamond, sapphire needle. Fits Webcor changers, CWT-Size 3T LNS1195. #8 Single diamond, fits AC and ACD series LNS995. #9 Single diamond, fits cartridges CAC & CQ series. QT & LQ 36 to 62. LNS995.

Liberty makes any needle at low Liberty Net (L.N.) prices. Diamond \$9.95. Dual diamond \$19.95. sapphire \$14.95. dual sapphire \$19.95. diamond, sapphire \$11.95. dual diamond \$14.95. diamond, sapphire \$16.95. Order today.

LIBERTY GUARANTEE—immediate delivery plus immediate refund for any reason GUARANTEED. Postage paid by Liberty.

Order from LIBERTY HI-FI NEEDLE CO., REGD. PARK, N.Y.

Please send me _____ of Needle # _____ as listed above. My needle is different than above, send the following _____ Below I've written name, number and letters on cartridge. (Cartridge is part that holds needle) _____ or I don't have above information—here is make and model of phonograph _____

_____ or enclosed is my present needle, duplicate & return. Enclosed is \$ _____ cash. _____ check. _____ M.O., or _____ send C.O.D. plus shipping charges.

Name _____ Address _____ City and State _____



ADD HOLT STEREO!

MONAURAL THEN SOUNDS LIKE STEREO.

6 tube converter and amplifier compliments any hi fi system. It begins where hi fi leaves off. Connects in 2 minutes.

Happy customers in 31 states and 9 foreign countries.

\$62.00 postpaid in U.S. Sold direct, only, on a moneyback trial.

Order yours or send for folder with High Fidelity magazine "Test Report". Read what customers say.

STEREO by HOLT

4712 W. Magnolia Blvd.
Burbank, California

Note: No waiting, now, but no foreign orders, please, except through exporters.

Definitive Sound

by



Model A10 Speaker System

a logical companion to the most distinguished components in the audio field.

\$99.50

INTERNATIONAL
SCIENTIFIC
INDUSTRIES CORP.
COLORADO SPRINGS, COLORADO
Address inquiries to:
SALES OFFICE, 15 ELLIS ROAD
WESTON, MASS.

Keep Your Records Young!

No more brushing spraying
or wiping records, leaves no
residue
Use the



**DIS-
CHARGER**

Imitated but not duplicated.

This tiny plastic device contains a radioactive material which constantly ionizes the air in its vicinity, drawing off the static electricity generated by your records.

Static electricity causes records to attract and hold dust. Use of the Dis-Charger eliminates the static electricity and allows the stylus to pick up the dust and clean the record in a few plays. Records now no longer attract dust and stay clean and noise free.

½ gram — clips to any pickup arm.
Lasts indefinitely
See your local distributor
or shipped postpaid, only **\$4.50**
Each

**MERCURY SCIENTIFIC
PRODUCTS CORP.**
1725 W. 7th ST.
LOS ANGELES 17, CALIF.

Pat. App. For

ADVERTISING INDEX

Key No.	Advertiser	Page
1	AMI, Inc.	147
2	Acoustic Research, Inc.	12
3	Airex Radio Corp.	140
4	Allied Radio Corp.	8, 9, 162
5	Altec Lansing Corp.	13, 59, 62
6	American Electronics, Inc.	113
7	Ampex Corp.	106
8	Angel Records	Indexed on 66
9	Arrow Electronics	162
10	Atlantic Monthly Magazine	155
11	Audax, Inc.	156
12	Audio Devices, Inc.	Inside Front Cover
13	Audio Exchange	165
14	Audio Fidelity Records	Indexed on 66
15	Audiogersh Corp.	32, 33
16	Bell Sound Systems, Inc.	15
6	Berlant Recorders	113
17	Bogen, David, Inc.	Back Cover
18	Book-of-the-Month Club, Inc.	5
19	Bozak, R. T., Co.	125
20	Brand Products, Inc.	153
21	British Industries Corp.	42, 120
22	Capitol Records	Indexed on 66, 110
23	Carston Studios	162
24	Chapman	152
	Christmas Seals	162
25	Classic Electrical Co.	162
26	Collaro	60
27	Columbia Phono	146
28	Columbia Records	Indexed on 66
29	Components Corp.	152
6	Concertone Recorders	113
30	Concord Record Corp.	Indexed on 66
31	Conn Organ Corp.	99
32	Conrac, Inc.	40, 41
34	Customcrafters	162
35	Decca Records, Inc.	Indexed on 66
36	Diamond Stylus Co.	163
37	Du Pont "Mylar"	102
38	Dyna Co.	150
39	EICO	142, 143
40	Electro-Sonic Laboratories, Inc.	154
41	Electro-Voice, Inc.	17-20
42	Elektra Records	Indexed on 66
43	EMC Recording Corp.	109
44	Epic Records	Indexed on 66
24	Ercona Corp.	112, 152
45	Esoteric Records	Indexed on 66
46	Experiences Anonymes	Indexed on 66
47	Fairchild Recording & Eqpt. Corp.	145
48	Ferro Dynamic Co.	29
24	Ferroglyph	112
49	Fischer, Carl, Inc.	162

Continued on next page



audio exchange

IS YOUR BEST SOURCE FOR

**ALL
LEADING AND
PROVEN
COMPONENTS**

Use this **7** point
check list and
compare!

- FABULOUS TRADE-INS — Hi-Fi Bargains
We specialize in trading by mail
- TIME PAYMENT PLAN
(Metropolitan N. Y. Customers Only)
- EXPERIENCED AND SPECIALIZED
HI-FI CONSULTANTS
- FAMED SERVICE DEPARTMENT
(only for equipment bought from us)
- CUSTOM INSTALLATIONS BY EXPERTS
- HI-FI IS OUR ONLY BUSINESS
- COMPONENTS OF ALL MAJOR LINES
AVAILABLE FROM STOCK

*We're celebrating our 7th year of successfully serving our customers by opening our 3rd Hi-Fi Center in Brooklyn.

Write Dept. HF11 for our unique Trade-Back plan, Trading information and catalog.

audio exchange

159-19 Hillside Ave., Jamaica 32, N.Y.
AXtell 7-7577

367 Mamaroneck Ave., White Plains, N.Y.
WHite Plains 8-3380

836 Flatbush Ave., Brooklyn 22, N.Y.
BUckminster 2-5300

Meter Parking at all stores

TERMINAL RADIO

is proud to offer
the magnificent high-fidelity

REVOX

Swiss Precision-Portable
TAPE RECORDER



Model B-36

PROFESSIONAL QUALITY AT MODERATE COST!

WOW AND FLUTTER WELL WITHIN BROADCAST
STANDARDS FOR PROFESSIONAL QUALITY

Less than 2/10 of 1% at 7 1/2 ips.

This remarkable new Revox recorder-playback unit creates an entirely new standard for tape instruments. Revox has every preferred feature, provides unusually simple, easy operation, and records or plays back half-track tape with the utmost precision and technical quality . . . well within professional broadcast standards.

All these amazing features in a single recorder . . .

- 2 Speeds—3 3/4 and 7 1/2 ips. on pole-switching hysteris synchronous capstan drive with outside rotor.
- 3 Motors, Direct Drive—no gears or belts to wear
- 3 Separate Heads for Recording, Playback and Erase.
- Response: 40-15,000 cps + 1, -2 db at 7 1/2 ips.
- Signal-to-Noise Ratio: 50 db or more at normal recording levels.
- Separate Recording-Playback Amplifiers permit simultaneous recording and monitoring.
- Simplified all-push-button control.
- 3 inputs: Microphone, Radio-Phono, Auxiliary.
- High Fidelity 8" coaxial speaker.
- Damped Eye level indicators.
- Automatic footage counter.
- Automatic end-of-tape shutoff switch.
- Outlet for connection to external speaker or hi-fi system.
- Controls for mixing radio & microphone
- Uses extra-long-play 10" (2400 ft.) reels.
- 90 Second Rewind for 2400 ft. tape.

Dimensions: 18 1/2 x 11-1/2 x 13 3/4" over-all in carrying case.
Weight: 46 lbs. with case.

\$399 Net
Half Track

2400 ft. of Tape on REVOX REELS only \$6.54

SARGENT-RAYMENT

Model SR-100

"Brentwood"

AM-FM TUNER

A perfect companion to the Revox tape recorder described above, and ready to plug right into the recorder for a complete AM-FM Tuner-Tape unit. The SR-100 is a true high fidelity instrument with every luxury feature including Ferrite loopstick antenna, Cathode Follower output for remote location, Automatic Frequency Control, Sensitivity 3 uv. for 20 db quieting on FM, 20 uv. on AM. Bandwidth 200 KC for 6 db down on FM, AM sharp 9.5 KC overall on 6 db down. AM broad 15 KC overall 6 db down. Shipping wt. 13 lbs.

Dimensions: 15" W x 4 1/2" H x 11 1/2" D. Only

Prices F. O. B. New York City.

Write for our attractive prices on other Hi-Fi components of your choice at big savings!

Phone: Worth 4-3311

Terminal
RADIO CORP.
85 Cortlandt St. • New York 7, N. Y.

ADVERTISING INDEX

Continued from preceding page

Key No.	Advertiser	Page	Key No.	Advertiser	Page
50	Fisher Radio Corp.	10, 22, 23	97	Peck, Trevor, Co., Ltd.	162
32	Fleetwood Television (Conrac, Inc.)	40, 41	98	Pentron Corp.	111
51	Folkways Records	Indexed on 66	99	Period Music Co.	Indexed on 66
21	Garrard Sales Corp.	42	100	Pickering & Co., Inc.	2
52	General Electric Co.	141	101	Pilot Radio Corp.	24-27
53	General Oglethorpe Hotel	154	58	Precision Electronics, Inc.	16
54	Glaser-Steers Corp.	151	102	Printed Electronic Research, Inc.	160
55	Grado Laboratories	148		Professional Directory	162
56	Gray Manufacturing Co.	138	103	RCA Victor Division	Indexed on 66
57	Gray Sound Corp.	144	104	Rauland-Borg Corp.	164
58	Grommes	16		Record Market	Indexed on 66
59	Harman-Kardon, Inc.	132, 133	105	Records in Review 1957	39
60	Heath Co.	116-119	106	Record Review Index	Indexed on 66
61	Hi-Fi Headquarters	160, 162	107	Recoton Corp.	157
62	Hi-Fidelity Electronic Corp.	162	108	Reeves Soundcraft	105
63	High Fidelity House	162	109	Rek-O-Kut	6
64	Hollywood Electronics	162	110	Revere Camera Co.	107
65	Holt Radio	164	111	Rider, John F., Publisher	158
66	International Electronics Corp.	155	112	Rigo Enterprises, Inc.	148
67	International Scientific Industries Corp.	165	113	Robins Industries Corp.	Indexed on 66, 114
68	JansZen	34, 35	26	Rockbar Corp.	60
69	Jensen Mfg. Co.	1	114	Santa Monica Sound	162
70	Key Electronics	162	115	Sargent-Rayment Co.	21
71	Kierulff Sound Corp.	162	116	Schwann, W.	Indexed on 66
72	Klipsch & Associates	163	117	Scott, Herman Hosmer, Inc.	127, 129, 131
73	Lafayette Radio	161	118	Sherwood Electronic Laboratories, Inc.	37, 38
74	Lansing, James B., Sound, Inc.	123	119	Sonotape Corp.	Indexed on 66
75	Leetronics	150	120	Sonotone Corp.	30
76	Leslie Creations	Indexed on 66	121	Stevens TRU-SONIC Inc.	7
77	Liberty Hi-Fi Needle Co.	164	65	Stereo by Holt	164
78	Liberty Music	163	33	Stere-O-Craft	114
79	Librascope, Inc.	114	122	Stereophonic Music Society	162
80	Listening Post	28	123	Stromberg-Carlson	14
81	Livingston Electronic Corp.	Indexed on 66	124	Techmaster Corp.	146
82	London Records	Indexed on 66	125	Terminal Radio Corp.	166
83	Louisville Philharmonic Society	Indexed on 66	126	Thorens Co.	115
84	Lyrichord Records	Indexed on 66	127	Trader's Marketplace	160
85	Marantz Co.	156	128	United Audio Products	149
86	McIntosh Laboratory, Inc.	11	129	United Speaker System	157
87	Mercury Record Corp.	Indexed on 66	130	University Loudspeakers, Inc.	100, 101
88	Mercury Scientific Products Corp.	165	131	Urania Records	Indexed on 66
89	Metzner Engineering Corp.	144	132	Vanguard Recording Society, Inc.	Indexed on 66
90	Minnesota Mining and Manufacturing Co.	Inside Back Cover	133	Vitavox	4
91	Montilla Records	Indexed on 66	134	Vox Productions, Inc.	Indexed on 66
92	Music Listener's Bookshop	159	135	Weathers Industries, Inc.	134
68	Neshaminy Electric Corp.	34, 35	136	Wellcor, Inc.	36
93	Newcomb Audio Products Co.	137	137	Westminster Recording Co.	Indexed on 66
94	North American Philips Co., Inc.	108, 158	138	WFB Productions, Inc.	Indexed on 66
95	Nuclear Products Co.	Indexed on 66	21	Wharfedale	120
96	Orradio Industries	110	128	Wigo Speakers	149
			139	Word Records	Indexed on 66
			140	World Radio Lab	164



A special service . . .

for **High Fidelity** readers

We've made it easier than ever for you to secure prompt additional information about products advertised or mentioned editorially in this issue.

HERE'S ALL YOU DO:

1. Tear out one of the two lower cards along its perforated edges.
2. Fill in your name and address in the space provided at the top of the card. Please type, or print in ink, if at all possible.
3. To get additional information about products advertised in this issue, look up the advertiser's name in the index on the page facing this one. In the column at the left will be found the advertiser's current key number. Simply circle this number in the central section of your card. Do this for each advertiser in whose products you are interested.
4. If you want more information about products described in our other departments, or mentioned in other editorial sections, print the product names and the numbers of the pages on which they appear in the spaces provided in the lower section of the card.
5. Drop the card in the nearest mail box. We'll do the rest.

Note that two cards are supplied. You can keep one as a spare, for possible later use, or let a friend use the extra card.

Use this service—everything, even the postage, is free. A special service to High Fidelity readers.

**THESE CARDS
FOR THIS ISSUE ONLY**

Use this service

Postage
Will be Paid
by
Addressee

No
Postage Stamp
Necessary
If Mailed in
the United
States

BUSINESS REPLY CARD
FIRST CLASS PERMIT NO. 82, SEC. 34.9 P.L.&R., GREAT BARRINGTON, MASS.

High Fidelity

Post Office Box 600
Great Barrington, Mass.

11-7

• PLEASE TYPE OR PRINT •

HIGH FIDELITY READERS' SERVICE

NAME _____
STREET & NO. _____
CITY _____ ZONE _____ STATE _____

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
ADVERTISED	16	17	18	19	20	21	22	23	24	25	26	27	28	29
PRODUCTS	31	32	33	34	35	36	37	38	39	40	41	42	43	44
(See Key Nos. in index on page at left)	46	47	48	49	50	51	52	53	54	55	56	57	58	59
	61	62	63	64	65	66	67	68	69	70	71	72	73	74
	76	77	78	79	80	81	82	83	84	85	86	87	88	89
	91	92	93	94	95	96	97	98	99	100	101	102	103	104
	106	107	108	109	110	111	112	113	114	115	116	117	118	119
	121	122	123	124	125	126	127	128	129	130	131	132	133	134
	136	137	138	139	140	141	142	143	144	145	146	147	148	149

PRODUCTS MENTIONED EDITORIALY (Including all departments)

PRODUCT _____ PAGE _____
PRODUCT _____ PAGE _____
PRODUCT _____ PAGE _____

• PLEASE TYPE OR PRINT •

HIGH FIDELITY READERS' SERVICE

NAME _____
STREET & NO. _____
CITY _____ ZONE _____ STATE _____

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
ADVERTISED	16	17	18	19	20	21	22	23	24	25	26	27	28	29
PRODUCTS	31	32	33	34	35	36	37	38	39	40	41	42	43	44
(See Key Nos. in index on page at left)	46	47	48	49	50	51	52	53	54	55	56	57	58	59
	61	62	63	64	65	66	67	68	69	70	71	72	73	74
	76	77	78	79	80	81	82	83	84	85	86	87	88	89
	91	92	93	94	95	96	97	98	99	100	101	102	103	104
	106	107	108	109	110	111	112	113	114	115	116	117	118	119
	121	122	123	124	125	126	127	128	129	130	131	132	133	134
	136	137	138	139	140	141	142	143	144	145	146	147	148	149

PRODUCTS MENTIONED EDITORIALY (Including all departments)

PRODUCT _____ PAGE _____
PRODUCT _____ PAGE _____
PRODUCT _____ PAGE _____



Subscription SERVICE PAGE

Because we have so many requests for subscription information, we have decided to publish the full subscription story — all in one place — the result being this page. We hope you'll use it.

High Fidelity Great Barrington, Mass.

Please enter my subscription, starting with the next issue, at the SPECIAL RATE of 3 years for only \$15.00

FOREIGN POSTAGE: \$1.00 per year outside the U. S. A., its possessions, and Canada.

- My remittance is enclosed. I prefer two years for \$11.00.
 Please send me your bill. I prefer one year for \$6.00.
This is a new renewal subscription

NAME _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

Group subscriptions attached. Send me the following back issues
@ \$1.00 each 3 10 11 *Sorry, cannot bill single copies*
 Gift subscriptions attached. @ .50 each 17 18 20 21 22 23 24 25 31 32
@ .60 each 33 34 36 37 43 44 45 55 56 57

REGULAR SUBSCRIPTION RATES

Three Years — Fifteen Dollars. *Save \$6.60 over single copy cost.*
Two Years — Eleven Dollars.
One Year — Six Dollars.

BARGAIN GROUP SUBSCRIPTION RATES

(One Year Subscriptions Only)

Here's a real saving. Just get together a group of subscriptions and submit the list of new subscribers, all at one time.
First subscription — Six Dollars.
Second subscription — Five Dollars.
Each additional subscription — Four Dollars.
Send the list to our Circulation Department (and mark it SPECIAL GROUP SUBSCRIPTION RATE) with a check or money order in the appropriate amount.

GIFT SUBSCRIPTIONS

Many of you have found HIGH FIDELITY the perfect gift for *any* occasion. If you submit more than one subscription (at the same time) the special group rates shown above apply. We will acknowledge your gift, to the receiver, with a special card signed with your name, if you wish.

LIFE SUBSCRIPTIONS

We're always pleased to welcome new members to our "lifers" club. The current rate is one hundred dollars.

BACK COPIES

The following back copies are in stock: — Winter-1951 (No. 3), May-June-1953 (No. 10), July-August-1953 (No. 11), May-1954 (No. 17), June-1954 (No. 18), August-1954 (No. 20), September-1954 (No. 21), October-1954 (No. 22), November-1954 (No. 23), December-1954 (No. 24), January-1955 (No. 25), July-1955 (No. 31), August-1955 (No. 32), September-1955 (No. 33), October-1955 (No. 34), December-1955 (No. 36), January-1956 (No. 37), July-1956 (No. 43), August-1956 (No. 44), September-1956 (No. 45), July-1957 (No. 55), August-1957 (No. 56), September-1957 (No. 57). Just encircle on the card to the left, the identification number of each issue you would like and enclose your check or money order. Sorry, we cannot bill single copies.

Postage Will be Paid by Addressee

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 62, SEC. 34.9 P.L. & R., GREAT BARRINGTON, MASS.

High Fidelity

Post Office Box 600
Great Barrington, Mass.

11-7

Postage Will be Paid by Addressee

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 62, SEC. 34.9 P.L. & R., GREAT BARRINGTON, MASS.

High Fidelity

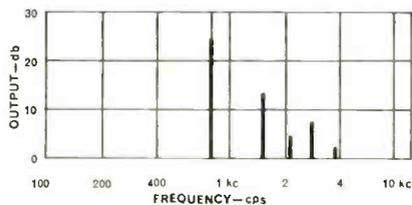
Post Office Box 600
Great Barrington, Mass.

11-7

CAUTION!

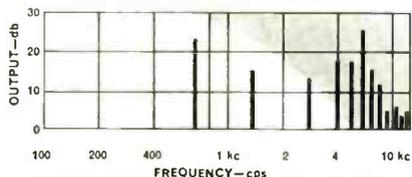


Before fiddles start sounding like flutes...
switch now to "Scotch" Brand Magnetic Tape!



The acoustic spectrums of three tones of a flute

Acoustic spectrums of a flute tone (above) and fiddle tone (below), reproduced by a worn magnetic head, would look almost identical if the violin's high frequencies (shaded area) were lost by the worn head. Result is a lack of instrumental definition.



The acoustic spectrums of the four open strings of a violin

Don't blame your recorder when one instrument sounds like another. Your present magnetic tape may be causing this annoying loss of harmonics—wearing down your machine's delicate magnetic head until high frequency response is noticeably reduced.

Put an end to head wear by switching now to "SCOTCH" Brand Magnetic Tapes . . . the only tapes with built-in dry lubrication... permanent silicone lubrication. "SCOTCH" Brand Magnetic Tapes guard your recorder head from wear—pass over it so freely you'll never suffer loss of harmonics.

Treat your machine to a reel of "SCOTCH" Brand Tape soon—and hear what a difference it makes!

ONLY "SCOTCH" BRAND HAS SILICONE LUBRICATION



The term "SCOTCH" and the plaid design are registered trademarks for Magnetic Tape made in U.S.A. by MINNESOTA MINING AND MFG. CO., St. Paul 6, Minn. Export Sales Office: 99 Park Avenue, New York 16, N.Y. © 3M Co., 1957.

BOGEN MEANS REALISM



MODEL R775 DELUXE FM-AM TUNER-PREAMPLIFIER

It took Bogen creative engineering to develop the tuner that automatically "fine" tunes itself. Just turn the tuning knob until you reach the fringe of the station you want (as indicated by the meter)—then let go. A light goes on to tell you that Bogen is taking over. Walk away. The exclusive Auto-Lock tuning "zeros in" like a homing pigeon. Then it locks out all unwanted signals—however strong—and locks your station in for keeps. No drift. Pin-point-perfect reception, even in areas where others fail. All this plus special "squelch" circuit which eliminates interstation noise. Complete chassis: \$249.50. Blonde or mahogany-finished enclosure: \$8.00.

- **SPECIFICATIONS:** Controls: Volume; tuning; separate
- bass and treble; 7-position record equalizer; loudness contour
- selector; separate high and low frequency filters; function selector.
- Colored dots indicate average listening settings. Audio
- response 10 cps to 100,000 cps ± 0.5 db. Extreme sensitivity (2
- microvolts for 30 db quieting on FM). Extremely low distortion
- (0.4% at rated output). Adjustable hum-eliminator. Tape recorder
- output. Inputs for magnetic, ceramic, and crystal cartridges.
- Write for complete catalog and/or send 25c for 56-page book
- "Understanding High Fidelity" to Dept. H-11.

David Bogen Company, Paramus, N. J. • A Division of Unitronics Corporation

Bogen
HIGH FIDELITY

...because it sounds better

MANUFACTURERS OF HIGH-FIDELITY COMPONENTS, PUBLIC ADDRESS EQUIPMENT AND INTERCOMMUNICATION SYSTEMS

www.americanradiohistory.com