



devoted to hi-fi music from records, tape, and FM radio

World Radio History

MAIS THE LEGEND OF PELE — The legend of fire goddess PELE as interpreted by Arthur Lyman, Recorded in Henry J. Karser's Aluminum Dome, Monolulu, Same big sound with intriguing new effects, it's a gas!



R609 WEST COAST JAZZ IN HI FI—A true experience of jazz. No ad lib. nothing happens by chance, not too far out, but a long way from being square.



R718 ROARING 20'S — The inimitable, irrepressible George Wright tears through typical tones of the roaring 20's on the mighty Wurlitzer Pipe Organ in the 6500 seat San Francisco Fox Theater.

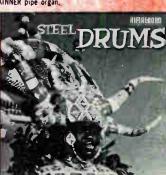
THE LEGEND OF PELO

King Instruments
BRUCE PRINCE JOSE 14

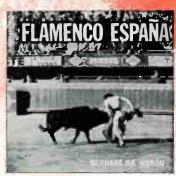
R720 KING OF INSTRUMENTS — Includes 10 dynamic big sound classics played with a flat by BRUCE PRINCE JOSEPH on the great AEOLIAN SKINNER pipe organ.

A whole new world of sound!

STEREOPHONIC RECORD



8817 STEEL DRUMS — A savage beat on primitive of uments brings you the color, drama and y of an African setting



R&11 FLAMENCO ESPANA — Sixteen exciting flamenco tracks with Bernabe DeMoron, guitarist; three other guitars and six castanet dancers.

This is the exciting stereo sound you've been looking for . . . the big sound judged "BEST STEREO" at HI FI shows everywhere. Show off your equipment with the full frequency range, clarity and presence found in these albums the finest in sound reproduction.



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R411 THE SURFERS AT HIGH TIDE—Latest "HIT" album of famous "SURFERS" now appearing at the Star Dust Hotel in fabulous Las Vegas.

Available at record shops and HIFI equipment dealers everywhere



"The sound that named a company"

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YOU SHOULD KNOW THERE IS SOMETHING BETTER!





With ordinary speakers, your listening position will determine whether you get a good or poor stereo effect. Careful placement of speakers is necessary.

Jensen SS-100 Stereo Director* speaker systems let you place cabinets anywhere on a "decorator" basis... you aim the sound for best stereo effect where you listen. No unsightly angling or cabinet placement problems. Wonderful for mono hi-fi too! Smooth coverage of full range from 20-15,000 cycles. Easily driven with a good 10-watt or larger amplifier. Only \$179.95 each in choice of genuine natural finished Walnut, Tawny Ash or Mahogany. Write for Catalog 165-C.



Two SS-100 Speakers on endwall give good stereo in otherwise poor stereo listening position.



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VERSATILE 3-WAY SYSTEM

Stereo Director mounted on shelf, behind grille, is eas-ily rotated for best stereo without twisting cabinet. Midrange and compression tweeter above 12" air-suspension Flexair woofer enclosure.

ensen Manufacturing Company

*T. M. J. M. Co.

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Here are the reasons why opie who will not compromise with quality insist upon a GARRARD CHANGER for playing stereo records:

The Garrard is actually a super-turntable. No matter how printed punchers were faiter, and ramble contents you will find Garrard Changers cureparable for the test professinal turntuities.

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Gerrard's exclusive for the second state of th

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II's ECONOMICAL

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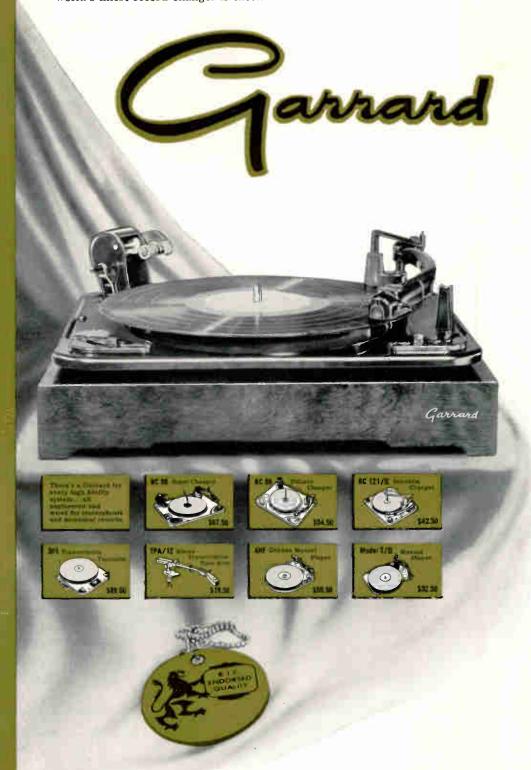
orrectly endorsed component of the Corporation (n.C) Group

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Stereo and monaural... most people ready to buy high fidelity components seek advice from friends who own them. Generally you will find that these knowledgeable owners have a Garrard changer. And if you ask experienced dealers, they will invariably tell you that for any high fidelity system, stereo or monaural, the world's finest record changer is the...



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COMPLETE GUIDE TO HI-FI REPRODUCTION FROM RECORDS, TAPE AND FM RADIO

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COVER Elli Zappert always asks us what we want for the next cover. Then of she goes, and we don't see her again until she has a preliminary sketch in color. It's never what we asked for, but that's all right because her ideas are always better than ours, anyway. When she came in with the sketch for this month's cover, we asked her why she chose this design. She just shrugged her shoulders and said: "I've always wanted to do a cover with records. They're so decorative, don't you think?" Well, they really are—don't you think?





Hi-Fi Shows

CHICAGO: Parts Show, Hilton Hotel, May 18-20

CHICAGO: Hi-Fi Show, Palmer House, Sept. 18-20

FM Stereo Broadcasting

It looks as if the National Stereophonic Radio Committee, now studying various methods of stereo broadcasting over FM, will not have its report ready to submit to the FCC until some time early in 1960. Meanwhile, FM-AM stereo programs will be continued.

Hi-Fi House

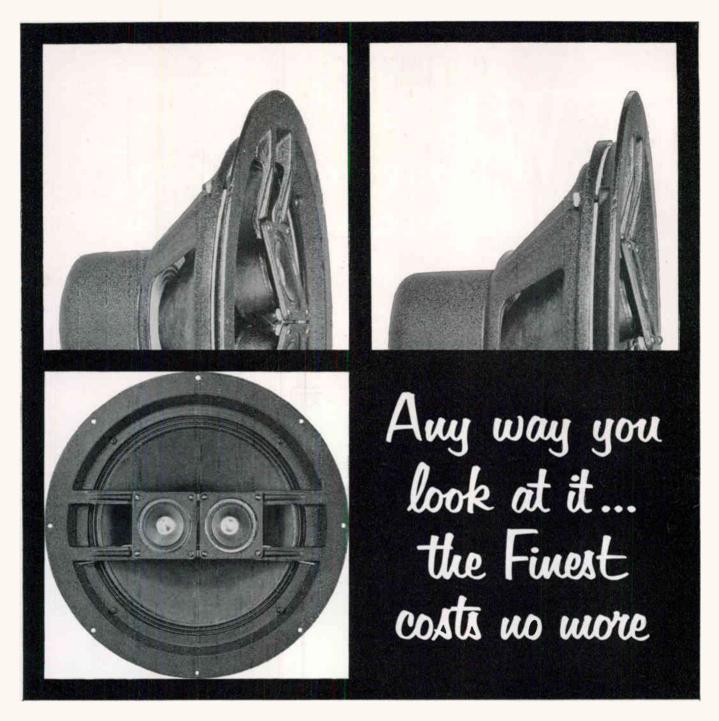
Acoustic Research, manufacturers of A-R speakers, have leased Hi-Fi House in the Grand Central Terminal, New York City from Kelly and Sleeper, Inc., and will resume the exhibit and demonstration of hi-fi equipment soon after April 1st. As in the past, nothing will be sold, since the purpose of this project is to attract people who would not go into the stores for the reason that they seek information, but are not sufficiently acquainted with equipment to know what they want to buy.

World Radio & TV Handbook

Thirteenth edition of this handbook contains 186 pages, listing radio and TV stations throughout the world, with the names of staff members, addresses, frequencies, operating schedules, types of programs, call letters, and other details. The new edition can be ordered from O. Lund-Johansen, Lindorffsallé 1, Hellerup, Copenhagen, Denmark. The price postpaid is \$2.80. You can send a bank money order or your own check but, in the latter case, mailing might be delayed until your check cleared.

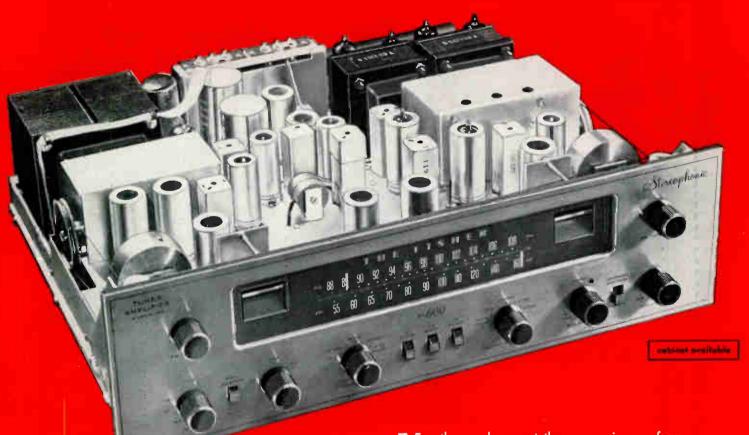
FM Station Score

At the last week of March, 591 commercial and 151 educational FM stations were on the air. This makes a total of 742. In addition, construction permits had been issued Continued on page 8



Even on a tight budget, you can still enjoy The Very Best in Sound—with the Bozak B-207A, the finest two-way speaker system made • Modest in price, unrivalled in musical sensitivity, the B-207A adapts to your needs • Use it where you will: in a wall, built-in enclosure, or existing sturdy cabinet—in an economical E-300K enclosure kit, a cabinet of your own design and handiwork, or a Bozak-built cabinet of Contemporary, Provincial or Urban styling • Use it as you will: singly as the purest voice for a space-saving quality music system—in pairs for thrilling stereo realism—or as a component of the larger Bozak three-way systems • See your Bozak franchised dealer—listen and compare, note-for-note and dollar-for-dollar—if you know music you'll choose Bozak • Literature sent on request • BOZAK • DARIEN • CONNECTICUT

THE WORLD'S ONLY STEREO RECEIVER FOR THE DISCRIMINATING AUDIO ENTHUSIAST



■ 17" wide, 14%" deep, 4"%" high.

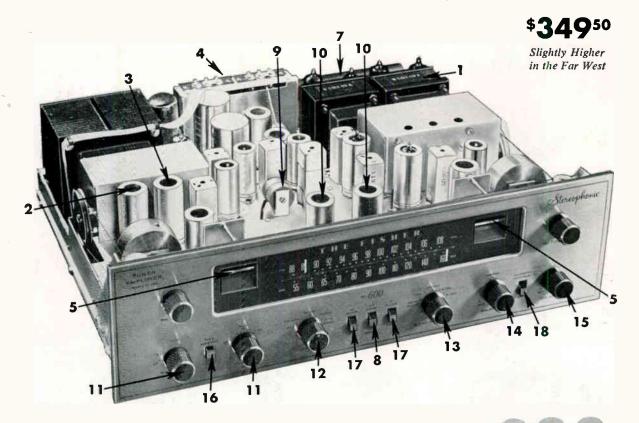
■ 3510 lbs. net.

For those who want the convenience of an all-in-one instrument...versatility at the heart of their hi-fi installation...as well as the quality of performance and dependability that have typified all FISHER high fidelity products for over twenty-one years — THE FISHER TA-600 is the only possible choice.

Everything you need - on ONE compact chassis!



- STEREO FM-AM TUNER
- STEREO MASTER AUDIO CONTROL
- **STEREO 40-WATT AMPLIFIER**



HE FISHER 600

BEST STEREO RECEIVER MADE!

1 Forty watts of power from dual twenty-watt amplifiers (seventy watts peak power.) 2 Cascode RF stage on FM for extreme sensitivity. 3 Bridge-type, lownoise triode mixer on FM. 4 Input and output jacks for MULTIPLEX reception. 5 Two MICRORAY tuning indicators to help you tune in the weakest signal as easily as the strongest. 6 Connections for four, eight, and sixteen-ohm speakers (rear.) 7 Rotatable, ferrite loop antenna, for maximum signal power and minimum interference (rear.) 8 Two-position bandwidth on AM (a must for stereo.) 9 Ten kilocycle whistle filter to eliminate interference from adjacent stations. 10 DC filament supply to reduce hum to complete

inaudibility. 11 Dual bass and treble tone controls. 12 Five-position input selector. 13 Five-position stereo-monophonic switch.

14 Dual balance control.

15 Master volume control.

16 Tape monitor switch.

17 High and low frequency filters.

18 Loudness contour switch. 19 Five input level adjustments (rear.) 20 Phase-reversing switch to compensate for any improperly phased tape recordings or speakers (rear.)

21 Tape recorder output jacks (rear.)

22 Special input jack arrangement to permit using an external FM tuner with the TA-600 for the reception of FM-FM stereo broadcasts (rear.) 23 Auxiliary AC outlets for plugging in associated equipment (rear.) Frequency response, 25 to 20,000 cps, ± 1 db

WRITE TODAY FOR COMPLETE SPECIFICATIONS

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May 1959

Expart: Morhan Exporting Corp., 458 Broadway, New York 13, N. Y.



You turn a dial . . . and something wonderful happens! You're there . . . reliving the original performance, hearing the songs you love with a new brilliant clarity . . . hearing the depth of life in each musical passage. Grommes Stereo is stereophonic reproduction at it's finest . . . superb fidelity with a new realistic depth . . . bringing you truly, music that lives.



Grommes Custom 24PG Stereo Amplifier

A complete 24 watt combined stereo preamplifier and power amplifier in one unit. All controls are ganged for ease of operation. For use with records, tape or tuner. Two 12 watt channels convert to 24 watts of monaural power when no stereo source is available. Net 99.50



Grommes Custom 101GT FM Tuner

New matching FM tuner for Grommes amplifiers with new "Standard Coil" tuner unit for outstanding performance. New electronic tuning eye and AFC simplify tuning. Advanced FM circuitry includes 2 broad band IF stages, 2 limiters and Foster-Seeley discriminator. Net 79.50

Visit your Grommes Hi-Fi Dealer . . . you owe it to yourself to see and hear the most exciting new series in high fidelity . . . Stereo by Grommes.

Please send me Free Color Brochure featuring the new Grommes Hi-Fi Series.	Dept.	Div. of Precision Electronics, In- 9101 King St., Franklin Park, III.
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HAMPFACTUREMS	City	State

RECORDS, TAPE, AND FM

Continued from page 4

by the FCC for 148 more, and 70 applications were pending. With this grand total of 950, it looks as if our earlier prediction of 1,000 FM stations by the end of '59 might be exceeded.

T.R.C. of London

Just received: a very interesting bulletin from the Tape Recorder Club, London, with a letter saying that the members would like to correspond with U. S. tape enthusiasts. Correspondence should be addressed to D. V. Lane, 73 Grand Parade, Harringay, London N4.

Donald J. Plunkett

President of the Audio Engineering Society and, for the past six years, New York director of recording for Capitol, has been appointed by Sherman Fairchild to take his place as president of Fairchild Recording Equipment Corporation.

FM Association of Broadcasters

Organized in Chicago at a meeting attended by 500 FM station executives. Officers elected were Larry Gordon, WBNY-FM Buffalo, president; Fred Rabell, KITT San Diego, vice president; Frank Knorr, Jr., WPKM Tampa, secretary; Harold Tanner, WLDM Detroit, treasurer. FMAB plans to open a headquarters office in New York City.

Hi-Fi Music Clubs

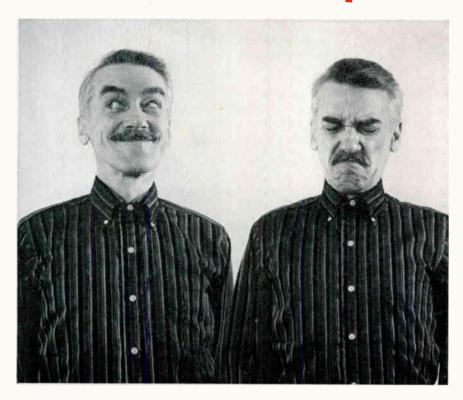
From time to time, groups of hi-fi enthusiasts form clubs and attempt to build their membership. But such clubs fall apart, principally because they lack worthwhile programs. Interesting speakers are hard to find; just listening to music isn't enough. The best idea we have heard about is to form an audio workshop where members can assemble kits, try out components, and have the use of test equipment under the guidance of someone skilled in service work.

This suggestion stems from the success of the Audio Workshop, operated by David Muirhead and Elliot Gordon, 732 Broadway at Waverly Place, New York. This project is operated for profit, but the idea gives a purpose around which nonprofit hi-fi clubs can be organized. If the idea appeals to you, it would be worth your while to visit the Audio Workshop to see how it is conducted.

Note for Subscribers

After April 20, correspondence about subscriptions to Hi-Fi Music, or notices of change of address should be sent to High Fidelity Magazine, Great Barrington, Mass. And if you should change your address, be sure to give your old one as well as the new one, because magazine subscription records are filed by states and cities—not alphabetically by name. Thus, giving your old address makes it possible to find your original stencil.

Which twin has the Audiotape?



Not even their mother can always tell these boys apart. But it's pretty easy to see which one is getting the rich, realistic performance that Audiotape consistently delivers.

Like twins, different brands of recording tape often look the same, but are seldom exactly alike. And though the differences may be slight, the discriminating tape recordist won't be completely satisfied with anything but the very finest sound reproduction he can get. Most of all, he wants this fine quality to be consistent—he wants *identical* results from every reel, regardless of when it was purchased. And so, he chooses Audiotape.

You'll find that Audiotape is different in other respects, too. For example, only Audiotape comes on the C-slot reel—the easiest-threading tape reel ever developed. Another example is quality. Audiotape has only one standard of quality: the finest possible.

And that's true regardless of which of

the eight types of Audiotape you buy. Don't settle for less. Insist on Audiotape. It speaks for itself.

Manufactured by AUDIO DEVICES, INC. 444 Madison Ave., New York 22, New York Offices in Hollywood & Chicago



READERS' ROUNDTABLE

Continued from page 9

follow this movement. Indeed, the most frequent sound shifts on this program are those not intended by the network, as they seem to be due to phasing difficulties on the telephone lines carrying the two sound channels.

Viewers can easily note microphone placement, and observe that the paired microphones are very close together. The result is that TV-only viewers receive a balanced sound — along with FM-only or AM-only listeners — and stereo viewers probably wonder what is so wonderful about stereo, particularly if they have table-model radios with four-inch speakers paired with TV sets that have tiny sidemounted speakers.

Second, consider the recently-inaugurated WRCA FM-AM broadcasts in the New York City area. One WRCA official was reported as saying that the program is designed to give the AM listeners a balanced signal, as so many people may be listening in their automobiles. I suppose WRCA merely adds some of the right track to the left. (Their AM is the left channel.)

New York station WRCA-FM is conducting occasional experiments with Crosby multiplex transmission. Unlike WBAI, these experiments are not incorporated (as yet) into the regular WRCA schedule, but are made in the very early morning hours. The experimental call letters for these transmissions are KE2XYA. Let us hope that NBC decides that the Crosby stereo is worthy of their support. A favorable decision by RCA would be of great help in furthering the cause of compatible multiplexed stereo broadcasting. 70 S. Munn Avenue, East Orange, N. J.

Equipment Reports

Down-rating of highly-favored loudspeaker models by Consumers Union stirred up controversies among hi-fi enthusiasts, manufacturers, and the magazines that have not died down yet.

One reason is the CU method or rating different models as Acceptable-Very Good, Acceptable-Fairly Good, Acceptable-Fair, and Not Acceptable.

As a result, while this is surely not CU's intention, products identified as being Fairly Good or Fair are as certainly stigmatized as if CU actually said that they are all right but why buy them?

There is nothing more damning than such faint praise. In this case, the average reader will probably infer that he is advised to buy speakers from either of two companies, and that no American-made electrostatic tweeter is equal to the Japanese model recommended!

An advantage to CU is that their method of rating creates sharp differences of opinion, thereby serving as highly effective circulation promotion and, since it does not carry advertising, it must depend on circulation revenue.



Magnificent Mercury Stereo!



LEROY ANDERSON, Vol. II—Eastman-Rochester Pops Orchestra, Fennell

A superb Fennell Performance! Creative orchestration. Clever percussion specialties produce unusual sound effects. Typewriter, Waltzing Cat, Fiddle-Faddle, Blue Tango and eight others.

SR 90043 Monaural MG 50043



LET'S DANCE, David Carroll and his orchestra.

Twelve favorites dressed up in dazzling new Instrumentals by this genius-arranger, David Carroll. Cuddle Up a Little Closer, Yearning, Glow Worm, My Sin, Puerto Rican Pedlar and others.

SR 60001 Monaural MG 20281



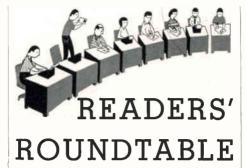
SONGS FROM GREAT FILMS, Clebanoff and his orchestra.

Clebanoff uses a multitude of lush strings to give a fresh, new beauty to twelve great movie themes. Tammy, Wild is the Wind, Gigi, Friendly Persuasion, Sayonara, Three Coins and others.

SR 60017 Monaural MG 20371

Ask for these records at your Mercury Record dealer now!





Jonathan Reiskind

For years I've been a great fan of Ralph Vaughn Williams, so when I read Edward Jablonski's review in your March issue that "Sibelius" youthfully imaginative mind" inspired Vaughn Williams' Ninth Symphony I was quite shocked until I realized that it was an error. Other than this, I have always enjoyed your record reviews. Amberst College, Amberst, Mass.

Note: Yes, it was an error, but not Mr. Jablonski's. The name Sibelius was inserted by our Music Editor!

Rough A. Boggess

Mabel Mercer is the only woman I know whose superb artistry is sufficiently compelling to demand and get total silence and total loving attention from a 3:00 A.M. East-side audience composed equally of teetotalers, moderates, and alcoholics. She must be the wisest woman of the ages, and if she is the "guardian of the tenuous dreams created by the writers of songs", as she certainly is, she is also the custodian of the loves, hopes, laughter, gaiety, tears, and sadness of which all the rest of us are a part. 1507 Sunset Drive, Norman, Okla.

Note: Miss Mercer says that since the publication of Shirley Fleming's article, she has had telephone calls, telegrams, and letters from friends all over the Country, many from those she has not seen in years.

A. E. Foster

I have waited to write my observations on stereo broadcasts because I know many readers are more qualified than I to discuss the issues involved. There is one point which I consider important, that has not been mentioned in the letters published so far.

In all stereo broadcasts which do not permit mono reception of a complete, balanced signal, the stations are very careful to make sure that anyone listening on only one channel receives a nice sound. As a result, the program received by stereo listeners is just barely stereo. I would like to mention two examples.

First, consider the much advertised stereo sound on the Lawrence Welk TV-FM (or AM) Plymouth show. (Please note that this is a discussion of stereo, not the merits of the program.) On the TV screen we see a tap dancer move back and forth across the floor, but the sound does not

Continued on page 10

DYNACO BE STEREODYNE PHONO PICK UP

This new, unique pickup is made in Denmark by Bang and Olufsen. It features a push pull magnetic principle (patent pending) which permits realization of the full potentialities of the most modern recording techniques. The special attributes which make the Stereodyne an outstanding stereo pickup make it equally exceptional for monophonic discs. On any type of record the Stereodyne offers smooth and natural sound—firm clean bass and sparkling treble—while its light tracking pressure insures negligible record wear.



BEST in every way .

- Wide frequency response
 Smooth peak free response from 30 cps to over 15 Kc
- True Stereo
 Highest channel separation over entire audio spectrum—better than 22 db.

15 x 10-6

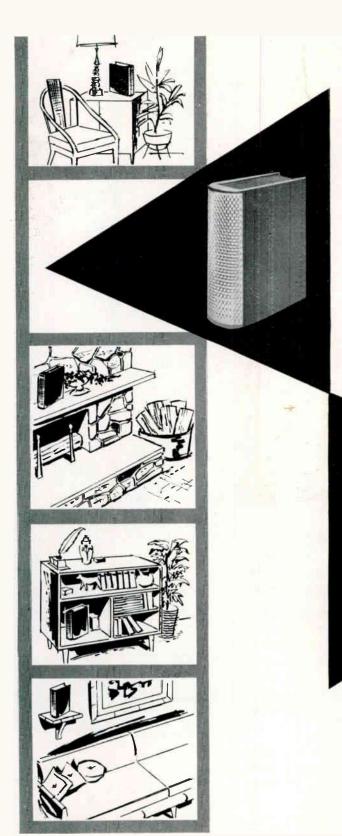
- Precision balance
 Both channels identical
 Same high compliance
 cm/dyne) in all directions
- No hum pickup

 Balanced coil structure plus low impedance plus complete shielding eliminate hum from external fields
- High output
 7 millivolts per channel even on low level stereo discs provides gain to spare
- No magnetic pull
 Special magnetic circuit eliminates attraction to steel turntables
- Easy installation
 Compact size and standard mounting centers simplifies mounting. 4 terminals to avoid hum loops.
- Only \$29.95 net including .7 mil diamond stylus (replaceable in 2 seconds)

Available from leading high fidelity dealers everywhere

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Made in U.S.A. Patent Applied For

A Conquest of Space The Harmony Trio Speakers

Here is a complete three channel stereo speaker system — better than you have ever heard at any price — which gives the full stereo effect in every part of any room. And yet it consists of only two booksize speakers and a hideaway bass that is completely concealed from view. Sound impossible? Well it was, until Weathers developed the Harmony Speakers utilizing the principle of Variable Mass—the first major breakthrough in speaker design in twenty years. Now space need no longer be a barrier to speaker performance. Stop in at your dealer

System

and see why.

Features:

Three channels. A full range speaker for each of the stereo channels and a non-directional bass. The smallest and most efficient stereo speaker system available.

Fits any size room. Blends with any decor.

Component Features: Harmony Speaker. Size: 11" x 914" x 35%".

Response: 70 to 15,000 cycles. Finish: Black leatherette. Golden grille.

Hideaway Bass.

Size: 16½" x 16½" x 5½". Response: 30 to 100 cycles.

Finish: Ebony.

Harmony Trio \$119.50 Harmony Speaker \$29.75

Hideaway Bass \$69.50

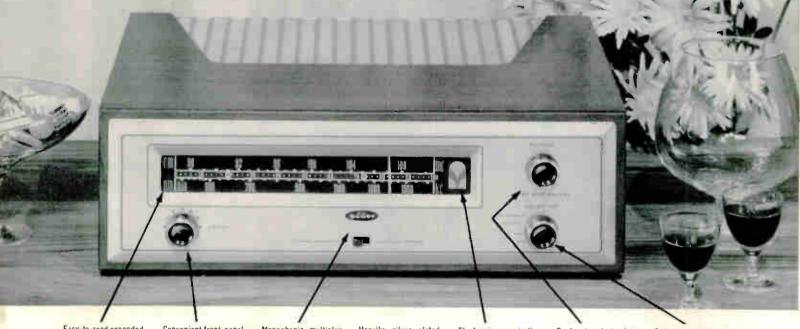
Weathers Industries

66 E. Gloucester Pike, Borrington, N. J.

Export: Joseph Plosencia, Inc. 401 Broodway, New York 13, N. Y.

New H.H. Scott Tuner features Wide-Band FM and Wide-Range AM at only \$139.95*

The many fine features built into this superb AM-FM tuner have never before been available for under \$200. Combined on one compact chassis are such famous H.H. Scott engineering features as Wide-Band FM circuitry to give you high selectivity with complete freedom from drift; Wide-Range AM circuitry for perfect reception of high fidelity AM broadcasts; and exclusive H.H. Scott Silver plated "front-end" for maximum sensitivity and reliability.



Easy-to-read expanded slide-rule dial for precise station selection, Separate linear logging scale for accurate charting of station settings.

Convenient front-panel level control gives you accurate adjustment of tuner audio output. Separate output for tape recorder,

Monophonic - multiplex switch gives front panel control of multiplex output. Adaptor can be added when multiplex standards are established. Heavily silver plated RF circuitry assures high sensitivity, and minimizes cross-modulation caused by strong local stations.

Electronic-eye indicator shows optimum tuning point on both FM and AM, Indicator can also be used for adjusting antenna orientation. Professional tuning control with heavy flywheel lets you make station settings with great accuracy and speed. Selector switch for choosing between FM, AM normal and AM wide-range. Widerange setting is for receiving wide-range AM broadcasts.

TECHNICAL SPECIFICATIONS Model 320 AM-FM Tuner

FM SENSITIVITY: 3 microvolts for 20 db of quieting on 300 ohm antenna terminals

CIRCUIT FEATURES: 2-megacycle wide-band FM detector assures high selectivity, high capture ratio and absolutely drift-free FM reception without need for troublesome AFC. RF stage assures high sensitivity on both AM and FM sections. Exclusive low-distortion AM detector for reception of wide-range AM broadcasts. New High-Q AM Loopstick Antenna. Folded dipole FM antenna. 10 KC Whistle filter.

OUTPUTS: Multiplex, Main, Tape-recorder.

Insist on genuine H. H. Scott components



West of Rock's \$142.45. Acciseory care estra

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World Radio History

MUSIC IN YOUR HOME



TITH your indulgence, I'm going to depart from the discussion of hi-fi music to which this page is usually devoted. The reason: HI-FI Music has been sold to the Billboard Publishing Company which previously bought HIGH FIDELITY and, after this issue, the two magazines will be combined. I know you will want to know how this change came about, and I feel that I owe you an accounting.

Toward the end of 1958, I was approached by two publishers with offers to buy H1-F1 Music. I didn't give serious consideration to either one. I simply didn't have time. On various occasions, Mrs. Sleeper has said to me, "You are a man of at least average intelligence. Surely there is something for you to do that is less demanding than the publishing business." My answer was always the same: "I'm sure you are right, but how else could I have as much fun?"

I really have had fun. I've always maintained that the nicest people I know are the readers of HI-FI Music. And no one could have a finer group of associates than those I have grown up with in the radio and hi-fi industry. Many of them have been my friends for forty years!

As for the members of our Magazine staff, it's been a joy to work with them. Douglass Cross, our Music Editor, and Shirley Fleming, as Assistant Music Editor, have made a wonderful team. You'd have to see them in action to appreciate their knowledge of music, and the meticulous care they have put into the planning, writing, and editing of articles and reviews for our music section.

I still call Mary Yiotis my Mary, even though she has just become Mrs. Hercules Sotos. Since the beginning of the Magazine, she has not only been my very competent secretary, but an able pinch-hitter in every emergency, of which there have been many.

The accuracy of our circulation work has been kept high and the number of complaints kept low by another able team headed by Richard Davis, with Irene Dubin keeping the books, and Willard Thomas maintaining the names and addresses.

Len Osten in the east and Fletcher Udall in the west have increased our volume of advertising in the last twelve months by more than 50% over the previous year.

Magazines are people. Thus HI-FI Music has reflected the splendid skills of Elli Zappert our cover artist, Edward Nussbaum as art director, photographer Max Richter, the members of our board of reviewers, and our contributors.

You can understand my reluctance to think of breaking up a group of specialists who took such pride in their individual accomplishments, yet worked together so harmoniously. True, I've lived by a schedule of closing dates that made weekdays and weekends all the same. It has been that way for twenty years, from the time I started FM-TV Magazine, then High Fidelity, Communication Engineering, and finally Hi-Fi Music — a schedule so tight that I never had time to consider a change of pace. This would have continued indefinitely, but a few days ago I was stopped cold by a broken rib. That did it!

Overnight, I decided to become independent of calendars and closing dates, and I immediately concluded arrangements with William and Roger Littleford, owners of Billboard Publishing Company, to sell H1-F1 Music. That's the story.

What next? Well, my first love was apparatus development and design, going back to the days when I was laboratory assistant to Dr. deForest, and later at Sperry Gyroscope and Western Electric, working on mechanisms and radio equipment. So I shall carry on a consulting practice devoted to product development and sales promotion in the hi-fi and radio communication fields. I shall keep what has been our editorial office at 107 East 35th Street in New York City, and divide my time between that address and my office at home on Radio Hill, Monterey, Massachusetts.

As for the Magazine, I am happy to have my two "children" united in one family. Under the management of the Littlefords, for whom I have a very high personal regard, I know that the interests of our readers will be served still more effectively than in the past. You'll hear more about the members of our staff, for they all plan to continue in the field of hi-fi music. Watch for their names.

If you are a subscriber to Hi-Fi Music, you will receive the combined Magazine in the future. If you subscribe to High Fidelity also, your subscription will be extended accordingly. Otherwise, ask your news dealer for High Fidelity next month.

This is not a good-bye from me to you, but only an an revoir, for I shall be serving you in ways other than through this magazine. While I shall be no less active than in the past, it will be on a schedule that I can adjust so as to have a little time that will be all my own.



NEW STEREOPHONIC EQUIPMENT

NEW STEREOPHONIC EQUIPMENT MF85: Steree Dual Preamplifier is a complete stereo control system in "low silhouette" design adaptable to any type of installation. Selects, preamplifies, controls any stereo source—tape, discs, broadcasts. Superb variable crossover, feedback tone controls driven by feedback amplifier pairs in each channel. Distortion borders on unmeasurable even at high output levels. Separate lolevel input in each channel for mag. phono, tape head, mike. Separate hi-level inputs for AM & FM tuners & FM Multiplex. One each auxiliary A & B input in each channel. Independent level, bass & treble controls in each channel. Independent level, bass & treble controls in each channel and be operated together with built-in clutch. Switched in loudness compensator. Function Selector permits hearing each stereo channel individually, and reversing them; also use of unit for stereo or monophonic play. Full-wave rectifier tube power supply. 5-12AX7/ECC83, 1-6X4. Works with any high-quality stereo power amplifier such as EICO HF86, or any 2 high-quality mono power amplifier such as EICO HF14, HF22, HF30, HF35, HF50, HF60. "Extreme flexibility . . a bargain" — HI-FI REVIEW. Kit \$39.95. Wired \$64.95. Includes cover.

NIT \$39.99. Wired \$64.99. includes cover.

NF86: Stereo Dual Power Amplifier for use with HF85 above or any good self-powered stereo preamp, identical Williamson-type push-pull EL84 power amplifiers, conservatively rated at 14W, may be operated in parallel to deliver 28W for non-stereo use. Either input can be made common for both amplifiers by Service Selector switch. Voltage amplifier & split-load phase inverter circuitry feature ELCO-developed 12DW7 audio tube for significantly better performance. Kit \$43.95. Wired \$74.95.

HF81: Stereo Dual Amplifier-Preamplifier selects, ampli-HFB1: Stereo Dual Amplifier-Preamplifier Selects, amplifies & controls any stereo source — tape, discs, broadcasts—& feeds it thru self-contained dual 14W amplifiers to a pair of speakers. Monophonically: 28 watts for your speakers; complete stereo preamp, Ganged level controls, separate focus (balance) control, independent full-range bass & treble controls for each channel. Identical Williambass & treble controls for each channel. Identical Williamson-type, push-pull EL84 power amplifiers, excellent output transformers. "Service Selector" switch permits one preamp-control section to drive the internal power amplifiers while other preamp-control section is left free to drive your existing external amplifier. "Excellent" — SATURDAY REVIEW; HI-FI MUSIC AT HOME. "Outstanding quality... extremely versatile" — RADIO & TV NEWS LAB-TESTED. Kit \$69.95. Wired \$109.95. Includes cover.

MONO PREAMPLIFIERS (stack 2 for Steree) HF-65: superb new design, Inputs for tape head, microphone, mag-phono cartridge & hi-level sources. IM distortion 0.04% @ 2V out. Attractive "low silhouette" design. HF65A kit \$29.95. Wired \$44.95. HF65 (with power supply) Kit \$33.95. Wired \$49.95.

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HF60 (60W), HF50 (50W), HF35 (35W), HF30 (30W), HF22 (22W), HF14 (14W): from Kit \$23.50. Wired \$41.50.

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SPEAKER SYSTEMS (use 2 for STEREO)

SPEAKER SYSTEMS (use 2 for STEREO)
HFS2: Natural bass 30-200 cps via slot-loaded 12-ft. split
conical bass horn. Middles & lower highs: front radiation
from 81/2" edge-damped cone. Distortionless spike-shaped
super-tweeter radiates omni-directionally. Flat 45-20.000
cps, useful 30-40,000 cps. 16 ohms. HWD 36". 151/2",
111/2". "Eminently musical"—Holt, HIGH FIDELITY. "Fine
for stereo"—MODERN HI-FI. Completely factory-built.
Mahogany or Walnut, \$139.95; Blonde, \$144.95.

HFS1: Bookshelf Speaker System, complete with factory-built cabinet. Jensen 8" wooler, matching Jensen com-pression-driver exponential horn tweeter. Smooth clean bass; criso extended highs. 70:12,000 cps range. Capacity 25 w. 8 ohms. HWD: 11" x 23" x 9". Wiring time 15 min. Price \$39,95.

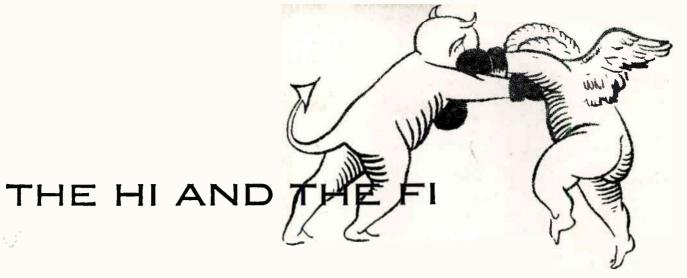
time 15 min. Price \$39,95.

FM TUNER HFT90: For the first time, makes practical even for the novice the building of an FM tuner kit equal to really good factory-wired units. No instruments needed, Pre-wired, pre-aligned temperature-compensated "front end" is drift free—eliminates need for AFC, Precision "eye-tronic" DM-70 traveling tuning indicator, supplied pre-wired, contracts at exact center of each FM channel. Pre-aligned IF coils. Sensitivity 6X that of other kit tuners: 1.5 uv for 20 db quieting, 2.5 uv for 30 db quieting, full limiting from 25 uv. IF bandwidth 260 kc at 6 db points. Frequency response uniform 20-20,000 cps ±1 db. Has 2 output jacks: cathode follower output to amplifier, plus Multiplex output for FM Multiplex Stereo adapter; thus prevents obsolescence. Flywheel tuning, AGC, stabilized low limiting threshold for excellent performance from weaker signals, broadband ratio detector for improved capture ratio & easier tuning, full-wave rectifier & heavy filtering, very low distortion. "One of the best buys you can get in high fidelity kits" — AUDIOCRAFT. Kit \$39.95". Wired \$65.95". Cover \$3.95. "Less Cover, F.E.T. incl.

NEW AM TUNER HFT94: Matches HFT90. Selects "hi-fi"

NEW AM TUNER HFT94: Matches HFT90. Selects "hi-fi" wide (20c — 9kc @ —3 db) or weak-station narrow (20c — 5kc @ —3 db) bandpass. Tuned RF stage for high selectivity & sensitivity. precision "eye-tronic" tuning. Built-in ferrite loop, prealigned RF & IF coils. Sensitivity 3 uv @ 30% mod. for 1.0 V out, 20 db S/N. Very low noise & distortion. High-Q 10 kc whistle fliter. Kit \$39.95. Wired \$69.95, incl. Cover & F.E.T.

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Chaos in the Spring: It was just a year ago that hi-fi's newest enfant terrible, the stereo disc, made its formidable debut upon the LP market and, as one suspected it would at the time, all hell has broken loose since then! How comfortable were the days when one simply stepped into a record store, selected the only available recording of one's choosen performance of a favorite piece, a good old-fashioned monophonic long-playing record, and took it home to one's good old-fashioned onechannel speaker system. And listened to music. But now! The strings had better be on the left and the percussion on the right, and there had better not be any hole-in-the middle!

In the meantime, what has happened to music? The prerequisite for all repertoire to be recorded nowadays seems to be that it must produce a startling shock effect. After all, who wants to listen to a Beethoven piano sonata recorded in stereo? It sounds just as good monaurally. One recording executive recently told me that he knew damned well that a singer's voice accompanied by orchestra should emanate equally from both speakers, placing the soloist in the middle and to the front of the ensemble; but the stereo-sticklers won't have it, and it has been his sad experience that such a record "won't sell". No, they demand the separation made obvious by the voice coming fron just one speaker and most of the orchestra from the other - no matter how lamentable the resultant artistic effect.

And then there is the current bedlam created by the third-rate "experimental" composers who have always had to rely upon tricks rather than talent: Duo for the West Side Subway and the East River at Night, Fugue for Flying Saucers, Essay for Echo Chamber and Strings and the like.

But patience. In spite of the madness presently in evidence, and the tragedy of the fast disappearing stereo tape (which one day will reappear, surely), stereo is here to stay. Latest available sales reports show that, nationwide, stereo discs accounted for 11% of LP sales in November, 12% in December, and 22% in January.

And music is entering what may well prove to be its most golden age. Never before have so many people listened to so much music, be it good, bad, or indifferent.

And never before have the young composers and performing artists of the world, struggling for recognition, felt more the stimulus to continue their efforts, nor have they ever enjoyed such exposure as their music has now before the huge new audience listening to hi-fi. Surely the good will prevail, and for this blessing every music lover and musician alike owes the recording industry heartfelt thanks and a strong vote of confidence.

Stravinsky on Stereo: In a recent article for The New York Times the Master had some engaging things to say: "We do not hear live performances 'stereophonically' . . . and stereo, instead of giving us 'the best seat in the house', gives us, in fact, a kind of omnipresent seat not found in any house . . . I do not say this to condemn stereo, however, but only to question the meaning of 'high fidelity'; fidelity to what? If, as I say, the audition offered by stereo is, in my sense, unreal, it can be in another sense ideal . . . since most concert halls are not ideal, or even good, I do not see why we should try to be 'faithful' to them, or why, in fact, we should not accept the 'stereophonic ideal' ". Stravinsky concluded: "With all my cautions about stereo, however, I expect that when I am accustomed to it, I will soon be unable to listen to anything else.'

Double Bill: We carp a lot about the shortcomings of commercial radio, but on a remarkable Saturday in March one network alone (CBS) presented in the afternoon the Metropolitan's majestic production of Berg's "Wozzeck," and in the evening a memorable concert performance by the New York Philharmonic of Debussy's "Pelleas et Melisande". Speaking of commercialism, what a unique conception is the one held by The Texas Company! Sponsors of the Met's broadcasts for so many years, they have contented themselves with the single slogan, "Your Texaco dealer — the best friend your car ever had". And they could justly add, too, 'the best friend the opera lover ever had''.

Thirty: When Milton Sleeper asked us all into his office the other day to tell us "something important", he was in a highly jocular mood and it seemed quite

likely that he was about to announce a wholesale raise in salary for everyone. But whenever he has a particularly unpleasant duty to perform he is always like this and it does put one off. After a few comments about the weather (it was a beastly day; wet snow turning to slush in the streets and even thunder from time to time reverberating above us) he said he had decided to sell HI-FI Music Magazine and that it is to be combined with his first publication in this field, High Fidelity. Then he told us that the May issue of HI-FI Music would be the last to be produced from this office.

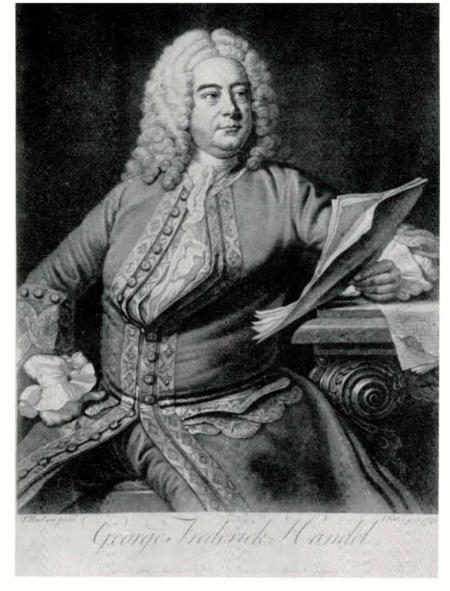
The resulting silence pulsated and I, for once, realized how much I liked my job. But after a moment or two we digested Milton's reasons, knew that they were valid, and made the usual half-hearted joke that it was fun while it lasted. Then to spare him what might easily have been an open display of tears on his part (and it would have been reciprocal from us) we quickly dispersed and did what we could to finish the day.

And now I have only space enough to say thank you and goodbye to all the wonderful ladies and gentlemen whose contributions solidified the heart of HI-FI Music: our board of reviewers, our contributing writers, the readers who wrote us and helped us stay on the track. And especially to Shirley Fleming, my Assistant Editor, who from the day I arrived in the office a year and a half ago, green as the first leaf of April when it came to being a Music Editor, determined to see to it that we got out, somehow, "my" first issue. Without her - the music section of it anyway - would never have felt the press of ink on paper, and it has been the same ever since, really.

Being an editor of a magazine, I have found out, is something like being the father of an unruly baby. The problems and the frustrations, and the feeling that you are failing as a parent! And every month the hope that it will somehow be better.

But putting a magazine to bed for the last time is very much like watching a beloved person sink into a deep and final sleep. And it is also like dying a little oneself.

- DOUGLASS CROSS



NEW YORK'S GREAT HANDEL FESTIVAL

On the 200th Anniversary of His Death, the World's Largest Metropolis Plans a Civic Celebration to Honor One of Music's Giants—By John Edmunds

should be the first musician to elicit the interest of the New York City Fathers in sponsoring a festival in his honor is not as surprising as it might seem. He was the first musician ever to have a statue erected in his honor during his lifetime (in Vauxhall Gardens, by Roubilliac) and he was probably the first musician to become a national hero—this also in his lifetime. His music speaks with the authority and with the voice of public utterance; he is cosmopolitan; the man and his music are one. He was and is, in short, a man about whom a festival forms naturally, a man from whose indomitable character and massive, relentlessly purposeful music the seeds of festivals spring inevitably.

These festivals, beginning with the London event following his death in 1759, are successful for a reason which



Top of page: The famous portrait of Handel painted by Thomas Hudson in 1749. Above: Medal struck for 1859 Handel Festival in Crystal Palace,

London

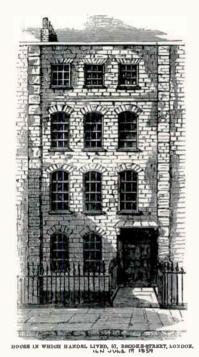
is plain enough. His idiom was intentionally fashioned to please his public. He pays the ultimate compliment to the common man by addressing him as an equal, and addressing him moreover in speech which is plain, objective, monumental, and which, when he is at his best, has a sovereign authority which no other composer has ever managed so effectively. Everywhere in his music is the touch of immense power; everywhere is the direct approach and the suggestion of noonday sun, which no Italian in that sun-drenched land (which provided Handel with his musical speech) has ever been able to reflect more magnificently. His is an outdoor music, though it is said that he never left his house in London except to go to the theater or to a sale of pictures.

After his death, the English tended to represent him primarily as a religious composer, even though he himself had

determinedly kept performances of his oratorios in the theatre, insisting always that they were dramatic works. Partly because of this quirk of the adoring English admirers of his time, Handel, a man bursting with life and energy, has suffered the strange fate of being turned into a monument. He is, in general, remembered chiefly for one work only, the "Messiah", and that in numerous corrupt

The purpose of the New York City festival (and there will be similar ones throughout Europe all year) is to break the stranglehold of this colossus, the "Messiah", and to rediscover the glowing warmth and humanity of the countless masterpieces which have lain in neglect for two centuries. To achieve this purpose it is necessary not only to perform a variety of works; it is equally necessary that audiences accept the challenge and make an effort to see beyond the surface commonplaces into the authentic originality at the heart of Handel's work. For there are musical conventions, readily acceptable in his lifetime, which we find as outworn and burdensome as the literary conventions of the same period ("I have the honor to be, my dear sir, your most obliged and humble servant, et cetera, et cetera''). It is difficult for us nowadays to accept his extremely dry recitatives, in fact to endure uncounted hours of them without becoming restive. They do, however, serve to carry forward the "argument," and provide relief from the intense concentration needed to follow the closely-wrought choruses, so full of ingenious and beautifully manipulated contrapuntal devices. There is the contrast, too, between the almost freely declaimed recitative and the fiercely strict metrical patterns of aria and chorus. In a sense the recitative is the "prose", and the aria and chorus the "poetry". The prose is out of fashion today, whereas the "poetry" is among the greatest expressions of the human spirit in the history of music.

Apart from the rigid overall recitative-aria-chorus structure there are technical conventions governing the



Handel composed "Messiah" here in 1741

details of Handel's work: harmonic, melodic, and rhythmic formulas. An artist of vast originality, he took not only details — the common property of his period - but whole movements from other composers without so much as a by-your-leave. His works have in fact become a happy hunting ground for countless music historians who for two hundred years have been more or less triumphantly detecting Handel's "grand larcenies" from such nearly anonymous contemporaries as Urio, Erba, and Clari. Strangely enough the recognition of these extensive appropriations has never affected his own fame in the smallest degree, nor induced adult listeners to think of Handel as dishonest. It would be as foolish to do so as to complain of Jupiter's immorality. Paradoxically, the noble integrity of Handel's characters is admired even by those who do not relish his music.

And the fact is that there have been musicians who disliked Handel's music. Berlioz, for one, went so far as to call him "ce tonneau de porc et de biere" (that tub of pork and beer). If one were to judge only from descriptions of Handel's appearance in his later years, such a remark might be understandable. "They used to call him the Great Bear," says Romain Rolland in a famous passage, "He was gigantic: broad, corpulent, with big hands and enormous feet; his arms and thighs were stupendous. His hands were so fat that the bones Continued on page 52

Handel died on April 14, 1759. This monument stands in Westminster Abbey where the composer is buried



HANDEL, BY ROUBILLIAC, IN WESTMINSTER ARRE

Thoughts on the Grafonola

Wherein the Pleasures of Playing the Talking Machine Are Recalled with Love and Nostalgia — By Robert Adams

THE PURSUIT of pleasure is a tricky affair, the devil knows. The more we win, the more we must woo it. The price of sophistication is innocence.

Sometimes as I hear new marvels of phonographic sound I experience a curious, wistful, contradictory sense of loss — a feeling that at first seems too ridiculous to confess aloud. In the face of today's phonographic triumphs what possibly could that loss entail? And does it really matter, in the end? Let us see. Let us look backward.

In the playback tape of my memory there stretches through the years a series of pathetic old phonographs that I have owned and adored. Like the old friends that they were, they had faces and, even, personalities. Some of them, the oldest ones, seem imbued with a certain magic property that is indefinable. The very center of my indoors life, they had been looked at, touched, and listened to with complete attention and, in some cases, with great effort on the part of myself and my friends. In a way these old trusties had demanded almost as much as they had given — they needed winding, cajoling, repairing, their needles sharpened, a host of blandishments. Hence, their facades had gradually taken on that look which objects acquire from our unmitigated respect and long-term dependency. Particularly stern and "no nonsense" was the expression my old Victor Orthophonic displayed when its doors and lid were closed. And oh, its smell! — as complex and promissory an odor as that of Christmas, it was compounded of oil, felt, varnish, dust, and suspense. I can recall it perfectly now. But wait. I must introduce you to the others.

The first — the very first — was a golden oak "highboy" console my parents had when I was in kindergarten. It was a Paramount, and I have never heard of another. Since it was taller than I was, I had to perch on the wainscoting to play it and, more particularly, to watch the revolutions that brought the big needle to the final, hissing groove. (Do you remember that complaining hiss? — "I'm through, I'm through, I'm through, I'm through, I'm de glorious sound.

Perhaps three years later I took up with a handsome Brunswick Panatrope owned by my English teacher. It was low and long and dark, with a discreeter, more velvet sound than I was used to. And that is just the point — all the old acoustic machines were highly individual in their tone quality, in spite of their parity of output of sound cycles per second. What a shame that the Victor Orthophonic came out so late in the acoustic era, just before electric phonographs were unveiled. It was a machine that produced a natural sound, far superior to all its acoustic

forerunners. A friend of mine still has his Orthophonic, in the same room with his hi-fi equipment. From time to time he winds it up and listens — really listens — to some favored old 78-rpm. recordings. I have recently heard this thirty-year-old machine, and I am astonished by its range and volume. (It favors the piano and the human voice.) Even the bass, on the later 78 records, is there to a remarkable extent.

After the acoustic age and the depression I bought my first electric machine, a second-hand Victor radio-phonograph. Lowering the big magnetic head into the grooves for the first time was a joy I will never forget. I was hearing my Cortot, Teyte, Koussevitzky, Goodman records through an electro-dynamic speaker, and I don't believe anything that the wonders of hi-fi subsequently produced ever stunned me with such marvelling joy, such a sense of extended horizons in sound. (The pleasure formula: what we start with, plus what we get, over what we want.) Here was ultimate beauty in sound, I thought, and many were the hours I spent in carefully sharpening the cactus needles that would preserve, I hoped, my precious records forever. Those records, by the way, cost two dollars apiece for perhaps eight minutes of music. Several years later they were reduced, oh joyous day, to one dollar. I still believe that the real era of the phonograph record began with that event.

There were other old trusties: a hybrid affair I used in college, made of the insides of an ancient table radio and the phonograph part of the old Victor, long after the latter's amplifier had grown mouldy with age; a final and necessary return to the acoustic type — a wind-up portable relic I used in Europe (I wanted music badly enough to spin the turntable with my index finger after the spring had broken); a black two-watt monster that wowed grudgingly for me on DC through the war years; then a handsome console combination with changer, which soon became obsolete with the arrival of LP records.

Today I have two speakers and five times as much power in an amplifier as I need and hundreds of LP records. I love the set. It sounds marvelous. It has needed almost no maintenance for five years of nearly constant playing. (As a consequence I have paid it less attention than any of the others — even during playing time.) The modern phonograph is something I know I could not do without. Eventually — I suppose — I will have stereo components and whatever refinements the future brings. I would not move backwards.

With most gains come losses, however small. I ask myself: with the gains of hi-fidelity have we not perhaps lost some- Continued on page 49



But

Stereo Stumbling Blocks

Recording a New World of Sound Has Created Its Own Peculiarities, Crackpot Theories, and Absurdities — By Leonard Feather

Nould you like to make a contribution?" a well known bandleader asked me recently. "I'm trying to raise funds for my campaign. The slogan is 'Help Stamp out Stereo!"

It turned out he was only partly kidding. His stereophobia had developed during the course of a recording date

"The rhythm section was composed of four musicians who work together so regularly on record sessions that they're almost considered a team," he went on. "Everybody usually raves about the great sound and the wonderful beat they produce. But on this session everything was thought of in terms of stereo—two of them had to be on one microphone, and the other two on another channel, and the result was that the engineers had them placed in such a way that they couldn't hear each other properly, and believe it or not, even with those guys, the rhythm section didn't swing!"

This is not the only instance of stereo requirements overriding musical values. These days, it seems to be the rule rather than the exception. On one date which I supervised myself we had an orchestration involving a duel between two tenor saxophonists. During parts of the arrangement one saxophonist would be alternating four-bar solos with the other. The logical idea, from the stereo standpoint, would have seemed to be the placement of the two on different channels, for a ping-pong effect. But there was a hitch. Immediately before and after the battle of the saxes, there were ensemble passages in which both men had to read music as part of a saxophone section. This produced two difficulties. The saxman who stepped over to another channel for his ad lib solos would have no time to dash back to his place in the sax section and start reading the music. If, on the other hand, he took his music along with him and read it from a vantage point where he would remain separated from the rest of the sax section, the sound on the resulting record would be absurd: one sax part would stick out on the left instead of blending with the others on the right. A third solution was available: we could stop the tape at the end of the sax-battle chorus, send the wanderer to his original position, resume the taping and splice the two passages together. But this, as any jazzman will tell you, does not make for a cohesive feeling or a musically satisfactory atmosphere.

This particular problem was never solved; we finally had to keep both men on the same channel, and to heck with the ping-pong.

There are complications presented by stereo even after the record is completed. The listener himself, whether he be the amateur who buys the LP or the expert who writes the liner notes, tends to be carried away with the wonders of stereo and allows it to dominate his thinking to the exclusion, or at least the subjugation, of musical content.

An example came to my attention this month when I received a delightful album by Jackie Cain and Roy Kral, a vocal duo whose musical ability and lyrical wit is striking enough to supersede in importance any technical considerations. The liner notes were quite lengthy — close to 1,500 words. They dealt, in an amusing and highly readable manner, with various aspects of mono and stereo sound (of the latter the writer observed "I still have lingering suspicions that it's actually magic, but perhaps I'm not a child of my times"). Shortly before the end he added hastily: "Incidentally — and before it slips my mind [italics mine] — this record contains some highly engaging listening."

Now I bow to nobody in my awe for the magic of stereo (I, too, am a child of another time) but if we have reached the stage that sees stereo the master rather than the servant of the music, we are at a dead end.

The attempts to create a synthetic realism by matching the relationship of the various instruments so that the listener will hear an approximation of the identical placement when listening to the record is a palpable fraud. Not every listener to the orchestra in a concert hall, night club, or arena is seated in exactly the same place. What he hears with two ears varies according to where he happens to sit, and if Carnegie Hall has 2,800 seats, there are 2,800 different aural receptions of the music - but the difference is so slight, and the overall impact of the music so much more important than a measurement in feet and inches of string-section-to-left-ear, woodwinds-to-right-ear, and so forth, that to quibble about such matters reduces the whole problem to a technical, and in effect anti-musical, hair-splitting contest. An even sillier policy was the physical separation of the above-mentioned close-knit vocal duo, Jackie and Roy. (See my review, in this issue, in which the B recording rating was for policy rather than quality.)

Stereo today is perhaps at the stage to which the motion picture industry brought itself when, in the first Cinerama production, the viewer was assailed by the immediate illusion of being with the riders on a roller-coaster. The impact of the technical effect per se in the introduction of any technical innovation in an art form is usually given precedence over the esthetic or entertainment qualities that will prove, in the long run, to be paramount.

Personally, I would place the matter in perspective by referring to my collection of old Duke Ellington records. I have a large library of the 78's made by the Ellington band during the late 1920's on the Brunswick label, and during the early 1940's for Victor. These performances, the Brunswick items particularly, were Continued on page 49

MUSIC, MAIL, and MICROPHONES



Martin Bookspan, director of recorded music, works at the "Master Kardex" in which complete list of records is filed by composer's name

NE EVENING not long ago, during the full of the moon, a lady telephoned WQXR and asked if the station would please play Beethoven's Symphony No. 10. Somewhat crestfallen at the news that Mr. B. had only composed nine symphonies, she said: "Well, couldn't you request him to write another one? I'm sure he would if WQXR asked him to." Now we like to think that the average musical IQ of our audience is slightly higher than that exhibited by this particular lady, but in a way her call symbolizes the unshakeable faith that so many listeners have in the station.

Through the years, New Yorkers have come to look upon WQXR as a veritable storehouse of musical information. Violin students call in to find out how long Heifetz takes to play the *Hora Staccato*, record dealers send us SOS calls, as when a prospective customer is in the shop asking for "the lovely piece that has a Spanish flavor and there's a trumpet solo in the middle", and our record information department is forever identifying melodies for people who don't recall the title or the composer or when they heard it, "but it goes something like this . . .".

But did I say storehouse of musical information? WQXR gets calls on just about everything under the sun, related to music or not. People write in for answers to TV quizzes and newspaper crossword puzzles, one man wanted to

know at what time we would broadcast the running of the Kentucky Derby, and last summer a listener even phoned to urge us to protest the fare increase on the New Haven Railroad!

Well, those are some of our listeners. Although the wackier ones provide better material for anecdotes, it is the serious and devoted music lovers in our audience who actually shape many of the policies at WQXR. Our highly critical listeners have proven time and time again that they simply will not tolerate any slackening in the standards to which they have become accustomed. A musical program which is not up to snuff, a distasteful commercial (vehement protests forced the banning of all singing commercials from WQXR as long ago as 1942), even the mispronunciation of a name, is sure to bring immediate retribution in the form of calls and letters of remonstrance.

Consequently program ideas, no matter how good they seem on paper — or how well they sound to the executive board — go out the window when our listeners fail to share the board's enthusiasm. About a year ago, for instance, we discontinued a daily half-hour program of solo piano music, substituting a light symphonic show which we felt would have a wider appeal. We reckoned, however, without the cries of anguish that poured in from what seemed like every piano teacher and student in town. Aggrieved letters, cards, and phone calls - some indignant, some cajoling, some more-in-sorrow-than-in-anger — all insisted that we bring back the piano music. A compromise which returned only fifteen minutes of piano music to the daily schedule failed to stem the protests, and finally, only a few months after the initial change, we surrendered unconditionally. Once again the listeners had spoken — and so the piano program came back to stay in all its half-hour glory.

This dependence upon our listeners for much of the policy-making can be traced all the way back to the founding of the station, for WQXR literally came into being "by popular demand".

In 1936 the Interstate Broadcasting Co. was formed by inventor-engineer John V. L. Hogan, and Elliott M. Sanger, an advertising expert and fellow music lover (who today is still at the station's helm). The new operation, built firmly on the foundation of "the best in music", made its commercial debut in the summer of that year, and on December 3, 1936, officially adopted its present call letters, WQXR.

In the succeeding years, WQXR grew steadily, and so



WQXR frequently broadcasts' live' stereo concerts on AM and FM, and a regular weekly feature is the performance of the station's own string quarter, maintained since 1947. It is shown here in the WQXR auditorium before studio audience which attends free of charge. Note the announcer's two microphones—one for each channel

did its audience, confounding the experts who had predicted flatly that a "good music" station was bound to be a financial flop. In 1939 it began operations on FM, becoming the first commercial station in New York City to do so, and as early as 1952 was already experimenting with live stereophonic broadcasts via its AM and FM transmitters. In 1944 WQXR was purchased by The New York Times, but the original policies of the station remained unchanged, except that the added facilities and financial resources of its new owner have since made possible further advances. In recent years its AM power has been increased to 50,000 watts, the maximum permitted by the FCC, and WQXR has also become the headquarters of a new FM network—thirteen stations in upstate New York which carry almost all of its programs

If WQXR was a proneer in the '30s and '40s, the broad-casting of classical music on a commercial station today is happily no longer a novelty. In the New York area a listener need only twist his radio dial (more particularly his FM dial) to find a whole bevy of stations which devote a substantial part of their day to good music. Thus what makes WQXR unique today is not merely that its emphasis is on the classics, but that its entire broadcasting format reflects in its variety and organization the energies

of a large and expert staff; only the key network stations have as many employees as WQXR carries on its payroll.

At WQXR no broadcast is handled haphazardly. Every step in its operations — from the birth of a program idea in the conference room to its actual Continued on page 48

Just before broadcast time, Melvin Elliot takes out records from the stacks. Only a small part of WQXR's collection is shown here





MONO/STEREO RECORDS

Reviews & Ratings

Board of Reviewers:

Robert Adams • Jean Bowen • George Cory • Douglass Cross • Oliver Daniel • Shelley Dobbins • John Edmunds • Leonard Feather • Shirley Fleming • Mortimer Frank • Bernard Gabriel • Ira Gitler • Robert Jones • George Louis Mayer • Colin McPhee • Robert Sherman • Abraham Skulsky

ORCHESTRAL MUSIC

Serenata ALBINONI: Concerto à Cinque in B A to B flat, Op. 5, No. 1 **BOCCHERINI: Minuet** PARADIS: Sicilienne **ROSSINI: Sonatos for strings, No. 5** in Eflat, No. 6 in D

Others I Solisti di Zagreb under Antonio Janiaro

Vanguard VSD 2013

A mixed bag of blessings and semi-blessings including, in addition to the works above, Sarabanda, Giga e Badinerie by Corelli, and Haydn's Serenade. The early Rossini pieces are most seductively beautiful and witty. Appropriately they occupy the lion's share of the record, and they are played with notable grace and style. The Albinoni too is excellent. The Corelli suite assembled from various sources is a pleasure to hear though at this point one's misgivings begin to generate—they are three overly-popular movements. The famous Boccherini Minuet is given a somewhat flaccid performance, and the Paradis Sicilienne is played with the faint enthusiasm it merits. The very familiar Haydn Serenade (from the String Quartet No. 3, Op. 5) is heard in a not-very-sparkling rendition. When such race-horse performers as these are aroused they are capable of making one's hair curl with excitement. Their boredom with the Paradis item is a rather back-handed display of their integrity.

Janiaro

BARTÓK: Divertimento for String Orchestra HINDEMITH: Mathis der Maler Philharmonia Orchestra under Constantin Silvestri

Hindemith

Angel 35643

The Divertimento is mainly remarkable for its mysterious slow movement which is full of original and ghostly sounds. The first and last movements have splendid things in them though the first has some unattractive sequential writing and the last is a trifle jocose. However, the whole is redolent of Bartók's Hungarianism. The Hindemith Mathis is a central work in its composer's oeuvre certainly one of his best pieces. The spacious opening of the Angelia Concert is as deeply impressive as ever. Some of the bright tunes and motives seem a little stale today, but the whole is carried through by Hindemith's authentic rhythmic force. The Philharmonia Orchestra of London plays both works with the utmost èlan. The recorded sound is very good.

BARTÓK: Roumonian Folk Donces, for small orchestro PROKOFIEV: Overture in B Flot, for seventeen players SHOSTAKOVITCH: Two Pieces for String Octet STRAVINSKY: Octet for Wind Instruments Members of the M-G-M Orchestra under Arthur Winograd M-G-M E3684

The outstanding work here is the Stravinsky Octet, scored for flute, clarinet, 2 bassoons, 2 trumpets and 2 trombones. Written in 1922, in the composer's early neo-classic style, the work today retains its instrumental freshness and still delights us with its unusual resonance and mordant wit. Bartók's set of Roumanian Dances, one of his most popular works, began as piano pieces but are here presented in a colorful arrangement for small orchestra which the composer made later. Prokofiev's Overture (1926) is a brightly scored piece of no particular significance. More interesting is the early Shostakovitch Octet (1925), with its lyrical Prelude and vivacious Scherzo. All performances are very fine, especially in the Stravinsky work, which calls for virtuoso playing, and is recorded with remarkable clarity. Label information well scram-C. McPhee

BEETHOVEN: Overtures: Fidelio, Op. 72b; Leonore No. 3, Op. 72o; Coriolan, Op. 62; The Creatures of Prometheus, Op. 43; Egmont, Op.

Berlin Philharmonic Orchestra under Rudolf Kemp EMI Capitol G7140

Two preludes to Beethoven's only opera occupy one side of this disc, and hearing them in succession points out how different they are. The "Fidelio" Overture is a simple, sonata-form movement lacking any extra-musical implications. Leonore No. 3 is a terse symphonic poem (composed long before Liszt and/or Strauss invented the tone-poem idiom) in which all of the libretto's soap-opera histrionics are reproduced. Kempe's performances, except for what some may consider a sluggish Coriolan, are orthodox, and his musicianship, the virtuosity of the Berlin Philharmonic, and an unusual clarity of inner details make this a laudable enterprise.

BEETHOVEN: Symphony No. 3 in E Flat, Op. 55 ("Eroica") Columbia Symphony Orchestra under Bruno Walter Columbia ML 5320

RATINGS OF CLASSICAL MUSIC

The following explanation of the Record Rotings which accompany the Record Reviews is given so that you will understand exactly the significance of the three letters which appear at the right of each review heading.

COMPOSITION (Top Letter)

A: Outstanding
Indicates that the composition is one of the composer's best works, or that it is outstanding in a particular class of music. Assignment of this rating is an unqualified recommendation.

B: Important
This rating is but slightly below the A rank.

C: Worthy

A composition which may merit representation in a library of the composer's works, or in a collection of that particular music.

PERFORMANCE (Middle Letter)

Outstanding Indicates a superb performance. Assignment of this rating is an unqualified recommendation.

Excellent

A noteworthy performance, subject only to minor criticism. C: Satisfactory

A performance not without flaws, yet deserving public

RECORDING QUALITY (Bottom Letter)

A: Outstanding Realism

Representing the highest present attainments in acoustic ond recording techniques.

B: Excellent Quality
Slightly below A rating because of minor faults in the acoustics or recording, or because the noise is considered somewhat above the minimum currently attainable.

C: Acceptable Quality

Representing the current average of the better LP

Important Note: Records which are rated below C as to the composition, artist or orchestra, or recording quality ore not ordinarily reviewed here.

S This symbol indicates a stereo disc.



Reviewers'



Raves

All the compositions, performances, and recording techniques on the following discs have been given unqualified recommendation

ORCHESTRAL MUSIC

BEETHOVEN: Symphony No. 3 in E Flat, Op. SS ("Eroica") Columbia ML 5320

BEETHOVEN: Symphony No. 6 in F, Op. 68 ("Pastorale") Columbia ML 5284

FALLA: El Sombrero de Tres Picos TURINA: Sinfonia Sevillana S London CS 6050

RAVEL: Bolero; La Valse; Rapsodie Espagnole Columbia ML 5293 & S MS 6011

STRAVINSKY: Symphony in Three Movements; Ebony Concerto S Everest SDBR-3009

STRAVINSKY: Petrouchka S Omega
OSL-8

CONCERTOS

BRAHMS: Violin Concerto in D, Op. 77 RCA Victor LM-2281

CORELLI: Concerti Grossi, Op. 6 (Complete) Vanguard BG585/7 & S BGS 5010/12

PROKOFIEV: Violin Cancertos No. 1 in D, Op. 19; No. 2 in G Minor, Op. 63 S London CS 6059

VOCAL MUSIC

WALTON: Belshazzar's Feast Capitol-EMI 7141

Five Centuries of Spanish Song Capitol G 7155

OPERA

GILBERT AND SULLIVAN: The Mikado; The Pirates of Penzance S London OSA 1201 & OSA 1202, respectively. Each 2-12"

GILBERT AND SULLIVAN: The Gondoliers; The Mikado S Angel 3570 B/L & 3573 B/L, respectively. Each 2-12"

KEYBOARD MUSIC

BACH: Organ Works: Prelude and Fugue in C Minor; Prelude ond Fugue in C; Fantasia in C Minor; Toccata and Fugue in F Vanguard BG 580

BEETHOVEN: Bagatelles, Opp. 33, 119, 126 Vanguard VRS-1033

BEETHOVEN: Thirty-Two Variations in C Minor; Variations in F, Op. 34; Variations in E Flat, "Eraica", Op. 35 Vanguard VRS-1032

SCHUBERT: Sonata in A Minor, Op. 42; Two Impromptus, Op. 142, No. 2, and Op. 90, No. 2 Monitor MC 2027

MISCELLANEOUS

Alice in Wonderland 5 London OSA 1206 2-12"

Around the World in Eighty Days Everest LPBR 4001 & S 1020 Tom Sawyer Decca DL 8432

PLAYS AND POETRY

SHAKESPEARE: "Much Ado About Nothing" The Spoken Word SW-A6 3-12"

FOLK

Folk Songs for Babies, Small Children, Parents and Baby Sitters Vanguard VRS 9042

STAGE, SCREEN & TV

Jeanette MacDonald and Nelson Eddy: Favorites in Hi-Fi RCA Victor LPM-1738 Book of Ballads Kapp KL-1117

POPULĀR

Malagueña Columbia CL 1267

JAZZ

The High and Mighty Hawk Felsted FAJ 7005

Peter Gunn S Stereo Records S 7025
Something for Both Ears S World
Pacific HFS 2

All of the qualities that made Walter's two previous recordings of the Eroica admirable are present in this one. Most striking is the way in which the conductor imparts weight and shape to small phrases and, at the same time, preserves the large structure of each movement. Climaxes are not synthetic but grow logically out of the music, and tempos, although restrained, are convincing. Columbia's engineers deserve much credit. The groans of anguish emanating from the contrabosses in the Fueeral March emerge with startling realism and two minor lapses in the orchestra (unnoticeable without a score) contribute to the illusion that this is a live performance and not an amalgamation of tape splices.

M. Frank

BEETHOVEN: Symphony No. 6 in F, Op. 68 ("Pastorale") Columbia Symphony Orchestra under Bruno Walter Columbia ML 5284

A A Walter



Walter, now in his 84th year, has undertaken to re-record the nine Beethoven symphonies and other outstanding works. This performance, the initial outgrowth of the project, displays many of the traits for which the revered ectogenarian is famous — warmth, lyric sentiment, and the ability to make the divergent personalities in a symphony orchestra respond as one. Disciplined romanticism is the keynote of Walter's conception, and everyone, save those who demand a Pastorale of classical purity, should find this interpretation compelling. Accompanying liner notes by Hector Berlioz transcend the imagination of most contemporary annotators. Remarkably clear sound.

M. Frank

BIZET: L'Arlésienne Suites Nos. 1 A-A-A and 2; Carmen Suite No. 1 A-A-B Philharmonia Orchestra under Herbert von Karajan Angel 35618 Bizet



The first L'Arlesienne Suite, drawn from the incidental music he had supplied for Daudet's play, was one of the few successes Bizet enjoyed during his short, troubled career. The second, arranged after his death, has equalled the first in durability. Von Karajan here shows, as he has in the past, his knack for revitalizing tired classics. His punctilious regard for musical details combined with the perfect performance by the Philharmonia makes this an outstanding achievement and puts us under the spell of Bizet's charming scores. These vie with Beecham's as the best available performances. G. L. Mayer

DEBUSSY: Iberia IBERT: Escales RAVEL: Alborado del Gracioso Orchestre National de la Radiodiffusion Francaise under Leopold Stokowski Capitol P8463

A-B-A A-A-A A-A-A

Debussy



Stokowski conducts *Iberia* with enormous vitality and loving attention to the details of orchestral color so especially Debussy's own. The slow movement has great sensuous charm but is never allowed to grow languid, while the last movement, so hard to project because of its episodic character, is given a symphonic sweep through the emphasis of hidden connecting lines in the score libert's exotic but conventional Ports of Call could well have been replaced here by something of deeper musical significance. Ravel's *Alborada* is sheer joy to listen to, both for the music itself, and for the fire and virtuosity of the performance. Stokowski remains in wonderful form.

C. McPhee

FALLA: El Sombrero de Tres Picos TURINA: Sinfonia Sevillaña Orquesta Nacional de Espana under Ataulfo Argenta S London CS 6050

A-A A-A Falla



Falla's Three Cornered Hat is one of his most exuberant and colorful works, as authentically Andalusian in spirit as "Petrouchka" is Russian. Written originally

for the Diaghilev Ballet, the score is complete in itself, witty, of great melodic charm, and fascinating in its use of Spanish folk themes. Turina's Sinfonia Sevillana (1920) is less daring in orchestral and harmonic methods, but is nevertheless a warm and captivating work of lyrical beauty and spontaneous rhythms. The late Ataulfo Argenta was in his element in works such as these, and the present performances are exciting. The recording is excellent, especially so in capturing delicate percussive sounds.

HAYDN: Symphony No. 104 in D ("London") A to B MOZART: Symphony No. 34 in C, A to B

Philharmonia Orchestra under Rudolf Kempe

EMI Capitol G7150

Mozart composed the K.338 when he was 24 years old. The London is the final symphonic fruition of Haydn's maturity. Despite this difference, the classic perfection of these works makes them compatible disc-mates. Kempe's readings are in keeping with this classicism. He animates the scores with a required vigor that is tempered by sensitive phrasing and rhythmic firmness. Unfortunately, a miscalculation by the engineers (or possibly the conductor) has led to an excess of string tone that occasionally obscures the winds. In all other respects, this record (which includes the original three-movement version of the Mozart) is a delight.

Russion Composer Mosterpieces A to B MOUSSORGSKY: Polonaise from Boris Godunov RIMSKY-KORSAKOV: Russion Easter Overture; Dance of the Buffoons BORODIN: Polovetzian Donces GLIERE: Sailors' Dance Virtuoso Symphony of London under Arthur Winograd

S Audio Fidelity FCS-50009 Winograd



It is hard to enthuse over such repertory as this. The initial pessimism is further strengthened by good but routine performances. The sound is another matter however: stereo could hardly be better technically. The impression is of moderately distant microphoning and the orchestra is spread widely and evenly with no "hole in the middle". The acoustics are heavily reverberant, too much so for my taste, and some loss of detail results. And why are we de-prived of a chorus in "Prince Igor"? But this is splitting hairs; one can only be thankful for such glamorous sound. Now how about some interesting, unhackneyed repertory in the Audio Fidelity catalogue?

PISTON: Serenata VAN VACTOR: Fantasio, Chaconne and Allegro A-A-A BENTZON: Pezzi Sinfonici, **Opus 109** Louisville Orchestra under Robert Whitney Louisville Commissioning Series

LOU-5B-6

Angel 3563B

The most that can be said about the three new works issued by the enterprising Louisville Commissioning Series is that they are finely written pieces and that their composers ore undeniably talented. What each of the works lacks is individuality and urgency. Piston's Serenata is an agreeable work indeed; Van Vactor's piece tends to be rather conventional, while Bentzon, who uses the more contemporary idiom of dissonant chromaticism, is in possession of both lyrical and dramatic qualities. The performances are adequate, the sound is excellent.

Whitney

PROKOVIEV: Peter and the Wolf **HAYDN: Toy Symphony** Peter Ustinov, narrotor (in the Prokof-A-A iev); Philharmonia Orchestra under Herbert von Karajan

Prokofiev's engaging musical tale comes off best when performed "os is", without the addition of celebrity narrators or overly winsome conductors. Happily, both performers in this version refrain from adding special touches and deliver impeccable, honest readings, free from artificiality. Ustinov has the compelling simplicity of a real story-teller and von Karajon leads the virtuoso orchestra in a spacious and transparent rendering, full of character, color and dramatic tension. This is exactly the kind of well-poised performance the work deserves. There is nothing here to pall on repeated hearings. Haydn's Symphony is both elegant and joyous.

G. L. Mayer G. L. Mayer

RAVEL: Bolero; La Valse; Rapsodie Espagnole New York Philharmonic under Leonard Bernstein Columbia ML 5293 (Monaural) S MS6011

A Bernstein



My preference here is for the atmospheric and subtly scored Rapsodie Espagnole, so unmistakably Ravelian in its orchestral texture and harmonic color. The lavishly orchestrated Valse is more of a brilliant tour de force, a kind of tribute to Johann Strauss, having great popular appeal, I have never found the Bolero interesting except as an ingenious demonstration of how an orchestral crescendo can be methodically built up in some fifteen minutes. Debussy superbly achieved this in three minutes with his Fetes. Bernstein conducts all three works to perfection. There is fine solo work in the Rapsodie, and La Valse moves with great rhythmic sweep. Both stereo and monaural discs are fine in sound. I found, however, that when played on stereo equipment the monaural disc lacked the brilliance it had on monaural equipment.

STRAVINSKY: Symphony in Three Movements; Ebony Concerto The London Symphony Orchestra under Sir Eugene Goossens; Woody Herman and his Orchestra, respectively Everest SDBR-3009

Stravinsky's Symphony, composed in 1945, is one of the high points in his creative career. It has a dramatic texture all its own and a rhythmic pulsation which at certain points is remindful of the Rite of Spring. The Ebony Concerto, while much smaller in scope, also proves the uncanny ability of the composer to express himself in any idiom-even jazz. Goossens conducts the Symphony with utmost precision and driving intensity. Woody Herman, for whom the Ebony Concerto was written, is of course an old specialist in the score. The sound of this stereophonic recording is most impressive by virtue of its depth, spaciousness and clarity. A. Skulsky

STRAUSS: Death and Transfiguration; Dance of the Seven Veils; Dance Suite after Cauperin The Philharmonic Orchestra under Artur Rodzinski

Capitol-EMI G7147

Rodzinski

This spacious rendition of Strauss' tone-poem takes on poignant overtones with Rodzinski's recent death. The lyrical passages near the start of the work, depicting youthful reminiscences, have great tenderness about them; and it is a noble interpretation throughout. The elegant Dance Suite derived from harpsichord pieces of Couperin is done with virtuosic precision by the Philharmonia players; it is unfortunate that two sections were deleted in favor of the rather tame performance of the Dance from "Salome". Beautiful recording.

STRAVINSKY: Petrouchka Cento Soli Orchestra of Paris under **Rudolf Albert** S 🗃 Omega OSL-B

Stravinsky's dazzling score to the ballet "Petrouchka" has never sounded more radiant than in this brilliant recording. Especially fine acoustically are many solo passages, featuring flute, bassoon, trumpet, etc., the clarity of the more percussive sounds in the score, and the various hurdy-gurdy and accordion episodes which are little masterpieces of satire. Rudolf Albert has a perfect sense of tempo throughout, and the ploying by the orchestra is technically superb. C. McPhee

TCHAIKOVSKY: Symphony No. 6 in B Minor, Op. 74

Virtuoso Symphony of London under Alfred Wallenstein

S Audio Fidelity FCS 50,002 Tchaikovsky

Wallenstein and his select body of Englishmen do well indeed by Tchaikovsky. This is a dramatic and unflinching performance: the first Allegro is whipped into a veritable fury, the second movement is deft and graceful; all the climaxes, and particularly those in the finale, are created with real impact, and the total impression is dramatic and brilliantly colored. The stereo is unobtrusive, with little if any directional quality; the presence is exceptionally clean and close in solo passages, but the sound seems to grow "furry" in the loud tuttis. S. Fleming

Marches from Operas: Marches by Berlioz, Bizet, Borodin, Glinka, Meyerbeer, Mozart, Rimsky-Korsokov, Verdi, and Wagner Virtuoso Symphony of London under

Arthur Winograd S Audio Fidelity FCS-5000B

Just about the only comment to be made on such a disc concerns the quality of the saund. This is indeed worthy of comment, for the sonics are not only spectacular but tasteful and ungimmicked. The performances are also tasteful and occasionally exciting but diluted a bit by excessive hall resonance.

CONCERTOS

BRAHMS: Concerto No. 1 in D minor, Op. 15 Gary Graffman, pianist; Baston Symphony Orchestra under Charles RCA Victor LM-2274 Graffman



The Brahms D Minor Concerto, though written by a young man in his twenties, does not sound at all youthful in spirit, but rather as though it might have been conceived by the composer when in his mast mature years. The performance by Gary Graffman, too, sounds remarkably mature for the young man he is. And this is certainly meant as a compliment. For there is real bigness of line in the playing, surprising emational depth and masterful technical support — solid as a rack — but never at all obtrusive. Only a slightly thick, earthbound quality keeps the present performance from being a highly distinguished one. Munch and the Bostan Symphony give gaod but not inspired callabaration.

BRAHMS: Violin Concerto in D, Op. 77

Henryk Szeryng, violin; Londan Symphony Orchestra under Pierre Man-

RCA Victor LM-2281



With more than a dazen currently available versions of this concerta, including superlative interpretations by Oistrakh, Heifetz and Milstein, any new entry in this arena must be prepared to take an some mighty stiff competition. Szeryng has nat, perhaps, quite the blazing incandescence, technical brilliance ar the sensitivity af two or three other performances on recards, but his negotiatian of this great wark is nonetheless ane very much to be reckoned with. He plays with great intensity, breadth, musical understanding and remarkable technical control. The archestral support under Manteux is in keeping with this very fine if nat definitive interpretation.

BRAHMS: Double Concerto, Op. 102, for Violin and Cello; Tragic Overture

David Oistrakh, violin: Pierre Fournier. cello; with the Philharmonia Orchestra under Alceo Galliera

S Angel S-35353

C-C

The only thing standing in the way of this disc's presenting a moving musical experience is a certain lack of intensity, a passive feeling, emanating fram Galliera and the orchestra. Only in the Andante does the performance get off the ground, despite some really fine playing from the soloists. Sound enthusiasts will find little to excite them, since the sound distorts considerably an most loud passages and gets quite annoying in the inner grooves. Stereo illusion is a slight improvement on some of Angel's former releases, but still leaves much to be desired. One wonders where the microphones were placed R. Jones to give such a monophonic effect.

CORELLI: Concerti Grossi, Op. 6 (Complete)

Chamber Orchestra of the Societas Musica, Copenhagen, under Jorgen

Vanguard BG 585/7 3-12" (monaural) S BGS 5010/12 3-12'

Corelli



There is probably no set of pieces in Baroque literature more complete, satisfying and effortless to listen to than Corelli's Opus 6. The first eight of the twelve concerti are written in the da chiesa, or churchly, contrapuntal style, the remaining four in the do camera, or chamber style, based on dance forms and more lightly textured. All of them are nable, full of grace and invention, and triumphant in spirit no matter which style prevails. These performances are outstanding, not only in general phrasing and execution but in the rhythm especially; the slow movements never drag or grow monotonous, due to the resilient, "live" pacing of the beat — an achievement not so simple as it sounds. Hansen has balanced his excellent ensemble with such care that no inner voice or bit of figuration is lost, and the engineers have complemented his effort by praducing a clean, brilliant recording. The distinction between the monaural and stereo versions? I, for one, could hardly tell the

FRANCO: The Virgin Queen's Dream Monologue; Fantasy for Cello and Orchestra

HOWE: Castellana for Two Pianos and Orchestra; Stars; Sand Paula Lenchner, saprano; Samuel Brill,

cello; Rotterdam Philharmonic under Eduard Flipse (in the Franco) Celius Dougherty, Vincenz Ruzicka,

pianists; the Vienna Orchestra under William Strickland (in the Howe) Composers Recordings CRI-124

Franco

B to C

A to B

B to C

Franco originally planned his aria for an opera about Sir Francis Bacon. Its fragmentary, nightmarish text, the product of a fellow Baconian, is wielded into a musically effective and dramatically convincing whole via vital rhythmic ideas and skillful orchestration. The Fantasy is well-made but his craftsmanship here lacks the tang of originality found in the aria. Mary Howe's Castellana, based on Spanish folk tunes, is frankly a virtuoso piece and no better or worse than similar enterprises. Her delicate and evocative tone-poems, however, illustrate a fine grasp of mood which marks her best compositions. Both conductors and soloists are excellent. Lenchner's dark-hued soprana is aftenthroaty but her performance is highly cammunicative

G. L. Mayer

PROKOFIEV: Violin Concertos No. 1 in D, Op. 19; No. 2 in G Minor, Op. 63

Ruggiera Ricci, violin; L'Orchestre de la Suisse Ramande under Ernest Anser-

S Landon CS 6059

Ricci



Ruggiera Ricci, ane af today's foremost violinists, gives stirring renditions of Prokofiev's twa violin concertos. He fares samewhat better in No. 1, far all its technical difficulties, than in No. 2 which is mare lyric in character. The great delight of the recarding is Ansermet's conducting. His reading of the orchestral accompaniments brings out the smallest details of Prokofiev's writing and in this he is helped by the superb stereophonic sound of the

SAINT-SAËNS: Concerto No. 4 in C MILHAUD: Le Carnaval d'Aix B-B

Grant Johannesen, piano; Philharmania Orchestra under Georges Tzipine Capital EMI G7151

The two works which are coupled here are quite contrasting in nature. Saint Saëns' Concerto is ta me rather dull and monotonous, while Milhaud's Le Carnaval d'Aix, which is based on music from his ballet "Salade", sparkles with humor and gaiety. Grant Jahannesen performs both works with beautiful tane and technical mastery. Tzipine and his orchestra support the soloist cooperatively. The reproduction, however, is not entirely satisfactory: both soloist and orchestra sound too far from the microphone. A Skulsky

VOCAL MUSIC

BACH: Magnificat in D; Cantata No. 50, "Nun is das Heil und die

Mîmi Coertse, Margaret Sjostedt, Hilda Rossl-Majdan, Anton Dermota, Frederick Guthrie; Chorus and Orchestra of the Vienna State Opera under Felix Prohaska

S Vanguard BGS-5005

The major companies should hang their heads in shame that there has yet been no absolutely acceptable recording of this great and enormously popular work. Possibly the old Robert Shaw performance in the 1940's came closest, but even that has been unavailable for years. This performance is easily the best available today, possessing real drive, authority, and most important of all, vitality. The soloists are all good — but no more sound is good, if not particularly stereophonic. Now let's have a Magnificat with de Los Angeles, Valletti, Forrester, Tozzi and Robert Shaw. How about R. Jones

BRAHMS: Song of Destiny; Academic Festival Overture LISZT: Psalm XIII

Walter Midgley, tenor; Beecham Choral Society and Royal Philharmonic under Sir Thomas Beecham S Angel S 35400

Brahms



This coupling of Brahms and Liszt, while justifiable historically, is rather hard on Liszt, for the Song of Destiny is a genuinely lovely work within its small framework and it is unkind to Liszt to put his contrived and rather pompous piece on the same disc. Sir Thomas, though, has both works well in hand, although one might wish that he had chosen a more exciting soloist and a chorus that could sing understandable English. The Overture, however, earns no such criticism. It is rousingly performed and excitingly recorded and is easily the pièce de resistance of the three. J. Bowen

BEETHOVEN: Music to Goethe's "Egmont", Op. 84; Symphony No. I in C, Op. 21

Friederike Sailer, soprano: Peter Mosbacher, narrator; Symphony Orchestra of the Southwest German Radio, Baden-Baden and the Orchester der Wiener Musikgesellschaft, respectively, both under Edouard von Remoortel



Remoortel

B-C

C-C

B-B

Vox PL 10.870

It is difficult to find justification for this recording. There are many recordings of the First Symphony, most of which are superior to this one, and Klemperer's recent recording of the "Egmont" music should have been sufficient reason for keeping this one in the vaults, unreleased. Instead, here it is luring ane on with one of the handsomest jacket-covers of the year. Lack of dramatic awareness and general awkwardness marthe "Egmont" music in van Remoortel's reading. In addition, the orchestral playing is often rough and inelegant. Sailer's fresh, youthful voice is attractive and fitting in the songs, however.

G. L. Mayer

DUFAY: Vocal works

Leslie Chabay, tenor, and instrumental soloists; the Dessoff Choirs under Paul Boepple

Vanguard BG 582 (Monaural)

BGS 5008

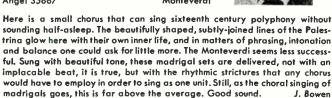
Good intentions do not always make good recordings, and this disc is a case in point. A great deal of care has gone into the preparation of this generous sampling of Dufay's sacred and secular music, but the results bely the effort. The weakness here is this insecure and clumsy chorus, whose individual voices do not blend, whose attacks falter, and whose phrasing is as if learned by rote. Mr. Chabay and the instrumentalists who assist him bring a much more professional note to things. The sound is rather fuzzy and stereophonic only by courtesy. J. Bowen

PALESTRINA: Motets MONTEVERDI: Lamento d'Arianna; Ch'io t'ami

Netherlands Chamber Choir under Felix de Nobel

Angel 35667

Monteverdi



WALTON: Belshazzar's Feast James Milligan, bass-baritone; Ernest Cooper, organ; the Huddersfield Choral Society and the Royal Liverpool Philharmonic Orchestra under Sir Malcolm Sargent Capitol-EMI 7141

A

Walton



This imaginative invention of the youthful Walton breathed new life into the venerable but musty tradition of the oratorio; and after over 25 years the pagan, orginstic sound of the music has lost little of its impact. Sargent molds the manifold forces astutely, and the engineer was right there to capture the maximum effect. The soloist and choral group cope with the complex score capably; what straining is evident among the soprani is certainly pardonable considering the demands of their part. Two seldom-heard choruses of Handel (from "Zadok, the Priest" and "Solomon") give a brilliant bonus to the buyer G. Cory of the album.

Five Centuries of Spanish Song Victoria de los Angeles, soprano Capitol G 7155

Ranging from deeply-felt religious chant to the music of a most sophisticated international court, these songs are, every one of them, alive. Some of them are Spanish to the bone; others, and especially those of the eighteenth century, are more closely tied to the rest of Europe's musical tradition. All are superbly performed. The purity, richness and flexibility of this singer's voice have seldom been heard to better advantage, and these gifts are matched by her artistry. The cambinations of modern instruments used to approximate an older sound have been tastefully chosen, and the recording has done full justice to all participants.

Music from the Woshington Cathedral: Four Centuries of Liturgical Music — Thomos Tollis to Somuel Barber

Washington Cathedral Choir of Men and Boys under Paul Gallaway

Vanguard VRS-1036 This program, designed as an anniversary tribute to the St. Albans School for Boys which was organized in 1908, reveals the choir to be one of the coun-

try's outstanding groups. Of the fifty voices which comprise the choir, thirty are boys on scholarship at the school. The excellence of their performance proves that a celebration is in order and fully justified. The group as a whole has an exceptionally well-integrated tone and is responsive to the stylistic demands of the centuries-spanning program. Musical virtues are outstanding here both in choice of material and in execution. The congregation of the Washington Cathedral is fortunate. G. L. Mayer

OPERA

GILBERT AND SULLIVAN: The Mikodo: The Pirates of Penzance

Donald Adams, Thomas Round, Peter Pratt, Kenneth Sandford, Jean Hindmarsh, Ann Drummond-Grant; with the Chorus of the D'Oyly Carte Opera Company, and the New Symphony Orchestra of London under Isidore Godfrey

London OSA 1201 (Mikado), and OSA 1202 (Pirates), each 2-12'

GILBERT AND SULLIVAN: The Gondoliers: The Mikado

Owen Brannigan, Richard Lewis, Geraint Evans, Ian Wallace, John Cameron, Elsie Morrison, Monica Sinclair; with the Glyndebourne Festival Chorus, and the Pro Arte Orchestra un-

der Sir Malcolm Sargent
Angel 3570 B/L (Gondoliers), and 3573 B/L (Mikado), each 2-12



Gilbert



Sullivan

These are all recordings of the very first order. The London albums feature the celebrated D'Oyly Carte Company, steeped in G&S tradition for four score years and more, while Angel has assembled a sterling cast of some of the best opera and oratorio singers in England; the equally fine orchestras are both under the direction of distinguished conductors with a lifetime of G&S experience; and both troupes have been recorded in sweeping, spacious stereo. What more can anyone ask? The main problem then is to decide which "Mikado" to get. On the whole, the singers in the Angel camp are vocally superior to their London counterparts, and in the more lyrical songs, their interpretations are much to be preferred. When it comes to the comic numbers, however, the stylistic perfection af the D'Oyly Carte singers is impossible to match. In short, the Angel "Mikado" is vocally immaculate, and the Landon "Mikado" is stylistically immaculate, and your choice should be determined by which of these elements you consider more important. These generalizations on the respective merits of the D'Oyly Carte and the Glyndebourne campanies apply also to the remaining two operettas, but since neither the "Gondoliers" nor "Pirates" has any stereo competition, further comparisons seem pointless — both sets belong in your library! Finally, if you have any lingering doubts about abandoning your old D'Oyly Carte monophonic albums in favor of these new versions, even a brief sampling of the wonders wrought by the fine stereo repraduction should convince you. The large choruses sound fuller and more thrilling than ever, the comic ensembles have newfound clarity and crispness, and for the first time those delightful polyphonic sections where Sullivan has pitted several independent vocal lines against each other, emerge with every part distinct and in its proper spatial alignment. R. Sherman

LEHAR: The Merry Widow Hilde Gueden, Emmy Loose, Per Grunden, Waldemar Kmentt, Karl Donch; Chorus and Orchestra of the Vienna State Opera under Robert Stolz S London OSA-1205 2-12"

В

It is difficult to be critical of this performance, for after critical listening to musical matters, vocalism, and so forth, one is distracted by the fun and the uncanny theatrical presence of the whole recording. It's exciting, no question of it! Gueden is marvelous, Loose almost as good as in her eorlier Angel performance, but Kmentt is no match for Angel's Gedda, nor is Grunden on a par with Kunz. Lehar fanciers may wish to wait for Angel's announced stereo re-recording of its historic "Merry Widow" before indulging in a stereo version, particularly since London has ossumed that all purchasers of its "Widow" will possess a knowledge of German and has therefore omitted ilibretto. If I hadn't had access to my Angel libretto I wouldn't have been in on the jokes at all!

R. Jones

POULENC: Diologues des Carmélites Denise Duval, Denise Scharley, Rita Gorr, Lilione Berton, and other artists; with Orchestro and Chorus of Théâtre National de L'Opéra under Pierre Dervaux Angel 3585 C/L 3-12¹⁷

b

A A B



Poulenc

"Dialogues" is quite possibly Poulenc's masterwork. A notable contribution to the modern repertoire, it stems from the pure tradition of French opera. A fluid recitative style, not unlike that of Debussy in "Pelléas et Mélisande", is employed for the maximum projection of Georges Bernanos' moving text; emphasis is ever on the vocal line, and the large orchestra (tripled winds) never obscures it. Yet, the more lyrical passages recall the warmth and passion of Charpentier's "Louise".

The story concerns the martyrdom of a group of Carmelites during the French Revolution, and the composer imaginatively overcomes two formidable obstacles: that of setting a non-romantic, philosophical ploy and of writing in the main for voices all of the same gender. His musical speech is so natural and his sense of characterization so penetrating that one is hardly aware of these limitations. This does not imply, however, that theatricolity is lacking in the piece, for there are scenes of high drama and intense emotionalism. The fearful, fitful death of the Mother Superior is wonderfully written; and the final scene, in which the Carmelites are sacrificed on the scoffold, is most stirring, indeed harrowing. The performance is near perfect, as is the recording, except for crowding of the grooves, resulting in distracting pre-echoes at times.

G. Cory

Renata Scotto: Operatic Arias by
Bellini, Baïto, Danizetti, Puccini, B to
Rossini, Verdi

Philharmonia Orchestra under Manno Wolf-Ferrori Angel 35635

Scotto

Miss Scotto, in addition to appearing as Glauce on Mercury's "Medea," garnered quite o lot of publicity when she filled in for the ailing Collas in the ill-fated "Sonnambula" at Glyndebourne. The voice is a beautifully smooth one of color and dynamic variety. Unfortunately a singer presenting such a conventional recital must be prepared to face stiff competition and Miss Scotto does not bear comparison with the best. Most of the excerpts smack more of the studio than of the stage, though the "Barber" aria shows what she may be capable of. In short, a reasonably interesting release which promises nice things for the future.

KEYBOARD MUSIC

BACH: Organ Works: Prelude and Fugue in C minor, BWV 546; Prelude and Fugue in C, BWV 547; Fantasia in C minor, BWV 562; Toccata and Fugue in F, BWV 540 Finn Viderø, organ

Finn Viderø, organ Vanguard BG-580 A A A



Everything about this recording is first-class: a glorious procession of great music played with admirable style and energy by a master organist and recorded excellently. Listening to the Toccata and Fugue in F one feels like Zeus—the creative power seems to run in the veins and one can believe that hearing it is almost the same thing as creating it. The other works, particularly the Prelude and Fugue in C are also breath-takingly grand. The sound of the instrument, the organ of St. Johannis, Veile, Denmark, is as beautiful as any that can be heard on records: clear and silvery, spacious and infinitely baraque, to my eors. This is a record to treasure and play when Brahms seems thick and saccharine, Debussy fatigued, and Stravinsky frenetic.

J. Edmunds

BEETHOVEN: Bagotelles,
Opp. 33, 119, 126
Denis Matthews, piono
Vanguard VRS-1033

BEETHOVEN: Thirty-Two Variotions in C Minor; Variotions in F, Op. 34; Variotions in E Flot, "Eroico", Op. 35

Denis Matthews, piano Vanguard VRS-1032

Matthews



The Bagatelles are fascinating examples of the great Beethoven turning his attention to the smaller forms of composition, and they could hordly have found a better interpreter than young Denis Matthews. I have not heard of this artist before but I am sure he will be very much with us in the future. Here is ploying of delicocy, subtlety, charm and infinite variety. Nor is he a "small scale" pianist, for when called upon for passion and brilliance he supplies it generously. As for the Thirty-Two Variations, it is particularly good to have a completely acceptable recording of them. There have been others, but none of them satisfying to both Beethoven specialists and critical owners of good sound equipment. Here is a wonderful performance, wonderfully recorded, and as a bonus (an immense bonus indeed!) the "Eroica" Variations ond the Opus 34 Variotions, too. The piano sound is close and brilliant on both records. Let us hope Vanguard follows this debut with more such interesting items—the remainder of the Beethoven variations among them.

R. Jones

BERG: Piono Sonata, Op. 1 SCHÖNBERG: Three Piano Pieces, Op. 11 KRENEK: Piano Sonata No. 3, Op. 92, No. 4

Glenn Gould, piano Columbio ML 5336

Gould



Gould's playing of this difficult music is a triumph; the music—Schönberg's especially—has ochieved much notoriety for the extent to which its structure is intellectually controlled. Here it sounds lucid and subtle. Actually the three composers are very different: Berg is here, as in most of his music, an almost unbridled romanticist at heart, extravagantly expressionistic. The terse Schönberg pieces are more stimulating because of the rigor of their organization, which has a for more significant urgency about it. Krenek is an accomplished and learned composer and hos long been known as a disciple of Schönberg, but even Gould's beautiful projection of the Sonata is not enough to make it seem other than ersatz—oil the more so when contrasted with the overwhelming Berg and the electrifying Schönberg. Sound engineering is superb.

LISZT: Transcendental Etudes Jorge Bolet, piano RCA Victor LM-2291 A A-B A Bolet



Bolet takes a deadly serious attitude in his performances of nine of these treacherous works. He is, therefore, most successful in the powerful bravura etudes, such as the Wilde Jagd, the Eroica and No. 10 in F minor—where the undeniable brilliance, sweep and thrust of his playing are strongly in evidence. Some of the others, however, require whimsy, grace and humor, these qualities are not invariably realized. The magical Feux Follets, for instance, is quite disappointing. It lacks imagination, and technically, too, is not one of his best efforts. The piano resounds as though the taping were done in a large concert hall.

8. Gabriel

SCHUBERT: Sonata in A minor, Op-42; Two Impromptus, Op. 142, No. 2, and Op. 90, No. 2 Sviatoslav Richter, piano

Sviatoslav Richter, piano Monitor MC 2027 A Richter



The Russians have produced on absolutely first-rate pianist in Richter, one who differs from most of his colleagues in keeping virtuosity in a subordinate place to musical values ot all times. Because of Richter's sense of proportion and his always convincing musicality, the dynamics of these performances as well as the tempos and the structural continuity ore ideal. The problem of making the long first movement of the Sonata hold together is particularly awkward because of the constant repetition of the material, made acceptable only by the fascinating novelty of Schubert's modulations. Richter's playing is also memorable for its airy lightness—the phroses seem to float as well as sing. The less challenging Impromptus are played excellently, too. All in oll this is one of the finest examples of mature pianism now ovailoble on records. Recorded sound is very good.

J. Edmunds

Etudes Ann Schein, piano Kapp KCL-9023 A to B A to B A Schein

A to B

Browning



Ten etudes by Chopin, and concert studies by Debussy, Szymanowski, Moszkowski, Scriabin, Rachmaninov and Liszt introduce this 19-year-old American pianist to the current recording scene. Miss Schein plays as one with a great natural affinity for the instrument—spontaneously, with ease and accuracy of technique. There are, however, some curiously abrupt starts and stops in her frequently overdeliberate phrasing, which mar some of the performances. Happily, this is not the case with the Chopin Butterfly and two F major Etudes, or in the very brilliant one in the same key by Moszkowski. They are extremely well played.

8. Gabriel

Debut John Browning, piano Capitol P 8464 Debut John Browning

"Encores" would have been a better title for this collection of familiar short concert pieces. On his own Mr. Browning undoubtedly would have chosen works for his record debut with which he feels more personal identification; it was probably Capitol, pondering the problem of presenting a relatively unknown young artist to the public, who played it safe by releasing this program of tried selections. Yet it is varied enough to show the pianist's versatility, and his authority and sensitivity as an interpreter clearly come through; he is, indeed, an outstanding performer. The piano sound is somewhat mushy, but perhaps this is the fault of the instrument.

G. Cory

MISCELLANY

Alice In Wonderland
Adapted and Produced by
Douglas Cleverdon
S London OSA 1206 2-12"

Lewis Carroll's wonderful world of fantasy comes happily to life in this whimsical and convincing dramatic adaptation of Alice's celebrated adventures down the rabbit hole. The large, all-English cast is uniformly excellent, but Margaretta Scott's sensitive narrotion, and the uncommonly winning performance of twelve-year-old Jane Asher in the title role, are outstanding. Much credit must go also to the engineers who have creoted throughout a remarkable illusion of depth and presence: they have utilized the potentialities of stereo to the fullest, and the startling realism of Alice swimming about in her pool of tears, or the White Rabbit running around in circles trying to open a series of locked doors, adds an exciting dimension to the tale. Only one element might keep the album from being entirely satisfying to American youngsters: the pronounced British accents of all the players may make it difficult for children to identify fully with the characters. R. Sherman

Around the World in Eighty Days
Dramatic Cast; Soloists, Orchestra and
Chorus under Franz Allers
Everest LPBR 4001 (Monaural)
S SDBR 1020



Emerging as a kind of Broadway-type cantata, this new adaptation of Victor Young's charming score with lyrics by Harold Adamson is thoroughly entertaining. Incorporating brief dramatic interludes and a running choral-narrative technique, it manages to capture much of the glamour and nonsense of Mike Todd's giant film. Before Todd's death he had envisaged a colossal "Around the World" ballet-circus, preferably to be staged in an arena no smaller than Madison Square Garden, and this is, it is explained in the album notes, an audio realization of "Mike Todd's unfinished dream". The sound, both monaural and in stereo, is peerless; the separation of forces in the stereo version of a range and scope commensurate with the late Mr. Todd's unfimited horizon and topping the pinnacle for which this new recard company is named.

Tom Sawyer
John Sharpe as Tom; Bennye Gatteys
as Becky; Jimmy Boyd as Huckleberry Finn
Decca DL 8432

i love my friend huckleberry finn. And that's the life for me. It's not only the name of two songs but it's also how I feel. When I'm twelve I'm going to go on a raft too.

d. i. jablonski

The Roaring 20's George Wright, organ Hifirecord R718

A to B B B

The high standard Mr. Wright has set for himself in earlier releases in this series flags here. The selection of material is typical of the album's title, while varying in quality; the recording is full-range — even to the point of picking up an occasional extraneous noise. What is lacking is good old-fashioned inspiration and a sense of production about the project as a whole. For stylization, inventiveness, and fun, Leonard Leigh's "The Mighty Wurlitzer and the Roaring Hi-Fi Twenties", recorded by Victor, has this beaten all around.

G. Corv

PLAYS AND POETRY

Tristan and Iseult Read by Claire Bloom Caedmon TC 1106

"Hear now a tale most sad and pitiful to all who love." So might these words from the text have begun this most famous of medieval romances. Our basic concept of romantic love springs from this twelfth century legend (without it the pops lament Glad To Be Unhappy could never have made sense), and our whole culture is its heir. The translation by Belloc is from the Bedier version, edited so as to highlight the lovers' roles. All bards of old were male, but Miss Bloom has good diction and taste. The harp fortunately serves only as a bridge, lending emphasis and a proper archaic flavor. The sound is fine.

MILTON: Paradise Lost
Read by Anthony Quayle
Caedmon TC 1093 2-12"

Douglas Bush describes this work as "an epic in the classical and especially the Virgilian tradition, a poem whose theme was the greatest event in the history of the world and man, whose stage was heaven and earth and hell, whose personages were Adam and Eve, the angels, Christ, and God." Sublimity, grandeur, poetic power, passion it has. To some it has monotory also, but not to Quayle. In this reading of Book I and most of Book IV he reveals a voice of superb power, beauty, and a kind of iron resonance that recalls a great tradition now out of public favor but here perfectly suited to the material. It is a challenge to all contemporary mumblers. Nevertheless, I fear Milton remains for the few. Side IV of the reviewer's set was marred with a faulty groove, otherwise the sound and presence are proper. The cover by Michelangelo and Leibowitz is handsome.

R. Adams

SHAKESPEARE: "Much Ado About Nothing"

The Eamonn Andrews Studio Presentation of Hilton Edwards' and Michael MacLiammoir's Dublin Gate Production. Complete in five acts, from the Oxford Edition

The Spoken Word SW-A6 3-12" Shakespeare



The love of a good performer for his material cannot be hidden. Here an entire company reveals this love with almost uninterrupted delight for the listener. All the wit, charm, and delicious rhetoric of this play is felt and transmitted suavely by director Hilton Edwards and the players. The poetry and prose, the emotion and reason, are deftly wedded. But the crown must go to Corolie Carmichael: her every exit made me pout for her return. As Beatrice she conveys with fullest authority the womanly charm, the mirth, the taunting vivacity which that character must embody or we are cheated and the play diminished. Even without her intelligence Miss Carmichael would be memorable for her voice alone. To the ear this is acting in the grand manner. Michael MacLiammoir's Benedick complements her nicely. Bravos also to Patrick Bedford, Dennis Brennan, Hilton Edwards, Anna Monaghan and their colleagues. The songs by Christopher Casson, who also arranged and played incidental music on the harp, tabor, and recorder, seemed resurrected, as they must. The sound is all it should be. If you have forgotten this play or if you treasure some past performance of it, go with these discs to Dublin. The prospect is pleasure.

SHAKESPEARE: "The Taming Of the Shrew"

The Eamonn Andrews Studio Presentation of Hilton Edwards' and Michael MacLiammoir's Dublin Gate Production. Complete in five acts, from the Cambridge Edition B to C

The Spoken Word SW-A7 3-12"

This early romp and farce has always been a visual favorite. But presented to the ear alone, it raises problems. Without scenery, the props of vaudeville and visual gags, the characterizations now must never falter. Where poetry is missing utter authority has to prevail. As Margaret Webster says, "the characters in farce must be an extension of reality: truth carried beyond accurate reproduction, carried with remorseless logic to the pitch of absurdity." This logic demands from the actors a fanatical sense of identity throughout. In this performance that identity is missing from the crucial role

of Kate. A shrew's stridency Maureen Toal does give, but without the warmth and tender potential needed to make her regeneration inevitable and sweet to behold. Thus, Kate's long, final speech, the very climax, hardly comes off. A pity, because Michael MacLiammoir's Petruchio is full-bloodedly sustained, giving the play most of the cohesion it gets here. The other players reveal precision if not spontaneity, and the voices are for the most part excellent. Director Hilton Edwards' pace is good, and praduction details are deft. Some popping "p's", but good sound.

Definitely not-for-the-purist, these cancert transcriptions of such seafaring standards as Ria Grande, Blaw the Man Dawn, A-Roving and High Barbaree nonetheless make entirely pleasant and diverting listening. Although many of the arrangements are too fussy for my taste, the music emerges with spirit and gusto, thanks to the hearty performances by the Roger Wagner Chorale, and the brisk singing of the several fine soloists (including Broadway favorite Earl Wrightson). In short, it's a great album for landlubbers. The sound is very good monophonically, even better on the stereo disc.

R. Sherman

FOLK

Folk Songs for Babies, Small Children, Parents and Baby Sitters
The Baby Sitters
Vanguard VRS 9042

lir



The Baby Sitters are comprised of two young mothers (Jeremy Arkin and Doris Kaplan), one young father (Alan Arkin) and a Professional Uncle (Lee Hays)—and with occasional assistance from Adam Arkin, aged 1½, and Jeff Kaplan who's all of three, they present a warmly ingratiating set of songs for younger folks. Kids will love the disc for such lilting tunes and game songs as This Old Man, Over in the Meadaw and Where's Miss Pinky. Adults will love it for its inventiveness and ingenuous, goodnatured charm. Hush Little Baby, a delightful duet sung by Alan Arkin and his baby san, is alane worth the price of admission. Excellent sound.

R. Sherman

Western Wind
Alfred Deller
Vanguard VRS 1031 (Monaural)
S



Alfred Deller's most recent album of English ballads is one you'll want to own, if you have no objection to the exaggeratedly pure, falsetto quality of a counter-tenor's voice. Singing with unfailing artistry, Mr. Deller makes even such almost-hackneyed songs as Annie Laurie, Cackles and Mussels and Drink to Me Only seem freshly appealing, and only a preponderance of slow or pensive sangs (ten of the eleven selections on the first side are thus) causes an occasional flagging of interest. Desmand Dupré provides the sensitive guitar accompaniments, while the several recorder descants are nicely played by John Sothcott. The sound—both monophonic and stereo—is clean and clear.

R. Sherman

Folk Song Saturday Night Alan Lomax, Peggy Seeger and Guy Carawan Kapp KL-1110 A A B

Produced by the world renowned folklorist Alan Lomax, this excellent sampling of American songs has an ingratiatingly homey, grass-roots flavor which should please both the serious and the casual folk music fan. The performances by Peggy Seeger, Guy Carawan and Mr. Lomax himself are perceptive and musically appealing, as well as entirely in keeping with traditional styles (in about half the numbers they are assisted by John Cole on harmonica and Sammy Stokes on bass). Highlights are Miss Seeger's singing of the exquisite ballad Mary Ann, Guy Carawan's tender version of Black Black and Mr. Lomax's distinctive performance of a Negro slave song, Saturday Night. Fair Sound.

A New Program of Favorites The Soviet Army Chorus and Band under Boris Alexandrov Monitor MP 540



The robust, exhuberant and oft-recorded vaices of the Soviet Army Chorus are again raised in song—more specifically in an appealing set of folk and popular songs from Russia, Armenia and Azerbaidzhan. The Chorus, which must be ranked among the finest anywhere, sings with warmth and sparkling precision, and fis especially effective in the buoyant, lighthearted ditties with which the album is generously sprinkled. Only the sonics leave something to be desired, with the covered, rather unresonant sound dulling somewhat the lustre of the performances.

R. Sherman

Sea Chanties
The Men's Voices of the
Roger Wagner Chorale
Capital P8462 (Monaural)
S SP 8462

B A A Wagner



Chain Gang Songs Josh White Elektra EKL 158 B C A White



As a longtime Josh White fan, I'm truly sorry to report that I find his latest album (which, incidentally, contains spirituals and blues as well as prison songs) mast disappointing. The great singer, who can bring tears to his listeners' eyes with his burningly intense interpretations of these poignant chain gang songs, seldom seems to "get into" them here. These are mostly surface performances, strangely lacking in dynamic tension, and further vitiated by the uninspired accompaniments of a vacal quartet. Yet withal, Josh White is unique, and in a few numbers, such as the earthy blues Did Yau Ever Lave a Waman we glimpse again the master whom we know and love. Excellent sound.

Folk Songs and Dances of Yugoslavia Monitor MF 312 A

A colorful cross-section of traditional music from five of the six republics of Yugoslavia is expertly presented by various native soloists, orchestras and folk ensembles. One senses a variety of musical influences here—the Slavic moad seems quite pronounced in some of the Serbian and Croatian dances, but one Slovenian ballad is remarkably reminiscent of Alpine music, and several other songs, including some from the southern republic of Macedonia, sound to these Western ears almost Greek or Turkish. All in all, the program is varied and entertaining, and the sonics, though not hi-fi, are adequate.

R. Sherman

STAGE, SCREEN, AND TV

Jeanette MacDonald and Nelson Eddy Favorites in Hi-Fi Orchestras under Lehman Engel and

Orchestras under Lehman Engel and Dave Rose RCA Victor LPM-1738 Eddy &

Eddy & MacDonald

A



The most famous singing team the movies ever produced makes a quite extraordinary come-back in hi-fi. Very little license must be granted here to the victory of years. Oh, the keys are a little lower than their original arrangements, and Jeanette struggles a bit for the high B's, but the musical alchemy that blended these two voices of the silver screen is still very much in evidence. The natural beauty of Eddy's voice remains almost undiminished, and Jeanette is even up to a reprise of Beyand the Ble Harizan which she introduced in the Talkie "Monte Carla". Let us not even try to remember when that was The big orchestra arrangements are the lushest of the lush, and the entire effect is charming, nostalgic and touching.

D. Cross

Redhead

Gwen Verdon, Richard Kiley, Leonard Stone, and other members of the Broadway cast with chorus and orchestra under Jay Blackton RCA Victor LOC-1048 B B

Verdon



The occasional pleasant moments in this murder-mystery musical with a score by Albert Hague are bogged down by too many formula situations and shades of other influences—especially "My Fair Lady". The action of the piece is similarly laid in London, but little of the atmosphere emerges. The fake British accents, in fact, only obscure Dorothy Fields' lyrics. Without the benefit of her visual performance, Miss Verdon seems swamped by her material. However, the introduction of Richard Kiley, already a romantic lead in films, is notewarthy; he is a real find as a musical-comedy personality. As for the sound, Victor has done better in other of its show-album releases.

G. Cary

POPULAR

Bobby Darin: Thot's All Arranged and Conducted by Richard Wess Atco 33-104 A to B A to C



Bobby Darin, whose contribution to the popular musical scene has been for the most part several highly successful rock 'n' roll platters, tries his style here on a few standards. Vocal egocentricity pervades much of his delivery: in Weill's Mack the Knife (a paraphrase of Louis Armstrong's paraphrasel), in Trenet's Beyond the Sea and Brandt's That's All. In other songs, however, he displays a winning vitality and freshness: Gershwin's It Ain't Necessarily So, Newman's Through a Long and Sleepless Night. One of the most earcatching numbers in the album, incidentally, is Darin's own That's the Way Love Is. The arrangements by Richard Wess are adequate—loud or lush—but not very individual, and the sound is variable; some cuts excellent, others badly balanced. Not an unqualified success but, even so, Bobby Darin bears watching.

D. Cross

Malagueña Percy Faith And His Orchestra Columbia CL 1267



The service which Mr. Faith recently performed for the music of Mexico (VIVA!) he has now performed for Cuba. And perform he does . . . fourteen of that tiny island's most popular delegates to our Tin Pan Alley. The songs you may recall most easily are The Breeze And I, The Peanut Vendor, Yours, Siboney, and the title song. Mr. Faith uses all the musical and orchestral components at his command: the brass section, to reflect not Cuba alone, but Spain and the bull ring. And when the percussion sets the scene, as it almost always does, it is the strings which charm the ear and send the mind into sunny days and mysterious evenings. (End of travel folder.) S. Dobbins

Faith

Judy Garland at The Grove A to C
Judy Garland with B
Freddy Martin Orchestra A
Capitol T1118 Garland



The disappointing revelation of this album is that Miss Garland's talent has begun to feed upon itself. She continues to capitalize on her identification with the nostalgic tunes from the vaudeville era, and most of these selections she has done as well, if not better, on previous releases. It is embarrassing that her only acknowledgement of more recent songs is Purple People Eater, although it is sung with tongue-in-cheek, of course. Freddy Martin's orchestra plays her arrangements with gusto, and the on-the-spot recording is vividly realized.

The Garbage Collector in Beverly Hills Vocal soloists, choral group, and or-	B to C B B
chestra under Billy Liebert and Carl Brandt	
Warner Bros. B 1254	
Monster Rally	B to C
Hans Conried, Alice Pearce, The Crea-	В
tures, with orchestra under Frank N.	Α
Stein (!)	
RCA Victor LPM-1923	
Musically Mad	В
Henry Morgan, Joseph Julian; the Ste-	В
reo Mad-Men under Bernie Green	A
RCA Victor LPM-1929	

Three recent releases having satirical humor as a common denominator deserve only passing mention. Irving Taylor's parodies of folk music, designated in the sub-title as "Work Songs for the Odd Job Holder", show him to be no Stan Freberg as a satirist, and a couple of them are in questionable taste.

"Monster Rally" spoofs the current preoccupation with science-fiction and the supernatural. The jacket notes joshingly remark, "Hans Conried and Alice Pearce, apart from their monstrous talents, were chosen for good sportsmanship and courage". Unhappily, these are the only qualities that emerge.

Weak material, but the arrangements are clever and the recording fine.

Best of the lot is Bernie Green's album of zany take-offs on staid musical traditions. Radiophiles will remember his distinctive interludes on the brilliant Henry Morgan shows of yore and relish hearing them again. Mr. Morgan even joins in the fun here and there, but the routines are not his most inspired.

The Editor of Mad provides amusing program notes.

G. Cory

I Like Men Peggy Lee Capitol T-1131





A sincere valentine is always in season, as Peggy Lee must have known. At any rate, the lady divides a dozen tributes among Charlie My Boy, Bill, Jim, and several unnamed gentlemen. One or two issues back, this reviewer complained of Miss Lee's ever-growing tendency to sing so softly that her tones became more like unvoiced whispers. As this album must have been prepared before our deathless prose appeared in print, the noticeable lessening of such singing is entirely untraceable to those afore-mentioned lines. Nevertheless, the change is greatly appreciated in these parts, though there is still some short way for her to go. The songs, the singer, and the backing, however, combine in a neat bundle.

S. Dobbins

Book of Ballads
Carmen McCrae with orchestra under
Frank Hunter
Kapp KL-1117

A A A

If Carmen McCrae continues to give out with work of this calibre, she's bound to boost herself further into the ranks of the Top Ten among female vocalists (She is number 10 in Downbeat's 1958 poll). The album is distinctive in every respect. Her songs are well-chosen, many of them fresh and unhackneyed (Do You Know Why?, If Love Is Good to Me, He Was Too Good to Me); her delivery of them is heart-felt and, for the most part, free from mannerisms. The backing — trio augmented by orchestra, mostly strings — is on the beam, and the sound right on top of you. Could anyone ask for more?

G. Cory

The Quiet Hour A to C
Johnny Nash with Orchestra under
Don Costa A
ABC-Paramount ABC 276 Nash



Johnny Nash is the fastest rising young singer in the popular entertainment industry since Johnny Mathis, and his light lyric tenor is singularly remindful of Mathis. But it is more beautiful, the sincerity of his style weighs in more convincingly, and one feels that he will keep his artistic identity more individual than Mathis has so far managed. In this album Nash furthermore proves his wide musical scope with superb performances of five Negro spirituals along with several inspirational-type songs of a more dubious nature. However, Johnny's sincerely fervent renditions save them from the maudlin tendencies revealed by lesser artists. The arrangements, while rich and employing the usual chime effects, are musicianly and not overly theatrical. Even the most jaded musical appetite is likely to be touched and very much impressed by the power and conviction of this talented young singer. D. Cross

Jimmie Rodgers . . . His Golden B
Year B
Jimmie Rodgers with orchestra under Hugo Peretti
Roulette R-25057

Jimmy Rodgers' rapid rise in popularity during the past year and a half is reviewed in this impressive collection of his hit records, and the album's title is certainly justified, for the young singer has established a standard considerably above the usual fodder peddled to the teenage set. While there is some excess of vocal tricks and a monotony in the twangy backing, this is understandable since the records were originally released singly and an identifiable commercial sound was the aim. It is encouraging to hear how well Mr. Rodgers rises to the occasion when given a superior song such as The Long Hot Summer. Lively recording.

G. Cory

JAZZ

In the Spotlight
Jackie Cain-Roy Kral
S ABC-Paramount 267

A A B Cain & Kral



Stereophonic stupidity strikes! When Jackie and Roy sing they are, to quote one of the song-titles here, two peas in a pod; one pictures them shoulder to shoulder. Yet stereo infamy puts them clear across the room from each other. Luckily this only happens on the four vocal-duet tracks. Six items have Jackie as lone singer, backed by Roy's piano, Shelly Manne's drums, M. Budwig's bass. Roy sings Have You Met Miss Jonest, plays his own Cake Walk as an engaging piano solo. Save yourself a buck: enjoy Jackie and Roy monaurally and hear them as they really are - together.

it tries less than the other two to be a jazz set and thus remains more faithful to the original concept of the material, the Johnny Smith LP is musically the most fitting of the three. A cello added to Johnny's trio lends effective protective coloration. Surface noise is high on my copy and I could have done happily without the drum explosions on Like a God. Best songs: A Hundred Million Miracles, I Enjoy Being a Girl. I didn't quite get the point of the Smith finale (nor, for that matter, of the Mastersounds' overture). Let's all hope the jazzed-up-Broadway-show-tunes gimmick is past its peak.

The High and Mighty Hawk Coleman Hawkins Felsted FAJ 7005

Hawkins



One need only list the personnel to indicate the quality: the durable, steadfast Hawkins tenor is surrounded by Buck Clayton, trumpet; Hank Jones, piano; Ray Brown, bass; Mickey Sheen, drums. The two ballads, My One and Only Love and You've Changed, are the most compelling tracks. Of the others, a very long blues and a bright-tempo original were written by Hawk, and two are Hank's. Produced by the British writer Stanley Dance, this is one of seven sets, (mostly featuring elder swinging statesmen) cut by him in New York last year.

Jonah Jumps Again Jonah Jones Capitol T 1115

A Jones

В

A

A

В



Rapidly approaching the status of Coca-Cola as an American institution, America's new popular jazz trumpet king cruises equably through a dozen songs, mostly old favorites, in his neutral and highly acceptable style. The very slow approach to Ballin' the Jack is an admirable attempt to depart from the obvious. Jonah sings inoffensively on I'll Always Be in Love with You. The shuffle rhythm, which dominates several titles, could have been skipped entirely without upsetting me in the least. The back cover has so much blank white space that a couple of inches might well have been devoted to the naming of Jonah's sidemen. L. Feather

Music from Peter Gunn Henry Mancini Victor LPM 1956

Peter Gunn Shelly Manne S Stereo Records S 7025 Manne



Both sets succeed admirably in varying aims. Conducting his own music, Mancini uses the same men heard on the NBC-TV show. Mostly ex-Les Brown sidemen, they play a brand of jazz admirably suited to the show's dramatic values. Fans seeking a more direct emotional kick may find the Manne sides even more potent. Using a smoller group (sextet) with a harder sound and intensely live recording (the stereo is as plangent and pointed as Peter's gun), he converts the attractive themes into straight modern jazz. Compare the two versions of The Brothers Go to Mother's. Manne's is slower, funkier, the melody exposed by vibist Victor Feldman (who, by the way, is heard on almost all tracks of the Victor set though his name is omitted). Slow and Easy, in Shelly's treatment, is less slow but a little easier and bluesier. A Profound Gass, a little bland and Shearingesque in the first set, is far faster, profounder and gassier on Manne's. Those seeking a souvenir of the show should buy the Mancini set; those who are strictly sound students should seek out Shelly.

Flower Drum Song Mastersounds S World Pacific 1012 Flower Drum Song Morris Nanton Trio

S Warner Bros. BS 1256 Flower Drum Song Johnny Smith Quarte

Roost SLP 2231

В

All three versions are musically impeccable and generally listenable. This does not imply that the appearance of a flock of recordings of this kind was a logical or welcome consequence of the appearance of a new Broadway musical. Many of the tunes would have far more meaning if the lyrics were heard, and indeed are almost valueless without them; moreover, this is far from Rodgers and Hammerstein's best score. Nanton's is basically a pianowith-rhythm set; he is a promising newcomer. The Mastersounds (vibes, piano, drums and electric bass) are well served by good stereo. Perhaps because Time Waits **Bud Powell** Blue Note 1958



In reviewing an album by Toshiko on these pages several issues back, I commented that her idol, Bud Powell, had fallen on evil days. The day this record was made was not one of them. In contrast to his recorded work of the past few years, Bud sparkles here; perhaps not with the fantastic drive of his late Forties but with some new qualities of depth. All the compositions are his; the pretty, title-ballad Time Waits, the Latinate Buster Rides Again, the boppish Marmalade and John's Abbey are good examples of Powell's art. Philly Joe Jones (drums) and Sam Jones (bass), unrelated by blood but brothers musically, help to weld this into a fine trio performance too. Notes: Leonard Feather. Interesting, with illuminating comments about each tune.

New Faces of Newport Randy Weston; Lem Winchester, others Metrojazz E 1005

A to B A to B Weston



Recorded here are potential new stars sponsored by various critics at the 1958 Newport Festival. Randy Weston has a powerful, blues-rooted, Monkderived style which is at its best on his theme, Machine Blues, and Hi-Fly. Bassist George Joyner is a new star too; drummer G. T. Hogan is skillful but his solo on Bantu Suite is overlong. Winchester, a vibist of a Milt Jackson persuasion, is a Wilmington, Delaware policeman and part-time jazz musician. In Now's The Time, Polka Dots and Moonbeams and Take The "A" Train, backed by Herb Pomeroy's rhythm section, he shows that although he is not in a class with Weston, he is worth listening to; at times he is under-recorded. Notes: Leonard Feather. Idea behind critics' choice, biography, description of Weston's tunes. I. Gitler

Bones for the King Dicky Wells Felsted FAJ 7006

В



It is good to find Wells, a fine trombonist of the 1930's, back on records. The better side shows him leading a trombone quartet (with Vic Dickenson, Benny Morton, George Matthews), in three simple tunes framing good solos. On the other side are three more long tracks, this time with a group that includes Buck Clayton, Buddy Tate and other jazz veterans. Some good solo work again, but the rhythm section drags at times and the balance between horns is imperfect, making it hard to tell who has the lead. Major Holley's amusing "singing bass" work recalls Slam Stewart. L. Feather

Something for Both Eors Stereo Demonstration Record S World Pacific HFS 2



Two tracks each by the Mastersounds, Chico Hamilton Quintet, Gerry Mulligan Quartet, plus one each by Ch. Mariano-Jerry Dodgion Sextet and the big bands of Johnny Mandel, Bill Holman, Gil Evans, make up this superblyrecorded set, showing off the consistently high quality of World Pacific's jazz. Ping-pong effects are striking on the funky Vamp's Blues by Mariano. Mandel's Georgia on My Mind includes pre-performance studio sound effects. Woody Woodward contributes an essay that's amusing and valuable. At \$2.98, this is the best azz bargain of the year to date. L. Feather

S

STEREO EXPERIMENTS

There is Still Much We Don't Know about Stereo Techniques. Here Is a Report on Experiments That Produced Very Interesting Results—By Fr. Heegaard

While the M-S method of stereo recording and reproduction has been described in detail in HI-FI MUSIC ("Stereo: Genuine and Simulated" by David Hall, 1958 Hi-Fi Yearbook issue) this article presents new information that may prompt tape enthusiasts to do some experimenting on their own account. The original work was done by the late Holger Lauridsen of Denmark. Our purpose in publishing this data is not to advocate any departure from practices already established in the U.S., but to encourage the widest investigation of stereo techniques, about which there is still much to be learned.

sile.

THERE seems to be little doubt that any major improvement in the quality of broadcast sound reproduction must be towards the creation around the listener of a sound field having a spatial distribution approximating much more closely that in the broadcasting studio than is the case with ordinary single-channel broadcasting. It may even be said that the improvements brought about by the introduction of FM broadcasting, leading to a better reproduction of the higher audio frequencies, have not always led to happy results, because the radiation of strong components at those frequencies from a concentrated source has often been found to cause a certain irritation, especially when broadcasting from extensive sources, such as an orchestra. It is true that the introduction of spherical loudspeakers may to some extent alleviate this effect, but even this does not cure the trouble completely, because the loudspeaker remains essentially a point source which is easily located by the listener.

Certain experiments which were carried out in the laboratories of the Danish State Radio and which shed some light on the problems of spatial sound reproduction will be described in this article. These experiments led to a compatible system of stereophony which was demonstrated for the first time at a meeting in Nordisk Akustisk Selskab in Copenhagen on 6th June, 1954.

Experiments with Producing Space Effects

The first experiment is very simple: A loudspeaker is placed in front of an observer, and another behind his back. Music signals are fed to the loudspeakers. The effect of the back loudspeaker is to some extent to lessen the localisation of the front loudspeaker as a sound source. The distances between the observer and the two loudspeakers are rather critical, and the effect is not very marked although a certain sense of roominess is achieved.

If, however, the sound from the back loudspeaker is delayed by means of a tape recorder by some 50 to 100 milliseconds, the effect is completely different. The observer now gets the impression of being present in a large room in which music is played in front of him. The loudspeaker distances are no longer critical, because localisation of the back loudspeaker is suppressed by the Haas effect. This is a modern version of the "Ultraphon"

demonstrated by Küchenmeister in 1926, which consisted of a gramophone with two sound-boxes placed one behind the other on the record, and each leading to its own horn.

The arrangement can be improved by the addition of a loudspeaker to the left and another to the right of the observer. The lateral loudspeakers are fed in parallel with delays of some 50 to 100 milliseconds, the delay of the back loudspeaker being then 100 to 200 milliseconds. This arrangement gives the observer the impression of an added dimension to the imaginary room in which the music seems to take place.

Feedback can be applied to the delaying machine in order to simulate secondary reflections, thus approximating more closely the reverberation process in a real room. Although this does add some naturalness to the effect, it is surprising to note the relatively small importance of the amount of feedback used. It seems to be the first few reflections that create the impression of a large room.

The experiment is rather instructive, because it demonstrates the fact that naturalness of reproduction can be greatly increased without establishing any possibility of right and left localisation. When listening to a recording of organ music, it is quite easy to imagine that one is present in a large church.

It is perhaps not very surprising that the arrangement described creates such an impression, seeing that the sound from the loudspeakers is similar to what would be obtained in a large room. It is rather less easy to imagine exactly by what mechanism of hearing the psychological effect is obtained. Since, however, the effect must be obtained solely as a result of the sound pressure at each ear as a function of time, one might well ask whether the use of spaced loudspeakers is really necessary. Could not similar spatial effects be obtained when listening with a pair of headphones? The answer was found to be yes.

Consider Fig. 1. We have a pair of headphones to which is delivered a signal from a musical recording. The headphones are connected so that the diaphragms move in phase; by this is meant that, at any instant, they both move towards the head or they both move away from it. A delayed signal from the same source can also be fed to the phones through a separate circuit, and in the leads to one of the phones in the delayed circuit is connected a

reversing switch. The delayed signal can thus be led to the headphones in phase or in antiphase at will. The delay is again of the order of 50 to 100 milliseconds.

We start the experiment by listening to the primary signal only. The effect is the usual one when listening with headphones. The sound seems to come from nowhere in particular or seems perhaps to be localised in the head itself. We add some delayed sound first with the headphones connected in phase. The effect is that of added reverberation and, due to the rather long delay, as the volume is increased at the preamp we soon arrive at a point in which the clarity of reproduction is impaired by

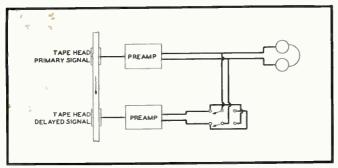


Fig. 1. Connected in phase the delayed signal adds too much reverberation. Reversed, the sound seems to come from hehind the listener

too much reverberation. But the feeling, or rather lack of feeling, of localisation is not changed. We then operate the reversing switch, so that the delayed sound is delivered in antiphase. We immediately get the impression of being present in a large room in which the music is being played, the distances to the walls corresponding to the delay time. For some reason, the sound field seems to be confined to the space behind us, as if we were placed with the face against a wall. The music regains its clarity and the effect is very pleasing. It is also very convincing. In many cases where the experiment has been demonstrated without previous warning, the observers have torn off the headphones and looked behind in order to find the sound source.

The experiment can also be made with two loud-speakers instead of headphones. In order to avoid confusion due to reflections from the walls of the room in which the experiment is made, it is best to use an anechoic chamber such as is used for microphone testing. The loud-speakers should be placed to the right and left at one end of the room in the position usually employed for two-channel stereophonic reproduction, and fed through a bridge circuit, Fig. 2. The effect is no less striking than with headphones.

With this arrangement another curious effect may be demonstrated. For this we use a recording of a pistol shot, fired in an echo-free room. This is reproduced with the primary sound in phase, as before, but instead of adding one delayed sound pulse we add two, one after the other and both in antiphase at terminals S. The shot seems to start from a point far away in a direction exactly in the middle between the loudspeakers and to fly towards the observer, ending up in the back of his head! If the connections are interchanged so that the primary sound is delivered in antiphase and the delayed sounds in phase, the

direction of travel is reversed: the shot seems to start in the back of the head and fly away.

Another loudspeaker arrangement used for these experiments is shown in Fig. 3. One loudspeaker is placed in the usual fashion in front of the observer and a second, which we shall call the transverse loudspeaker, is placed behind the first, at right angles. When primary sounds are fed to the front loudspeaker and delayed sounds to the transverse loudspeaker, we get all the effects described above. If this arrangement is placed in an ordinary room, the reflections from the side walls reinforce the output from the transverse loudspeaker. The arrangement also works, however, in the echo-free room, although the sound from the transverse loudspeaker decreases rather rapidly with distance, especially at low frequencies, due to the cancellation of the sound pressure from the two sides. This gives rise to a remarkable effect: if we walk towards the loudspeakers while music is being played, the distance to the sound source seems to increase.

Experiments with Stereo Reproduction

In the experiments so far described, the effects have been completely symmetrical in regard to left and right. No stereophonic effects were involved. A little con-

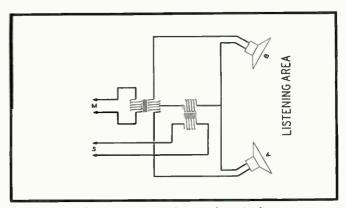


Fig. 2. When the inputs to M and S are changed, the music seems to come from the center, either side, or move from one side to the other

sideration will show, however, that it must be possible to obtain stereophony from the reproducing arrangements shown. Consider for instance Fig. 2. Music signals are fed to the terminals marked M. The two loudspeakers operate in phase, and the sound source seems therefore to be located at the midpoint between the loudspeakers. The same signals are now led to the terminals S, without introducing any delay. The two sets of signals will add in phase in one loudspeaker, say A, and in antiphase in the other. The sound source seems to have moved to the left. If we gradually attenuate the S signals to zero, reverse the connections and increase the signals again, the sound source seems to be moving from left to right. What is needed to make up a complete stereophonic system is, therefore, a microphone combination which will deliver an M signal containing the central information (this might be any ordinary microphone) and an S signal which will be zero for a centrally-located sound source and increase with increasing angular deviation, the phase reversing as the source passes from left to right. We use Continued on page 42



By James Jewell

TWO AMPLIFIERS, each rated at 30 watts output, are combined in the Arkay SPA-55 chassis, with connections to use them separately for stereo, or for 50 watts total output on mono. The circuit is straightforward, using a 6AN8 and two 6GL6B output tubes in each section, with a 504GB rectifier. Rated performance and actual performance in music reproduction are excellent. An input of slightly less than I volt is required for 30 watts output.

Fig. 1. Instructions for the first stage call for mounting these parts

As you can see from the illustrations, there are no problem situations to cause difficulties in the assembly and wiring, although the wires and parts are somewhat crowded behind the level controls, calling for a little spe-

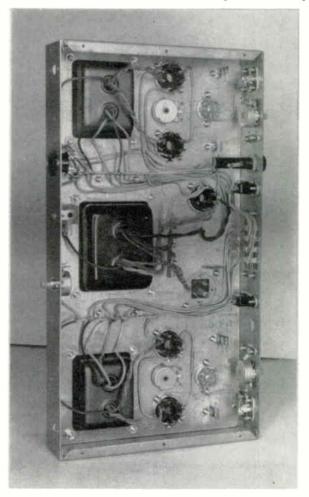


Fig. 2. This much wiring is shown in the diagram of the second stage cial care in soldering the connections at these points.

External Connections

Across the front of the chassis from left to right, Fig. 4,

are dual inputs, input level adjustment, and phantom output for channel 1, fuse, unswitched AC outlet, speaker connections of 4, 8, and 16 ohms, another unswitched outlet, and the channel 2 phantom output, input level adjustment, and the dual inputs.

Each pair of dual inputs is in parallel. The reason for them is that, on mono operation, one input of channel 1 is connected to one input of channel 2. Then either of the remaining inputs is connected to a mono signal source in order to play the music over both speakers.

A level control is provided for each input as a means of getting a preliminary balance between the two channels.

They should be set for normal listening volume when the preamp volume and balance controls are at about the center position. The phantom outputs are to drive additional speakers, or they can be connected in series to drive a single center speaker in a three-speaker installation.

On the rear of the chassis there are a bias control and a socket for taking off filament, plate, and bias voltages for an Arkay preamp. If it is used, the stereo amplifier can be switched on and off at the preamp. Otherwise, an AC switch must be connected across terminals 1 and 8 of the socket. An alternative method is to short terminals 1 and 8, and then plug the AC cord from the amplifier into a switched outlet on one of the other components.

Notes on Assembly and Wiring

The four large diagrams are easy to follow. The first stage is devoted to mounting the parts, as shown in Fig. 1. Fig. 2 corresponds to the second stage, while Figs. 3 and 4 show the completed instrument.

This writer found four errors in the instructions. On page 6, step 58D should end with (S5) and not (S4). Step 60d should end with (S4) and not (S3). On page 7, step 16 should give the color coding as (gray-red-brown) and not (gray-red-white). The same error appears on page 8, step 33.

Time required for the work, proceeding at a moderate pace, was: preparation and sorting of the parts 1 hour;

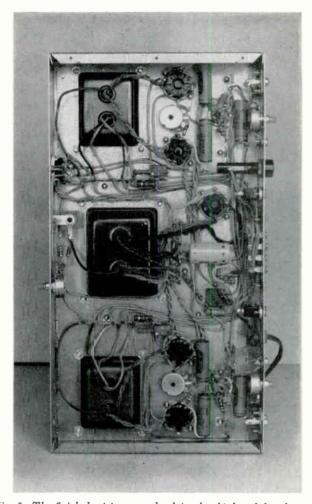
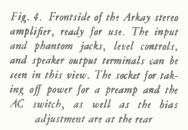


Fig. 3. The finished wiring, completed in the third and fourth stages

stage 1 (assembly) 1 hour, 15 minutes; stage 2 (wiring) 3 hours; stage 3 and 4 (wiring) 5 hours, 15 minutes.

After the bias and hum adjustments were made in accordance with the instructions, this unit performed in an entirely satisfactory manner, delivering excellent reproduction quality.





OPERATION CLEANUP

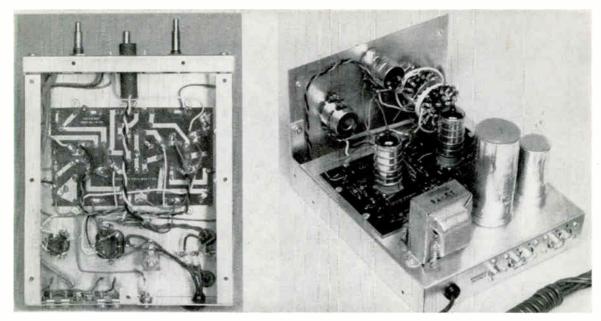
It's Spring Again, and Time for the annual Checkup on Your Hi-Fi Equipment. And If You Haven't Converted to Stereo Already, You Ought to Consider It Right Now

	▲ RE YOU confronted, and perhaps embarrassed at fre-	TURNTABLE
A	quent intervals, by such questions as: "When are	☐ If you have been planning to buy a turntable, how about
1	you going to clean up those loose wires we've	doing it right now?
	en tripping over for the last two months?" or "Why	If you have a turntable, is it mounted solidly, on an ade-
	n't you take a few minutes to get a new pickup so we	quate base?
	n have some decent music again?" Or have you just	Does the tone arm swing freely, and have you checked
	en making private promises to yourself about running	the stylus pressure? How about a stereo pickup?
do	wn things that are wrong with your hi-fi system?	Is the belt or driving puck in perfect condition for all
	To make your inspection quick and easy, this checklist	speeds?
	divided by headings which, collectively, make up a comete hi-fi installation. A suggestion: put a black X in the	Do you have a main control switch that cuts off the turn-
	uare before each item that does not need attention, and	table, too?
-	ed check where you think that something must be done	PREAMPLIFIER
	requires at least a second look.	
-	•	Is your preamp mounted permanently, or is it still installed in some temporary fashion?
	AC POWER CONNECTIONS	What about the wiring? Are you troubled with hum pickup?
	Does the AC plug fit firmly in the wall or baseboard outlet?	Do all the controls function perfectly?
Ш	Is the insulation on the cord bruised or frayed? The cord should have round rubber insulation—not flimsy cotton	Any loose knobs?
	braid.	Need a new pilot light?
	Does the cord run directly to your equipment, so that no	 Is it time to have the tubes checked? Is the ventilation adequate, so that the preamp does not
_	part lies loose on the floor where someone may trip on it,	become excessively hot?
	or where it might be run over or pushed around by a	Should you replace your present preamp with a new
	vacuum cleaner?	stereo model?
	Does the AC connection run directly to one switch, where power to all the components can be cut off?	THATED
	If your equipment is mounted behind doors, or otherwise	TUNER
	concealed, do you have a main power switch with a pilot	Do you have an FM tuner, or an FM-AM stereo tuner?
	light in plain view?	If so, does it suppress the background noise on weak stations? If not, the trouble may be due to one of the
	INTER-UNIT WIRING	sources covered in the next five items:
	INTER-UNIT WIRING	sources covered in the next tive items: Have you ever had the FM alignment checked? (Unless
	Is all the wiring between the units of your audio system	Have you ever had the FM alignment checked? (Unless your local dealer has the proper equipment, better send
		Have you ever had the FM alignment checked? (Unless your local dealer has the proper equipment, better send the tuner back to the manufacturer to have this done.)
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	Is all the wiring between the units of your audio system as short as possible? Is the shielding and insulation all in perfect condition? Should you substitute the madeup leads and terminals that are now available in hi-fi equipment stores? Are all connections to pin plugs and terminals soldered neatly and securely?	Have you ever had the FM alignment checked? (Unless your local dealer has the proper equipment, better send the tuner back to the manufacturer to have this done.) Is it one of the earlier, less sensitive models? (Low sensitivity results in poor noise limiting.) Does the tuning drift after the set warms up? Do you get as many FM stations as you should? (The new models, used with a good antenna, have a range of 50 to
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	Is all the wiring between the units of your audio system as short as possible? Is the shielding and insulation all in perfect condition? Should you substitute the madeup leads and terminals that are now available in hi-fi equipment stores? Are all connections to pin plugs and terminals soldered neatly and securely? Have you wiggled the wires to see if there are any uncertain or intermittent connections? RECORD-CHANGER Does your record-changer mechanism perform all its functions perfectly? Is it mounted securely, with the base perfectly level? Is it smooth and quiet in operation? Do you hear rumble or wow when you play records? When did you oil it last? Do you need a new stereo pickup? Are you using a sapphire stylus that should be replaced by a diamond?	Have you ever had the FM alignment checked? (Unless your local dealer has the proper equipment, better send the tuner back to the manufacturer to have this done.) Is it one of the earlier, less sensitive models? (Low sensitivity results in poor noise limiting.) Does the tuning drift after the set warms up? Do you get as many FM stations as you should? (The new models, used with a good antenna, have a range of 50 to 100 miles or more, depending upon the receiver location and the power of the transmitter.) Should the tubes be checked? Is the tuner installed permanently, or is it still set up in some temporary fashion? Do any of the pilot lights need replacing? Are all the connections neat and secure? Is it connected so as to be cut off from a master switch that controls the entire system? TAPE MACHINE Do you have a tape machine?

Hi-Ji Music at Home

	"OPERATION CLEANUE	" REPORT	ON	YOUR	HI-FI	INSTALLATION		
4	Here is a review checklist of the main items which appear separately, in detail. If you can put an OK opposite 13 out of the 14 items, your wife should present you with a gold-plated record, and it should be done with fitting ceremony on the front steps of your local Town Hall. If you don't score at least 7 OK's, your wife should call in the junk man and have him cart off that mess. But if you mark all 14 items with OK's—well, we still won't believe you unless your wife signs your report card!	AC POWER CO Something to be INTER-UNIT Something to be RECORD-C Something to be TURNT Something to be PREAMP Something to be TUN Something to be TUN Something to be TAPE MA Something to be	done WIRING done HANGE done ABLE done PLIFIER done IER done	☐ AII OK G ☐ AII OK	Somethin RECOR Somethin Somethin ADDIT	AMPLIFIER Ing to be done		
	What about replacing it with a stereo model, or a stereo tape phonograph? Can a stereo unit be added to your pres Are you using a high-quality microphone.	ent machine?	☐ Ha	il your equi you certair	ht all the co	nished? mponents you need? anently in place? e components are adequately		
	AMPLIFIER			tilated? ve you set a	date on wh	ich the installation will be com-		
	Is it installed properly, with adequate versional should it be replaced with a stereo mod. Are the wires and connections neat and should you have the tubes tested? Is it causing noticeable hum in your speal Does it have enough power to drive your system without overloading?	el? secure? ker?	pleted, right down to the last detail? Or at last getting a stereo pickup and a second speaker? ADDITIONAL EQUIPMENT What about going stereo? Do you need an extension speaker?					
	SPEAKER SYSTEM		If you listen to radio or records after you go to bed, can you cut off your entire system without getting up?					
	Are your speakers still in temporary encl. Are the enclosures adequate for your speakers. Are you planning to add a tube-type of to coperate two or three separate of channels? Planning to modify your speaker setup for Are you still waiting to paint or stain your ls the wiring shipshape, with no loose lead	rossover network implifier-speaker or stereo? enclosure?	 What about test instruments to check the performance of your system? Do you need a second tuner, amplifier, and speaker for the kitchen or bedroom? Are you planning a stereo tape system? Do you need a shop where you can experiment without tearing up your hi-fi installation? What has your wife been asking you to repair or add to your system? 					
	FM ANTENNA				-	mplete, but undoubtedly the		
	Do you have an adequate FM antenna to give you maximum performance from your tuner? Do you need a Yagi antenna for long-distance reception? And a rotator, for long distance in all directions? Have you inspected the condition of your antenna and the mounting, to be sure it can withstand high winds? Is the lead-in secure, so it does not rub on the house? And does it run directly to your tuner? Is your antenna high enough?			questions here will prompt you to think of other ite which call for attention. Usually, the things that rem to be done require very little time. It's just a matter stopping long enough to do them! But putting everything in order is one way for a reto make himself popular with his family, and particular with his wife. Besides, if a hi-fi installation is to be accessory to good living, and that is its basic function it should be as attractive in appearance as it is fine				
	CABINETWORK		perform	nance.				
	Is your equipment installed in an attractive or furniture piece, in a manner satisfacto Or are you still promising to do somethin Are you still in the process of designing a bas the construction of the cabinet been	ry to your wife? g about it? cabinet?	and bla at the put it	ck pencils, top of this	complete the page. You eketbook as	ne foregoing squares with red the review in the Report Card may want to cut it out and a reminder of things to be		

May 1959



The KT-315 is supplied in kit form. These views show the printed-circuit board and chassis completely assembled and wired.

Versatile Stereo Control

A Unique Circuit Provides for Channel-Mixing, and a Center Speaker

THE GREAT PROBLEM in designing controls for audio installations is to provide sufficient flexibility to take care of the widest variety of system requirements, without getting into such a complicated collection of knobs and switches that they will not be understood.

A truly outstanding design in both flexibility and simplicity is the Lafayette KT-315 stereo control illustrated here. This unit contains the conventional adjustments for a stereo system using 1) a preamp-amplifier in one channel and a preamp and separate amplifier in the other channel, 2) separate preamps and amplifiers in each channel, or 3) a 3-speaker system with an extra amplifier to drive the center speaker.

The center adjustment on the front panel is a bridging control. Using two speakers, an adjustable amount of each channel is mixed with the other. Thus, any hole-in-the-middle effect from a particular record can be closed. With the three-speaker setup, the bridging control can be used to feed an adjustable amount of each channel into the amplifier driving the third (center) speaker.

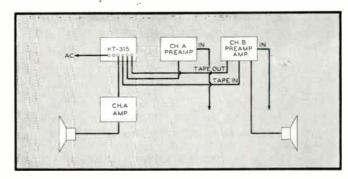
This unit controls all speaker switching, volume, balance, and bridging

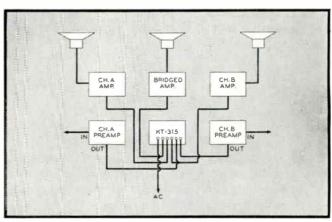


Some reports on the use of a center speaker for stereo have not been particularly enthusiastic, but in each case, the connections used did not have any control of the volume. As a result, the level was too high or too low. The KT-315, however, permits an exact balance, and a great improvement over two-speaker stereo reproduction.

Left and right concentric knobs are for speaker switching and phase reversal, and for adjusting the sound level and balance between channels.

Two and three-speaker installations connected to this versatile unit





Disc-Playing Equipment

Notes on the Various Factors Which Affect Reproduction Quality, Particularly from Stereo Discs—By Herman Burstein

UALITY of performance from a record player depends upon the cartridge, turntable, and arm used, as well as upon cartridge load, equalization, and measures for hum reduction. In view of the present accent on phono discs as the medium for stereo in the home, a review of these factors is appropriate. If you are seeking optimum performance either from a stereo or mono system, it will pay you to give careful attention to each of the six factors above in setting up or improving upon the phono portion of your hi-fi system.

Selecting a Phono Pickup

While manufacturers' claims and critics' comments may serve as a preliminary guide, your choice of a cartridge should be based ultimately upon your individual reaction to a listening test. A particular cartridge may be liked by some and disliked by others for reasons that vary from person to person. Or two individuals may prefer cartridge A over cartridge B, but one may feel that the difference between the two pickups justifies whatever A costs, while the other may consider the difference in performance does not justify the higher price.

These observations are drawn from listening tests in which the author participated, designed to elicit the reactions of a number of experienced listeners to five representative pickups. These comprised two magnetic pickups of the variable reluctance type, two magnetics of moving coil construction, and a ceramic pickup. Other audio components employed for the tests were of high quality — wide, uniform frequency response and low noise and distortion — so that limitations of the cartridges were readily discernible.

The tests brought out that no one pickup excelled under all circumstances. Reactions to specific cartridges varied with program material, listening level, and frequency balance of the record being played. (Although current records nearly all claim adherence to RIAA equalization, it was apparent that liberties are taken by the recording studios. Using the same cartridge, some purportedly RIAA discs sounded relatively shrill and others bottom-heavy.) At times one cartridge won favor, if for no other reason, simply because it tended to compensate best for the record's departure from correct balance. Sometimes another cartridge was preferred because it seemed to bring a vocal or instrumental soloist forward of the orchestra, while on other occasions a different pickup was favored because it achieved the most satisfactory blend of all participating forces. Cartridges were variously acclaimed for such qualities as clarity, sweetness, ease, definition, solid bass, and richness. From record to record there was a continual shift of the order in which cartridges were ranked, and not one of them was universally first or last in esteem.

All told, the tests demonstrated the subjective relationship between cartridges and listening pleasure. While specifications, price, and personal recommendations can be worthwhile guides to the selection of a cartridge, the best way to reach your decision as to the type you will buy is to base your selection on the dictates of your own ears.

Turntable, Changer, and Tone Arm

Turntable requirements for top performance can be mainly summed up by the phrase "good motion". This pertains to:
1) accurate speed (within .3% of the correct number of revolutions per minute, by professional standards); 2) steady speed (not more than .2% wow and flutter); and 3) minimum rumble.

Most human ears are undisturbed by turntable rotation that is 1% or 2% fast or slow, although a golden ear can detect the pitch error produced by a considerably smaller deviation from correct speed than that. A turntable that maintains its speed with a precision of \pm .3% is almost certain to be satisfactory. You can easily check speed with the aid of a stroboscope card, available for a few cents in most audio stores, by placing the card on the turntable and counting the number of bars that appear to pass any given point within 1 minute. A speed error of \pm .3% corresponds to 21 bars passing by per minute. A smaller or greater number of bars indicate proportional errors. Thus 72 bars per minute indicate an error of 1%, while 7 bars represent a speed error of only .1%.

In the case of wow and flutter, virtually all of us are bothered by very slight changes in speed, particularly on sustained notes and at the higher frequencies, especially in the region of 3,000 cycles. Thus your ears serve as an adequate instrument for determining whether wow and flutter are held within suitable bounds.

Rumble, though slight, can be audible on a system with excellent low-frequency response. By turning up the gain and the bass control, the rumble characteristics of a record player can easily be noted. Even though rumble is inaudible at ordinary listening levels, it may drive the speaker voice coil beyond the linear portion of its range of movement, producing distortion of audible frequencies. Furthermore, turntable rumble can be transmitted to the tone arm, causing modulation and distortion of audio frequencies.

The record changer, burdened with the complex tasks of automatic operation, generally does not match the performance of the manual turntable. Nevertheless, ingenious design and good workmanship have brought forth some changers that offer performance satisfactory to many, if not all, discriminating listeners.

It is important to mount the turntable so that it is perfectly level. This can be checked with a spirit level.

If it is not level, the stylus may tend to ride against one side of the groove and, at the end, the arm may not exert enough pressure on the tripping mechanism to operate it.

The weight, shape, material, and mounting of a tone arm should be such as to keep the resonant frequency as low as possible, because reproduction is considerably emphasized at the arm's resonant frequency, sometimes to the extent that the cartridge stylus jumps out of the record groove on loud passages. In a professional arm, resonance is usually below 20 cycles. Resonance of a record-changer arm, unfortunately, tends to be higher than of its professional counterpart, and may be in the vicinity of 30 cycles; this is approximately the rumble frequency of the commonly used 4-pole induction motor, so that arm resonance will then augment reproduced rumble.

For minimum distortion, the pickup stylus should move as nearly as possible at right angles to a tangent of the groove so far as lateral motion is concerned (only lateral motion is involved in mono discs; both lateral and vertical motion in stereo discs). This requirement is met closely through the offset angle at which the pickup is mounted on the tone arm, and by mounting the cartridge in the arm for the correct stylus overhang beyond the center of the turntable (usually about one-half inch). It is necessary to follow the manufacturer's instructions exactly when mounting an arm on a turntable base.

A tone arm suitable for mono use is not necessarily satisfactory for stereo. Mono arms are designed so they can move vertically fast enough to accommodate vertical motion due to record warp. But if stylus, pickup, and arm

move as a unit when the stylus encounters vertical undulations, then there will be no signal output from the cartridge, for a signal is produced only when the stylus moves relative to the cartridge. In the case of stereo, this raises a problem at low frequencies, specifically those which appear as vertical modulation of the groove. Therefore, for stereo, the tone arm must be designed so that it will only respond to vertical motion at frequencies below the audio range.

For minimum distortion and record wear, the stylus mounting should be so positioned that the movement of the stylus is at right angles to the surface of the record. This requirement is even more stringent for stereo than for mono reproduction because the cutting stylus moves vertically with respect to the record surface, and the pickup stylus should not move in the groove at some other angle. If it does, record wear will be increased even at very small stylus force, and crosstalk will be introduced. That is, left-side signals will appear in the right channel, and right-side signals will appear in the left channel.

Adjustment of the stylus angle can be achieved by using spacing washers when mounting the cartridge in the tone arm. It is advisable that at least one of the washers be of compressible material, such as rubber, so that a fine degree of adjustment can be achieved by tightening up on a mounting screw.

Tracking pressure — the force with which the stylus bears upon the record groove — is important with respect to distortion, record wear, and stylus wear. Don't guess at the stylus force. Use a gauge. The modest cost will



be your best investment in the care of your records! The instructions which accompany each pickup specify the correct force. Usually a range of pressure is given, such as "3 to 6 grams". The low figure should be taken for use with a turntable, and the high figure for use with a changer.

Pickup Loading and Equalization

Frequency response of the pickup, whether a magnetic or crystal type, usually depends upon the electrical load put across the pickup by the preamp or amplifier. Magnetic pickups of the variable reluctance or moving magnet types (high-inductance types) tend to have a peak at the upper end of the audio range unless a "damping" resistor of relatively small value is placed across the cartridge as a load. Therefore the manufacturers stipulate suitable resistive loads, typically 47,000 to 100,000 ohms, to be connected directly across the pickup at the tone arm or in the preamp. If the preamp has an adjustable load resistance, that is all that is necessary. The smaller the load resistor, the better the damping of the treble peak. On the other hand, a very small load resistance is to be avoided because it causes treble loss. Hence the manufacturer's recommendation should be carefully followed for the widest vet smoothest response of which the high-inductance magnetic cartridge is capable. Moving coil pickups, on the other hand, have a wide latitude, operating satisfactorily with almost any load from about 1,000 to several hundred thousand ohms.

In the case of high-inductance magnetic pickups, high-

frequency losses will result from an excessively long cable between the record player and the preamp. This is due to capacitance of the cable, which tends to act as an increasingly effective short-circuit to ground as frequency goes up. Thus, for maximum performance, you should use the shortest cable possible. With moving coil pickups, however, length of cable is ordinarily not a problem, at least as far as treble response is concerned; however, a long run of cable may pick up hum.

The ceramic or crystal pickup ordinarily requires a very large load resistance in order to maintain bass response. The correct value is usually between 1 megohm and 3 megohms. Too frequently, however, control amplifiers provide a load of only 500,000 ohms, which results in bass attenuation. This situation can be remedied in two ways: If you are accustomed to tinkering with the insides of audio equipment, you can increase the load resistance in the amplifier to the value recommended by the pickup manufacturer. Or you can connect a capacitor across the cartridge at the tone arm or in the preamp that will provide full bass response when the load is 500,000 ohms. The value of this capacitor can generally be obtained from the manufacturer if it is not given in the instructions.

Length of cable between the record player and the control amplifier, unless exceptionally great, will not affect the performance of a ceramic pickup significantly.

Most preamps provide variable phono equalization for magnetic pickups, thereby achieving flat frequency response when playing older discs that were not recorded with RIAA equalization. To profit Centinued on page 50

IN ACOUSTICAL DESIGN BY STROMBERG-CARLSON

Announcing . . . a revolution in speaker system design!

The world-famous Acoustical Labyrinth® -long acclaimed for its peerless performance—is now available in small, compact systems! You get the cleanest, identifiable bass response—in shelf-size systems, for 8", 12", 15" speakers.

Identification of sound in all frequencies is directly related to transient response. NOW STROMBERG-CARLSON HAS BRO-KEN THROUGH transient response limitations at low frequencies. How? WITH OUR ACOUSTICAL LABYRINTH® QUARTER-WAVELENGTH DUCT. The result: new

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The phenomenal performance of these new Stromberg-Carlson speaker systems is matched by their versatility. They are available with or without base. You mount them on shelf or table . . . on end or on the side—IN ANY WAY AND IN ANY LOCATION YOU CHOOSE!

The new systems are available as (1) complete, factory-wired systems with speakers mounted; (2) as assembled labyrinths; (3) as unassembled labyrinth kits.

Ask your dealer for a demonstration now. He's in the Yellow Pages under "High Fidelity."

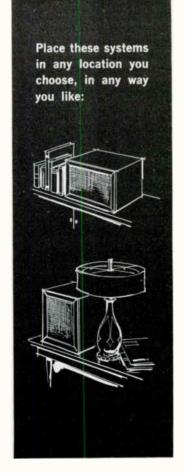
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STEREO EXPERIMENTS

Continued from page 33

a microphone with figure-of-eight directional characteristic, placed so that the plane of zero sensitivity coincides with our central plane.

The microphone combination actually used in these experiments consists of two capacity microphones of the type with steerable polar diagrams, that of the M microphone being in the cardioid condition, while that of the S microphone is in the figure-of-eight condition as in Fig. 4. Care should be taken to place the microphones as close together as possible in order to preserve phase relationship, which is especially important at low frequencies. In this case, one was mounted directly above the other. The results obtained in practice are good; the sideways

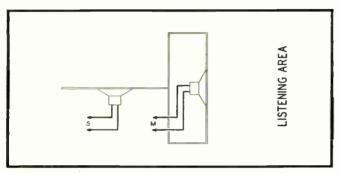


Fig. 3. Special effects can be produced from a mono source with this M-S system by feeding the primary signal to M, and the delayed signal to S

location leaves little to be desired, the feeling of depth is retained and the hole-in-the-middle effect seems to be less evident than with most other two-channel systems.

In traditional two-channel systems, the information intended for the left ear is sent out in one channel, say channel A, while the information intended for the right ear is transmitted in channel B. The system here described is certainly a two-channel system, but the division of information between the channels is quite different. The letter M may be taken to stand for monaural, since the M channel contains all the information necessary for monaural reproduction. It could also stand for middle, since the M microphone would usually be directed towards the acoustical centre of extended sound sources. The letter S might similarly be taken to stand for stereophonic, since the S channel contains the supplementary information necessary to convert the monaural signal to a stereophonic. It could also stand for side, since it defines the side position of the sound source.

Compatible Stereo Broadcasting

In a sound broadcasting system, it would therefore be possible to arrange for the M channel to contain the signal necessary to operate the usual monaural receivers. The addition of an S signal in another channel would make stereophonic reception possible for those who had acquired the necessary additional receiving equipment, without in any way disturbing the reception of the monaural receivers. The system is, therefore, compatible with existing sound broadcasting systems. It should, for instance, be quite possible to modulate the S signal on a

sub-carrier in existing FM stations, without interfering with transmission of the M signal.

If stereo broadcasting were to take place on the A-B system, there would seem to be two alternative methods of dealing with monaural receivers: either to let them receive the A or B signal as best they might, a procedure which would hardly satisfy the discriminating listener, or to send out the central, monaural signal in a third channel which, for obvious reasons, would be out of the question.

In Fig. 2 the signals fed to the loudspeakers are the usual A and B form. The relation between the two forms is simply A = M + S and B = M - S, and the circuit of Fig. 2 may also be used to convert the A-B, form to M-S.

The idea of transmitting A+B and A-B in order to achieve compatible stereophony is not new, although this was not known to Mr. Lauridsen when he was working on his system. It should be noted, however, that A+B cannot be depended upon to form a satisfactory M signal when spaced microphones are used to derive the A and B signals. With a combined microphone such as that used in the Stereosonic 1 system the conversion is completely satisfactory.

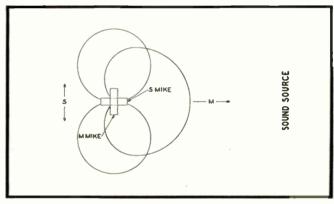


Fig. 4. The pickup pattern with microphones arranged for stereo recording and reproduction, using the loud speaker system illustrated in Fig. 3

Subsequent studies of the patent literature has indeed revealed the fact that more than a quarter of a century ago Blumlein used sum and difference signals in his system of stereophonic gramophone recording, and even used the combination of an omni-directional and a velocity microphone to derive directly what have here been called M and S signals.² Judging from contemporary technical literature, these inventions do not seem to have created much interest, and no one seems to have conceived the idea of broadcasting pure M and S signals in compatible form, or to have realised the potentialities of such a system.

If the operations M + S and M - S are carried out on the polar diagrams of Fig. 4, it will be found that the A and B signals derived from the corresponding microphone combination are the same as those that would be obtained from two supercardioid microphones placed with their axes at an angle.

Continued on page 48

¹ Clark, Dutton, and Vanderlyn: "The 'Stereosonic' Recording and Reproducing System" Proceedings I.E.E., September, 1957

² British patent Nos. 394,325 and 429,054 Blumlein

Easy-to-build



- style
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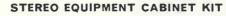


PROFESSIONAL STEREO-MONAURAL AM-FM TUNER KIT

MODEL PT-1 \$8995

The 10-tube FM circuit features AFC as well as AGC. An accurate tuning meter operates on both AM and FM while a 3-position switch selects meter functions without disturbing stereo or monaural listening. The 3-tube front end is prewited and prealigned, and the entire AM circuit is on one printed circuit board for ease of construction. Shpg. Wt. 20 lbs.





MODEL SE-1 (center unit) \$14995 Shpg. Wt. 162 lbs. (specify wood desired)

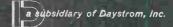
MODEL SC-1 (speaker enclosure) \$39⁹⁵ each
Shpg Wt. 42 lbs.(specify R. or L. also
wood desired)

Superbly designed cabinetry to house your complete stereo system. Delivered with pre-cut panels to fit Heathkit AM-FM tuner (PT-1), stereo preamplifier (SP-1 & 2) and record changer (RP-3). Blank panels also supplied to cut out for any other equipment you may now own. Adequate space is also provided for tape deck, speakers, record storage and amplifiers. Speaker wings will hold Heathkit SS-2 or other speaker units of similar size. Available in ¾" solid core Philippine mahogany or select birch plywood suitable for finish of your choice. Entire top features a shaped edge. Hardware and trim are of brushed brass and gold finish. Rich tone grille cloth is flecked in gold and black. Maximum overall dimensions (all three pieces): 82¾" W. x 36½" H. x 20" D.

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Benton Harbor, 5, Michigan



MONAURAL-STEREO PREAMPLIFIER KIT (TWO CHANNEL MIXER)

Complete control of your entire stereo system in one compact package. Special "building block" design allows you to purchase instrument in monaural version and add stereo or second channel later if desired. The SP-1 monaural preamplifier features six separate inputs with four input level controls. A function selector switch on the SP-2 provides two channel mixing as well as single or dual channel monaural and dual channel stereo. A 20' remote balance control is provided.

HIGH FIDELITY RECORD CHANGER KIT

MODEL RP-3 \$6495

Every outstanding feature you could ask for in a record changer is provided in the Heathkit RP-3, the most advanced changer on the market today. A unique turntable pause during the change cycle saves wear and tear on your records by eliminating grinding action caused by records dropping on a moving turntable or disc. Record groove and stylus wear are also practically eliminated through proper weight distribution and low pivot point friction of the tone arm, which minimizes arm resonance and tracking error. Clean mechanical simplicity and precision parts give you turntable performance with the automatic convenience of a record changer. Flutter and wow, a major problem with automatic changers, is held to less than 0.18% RMS. An automatic speed selector position allows intermixing 331/3 and 45 RPM records regardless of their sequence. Four speeds provided: 16, 331/3, 45 and 78 RPM. Other features include RC filter across the power switch preventing pop when turned off and muting switch to prevent noise on automatic or manual change cycle. Changer is supplied complete with GE-VR-II cartridge with diamond LP and sapphire 78 stylus, changer base, stylus pressure gauge and 45 RPM spindle. Extremely easy to assemble. You



HIGH FIDELITY TAPE RECORDER KIT

MODEL TR-1A \$9995 Includes tape deck assembly, preamplifier (TE-1) and roll of tape.

The model TR-1A Tape Deck and Preamplifier, combination provides all the facilities you need for top quality monaural record /playback with fast forward and rewind functions. 7½ and 3½ IPS tape speeds are selected by changing belt drive. Flutter and wow are held to less than 0.35%. Frequency response at 7½ IPS ±2.0 db 50-10,000 CPS, at 3¾ IPS ±2.0 db 50-6,500 CPS. Features include NARTB playback equalization—separate record and playback gain controls—cathode follower output and provision for mike or line input. Signal-to-noise ratio is better than 45 db below normal recording level with less than 1% total harmonic distortion. Complete instructions provided for easy assembly. (Tape mechanism not sold separately). Shpg. Wt. 24 lb. Model TE-1 Tape Preamplifier sold separately if desired. Shpg. Wt. 10 lbs. \$39.95.

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HIGH FIDELITY AM TUNER KIT

MODEL BC-1A \$2695

Designed especially for high fidelity applications this AM tuner will give you reception close to FM. A special detector is incorporated and the IF circuits are "broadbanded" for low signal distortion. Sensitivity and selectivity are excellent and quiet performance is assured by high signal-to-noise ratio. All tunable components are prealigned. Your "best buy" in an AM tuner. Shpg. Wt. 9 lbs.



HIGH FIDELITY FM TUNER KIT

MODEL FM-3A \$2695

For noise and static-free sound reception, this FM tuner is your least expensive source of high fidelity material. Efficient circuit design features stablized oscillator circuit to eliminate drift after warm-up and broadband IF circuits for full fidelity with high sensitivity. All tunable components are prealigned and front end is preassembled. Edge-illuminated slide rule dial is clearly marked and covers complete FM band from 88 to 108 mc. Shpg. Wt. 8 lbs.

- No Woodworking Experience Required For Construction
- All Parts Precut and Predrilled For Ease of Assembly





"UNIVERSAL" HI-FI 12 WATT AMPLIFIER KIT MODEL UA-1 \$2195

Ideal for stereo or monaural applications. Teamed with the Heathkit WA-P2 preamplifier, the UA-1 provides an economical starting point for a hi-fi system. In stereo applications two UA-1's may be used along with the Heathkit SP-2, or your present system may be converted to stereo by adding the UA-1. Harmonic distortion is less than 2% from 20 to 20,000 CPS at full 12 watt output. "On-off" switch located on chassis and an octal plug is also provided to connect pre-

amplifier for remote control operation. Shpg. Wt.



CHAIRSIDE ENCLOSURE KIT

MODEL CE-1 \$4395 each (Specify model and wood desired when ordering.)

Your complete hi-fi system is right at your fingertips with this handsomely styled chairside enclosure. In addition to its convenience and utility it will complement your living room furnishings with its striking design in either traditional or contemporary models. Designed for maximum flexibility and compactness consistent with attractive appearance, this enclosure is intended to house the Heathkit AM and FM tuners (BC-1A and FM-3A) and the WA-P2 preamplifier, along with the RP-3 or majority of record changers which will fit in the space provided. Well ventilated space is provided in the rear of the enclosure for any of the Heathkit amplifiers designed to operate with the WA-P2. The tilt-out shelf can be installed on either right or left side as desired during construction, and a lift-top lid in front can also be reversed. Both tuners may be installed in tilt-out shelf, with preamp mounted in front of changer.... or tuner and preamp combined with other tuner in changer area. Overall dimensions are 18" W. x 24" H. x 351/2" D. Changer compartment measures 17%" L. x 16" W. x 9%" D. All parts are precut and pre-drilled for easy assembly. The Contemporary cabinet is available in either mahogany or birch, and the Traditional cabinet is available in mahogany suitable for the finish of your choice. All hardware supplied. Shpg. Wt. 46 lbs.



"BOOKSHELF" HI-FI 12 WATT

MODEL EA-2 \$2895

An amplifier and preamplifier in one compact unit, the EA-2 has more than enough power for the average home hi-fi system and provides full range frequency response from 20 to 20,000 CPS within ± 1 db, with less than 2% harmonic distorition at full power over the entire range. RIAA equalization, separate bass and treble controls and hum balance control are featured. An outstanding performer for the size and price. Shpg. Wt. 15 lbs.



"EXTRA PERFORMANCE" 55 WATT HI-FI AMPLIFIER KIT

MODEL W7-M \$5495

This hi-fi amplifier represents a remarkable value at less than a dollar a watt. Full audio output and maximum damping is a true 55 watts from 20 to 20,000 CPS with less than 2% total harmonic distortion throughout the entire audio range. Features include level control and "on-off" switch right on the chassis, plus provision for remote control. Pilot light on chassis. Modern, functional design. Shpg. Wt. 28 lbs.

"MASTER CONTROL" PREAMPLIFIER KIT MODEL WA-P2 \$1975

All the controls you need to master a complete high fidelity home music system are incorporated in this versatile instrument. Featuring five switch-selected inputs, each with level control. Provides tape recorder and cathode-follower outputs. Full frequency response is obtained within $\pm 1\frac{1}{2}$ db from 15 to 35,000 CPS and will do full justice to the finest available program sources. Equalization is provided for LP, RIAA, AES and early 78 records. Dimensions are 12% L. x 3% H. x 5% D. Shpg. Wt. 7 the

13 lbs



"HEAVY DUTY" 70 WATT HI-FI AMPLIFIER KIT MODEL W6-M \$10995

For real rugged duty called for by advance hi-fi systems or P.A. networks, this high powered amplifier more than fills the bill. Silicon-diode rectifiers are used to assure long life and a heavy duty transformer gives you extremely good power supply regulation. Variable damping control provides optimum performance with any speaker system. Quick change plug selects 4, 8 and 16 ohm or 70 volt output and the correct feedback resistance. Frequency response at 1 watt is ±1 db from 5 CPS to 80 kc with controlled HF rolloff above 100 kc. At 70 watts output harmonic distortion is below 2%, 20 to 20,000 CPS and 1M distortion below 1% 60 and 6,000 CPS. Hum and noise 88 db below full output. Shpg. Wt. 52 lbs.

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GENERAL-PURPOSE 20 WATT AMPLIFIER KIT MODEL A9-C \$3550

The model A9-C combines a preamplifier, main amplifier and power supply all on one chassis, providing a compact unit to fill the need for a good amplifier with a moderate cash investment. Features four separate switch-selected inputs. Separate bass and treble tone controls offer 15 db boost and cut. Covers 20 to 20,000 CPS within ±1 db. A fine unit with which to start your own hi-fi system. Shpg. Wt. 23 lbs.

ELECTRONIC CROSSOVER KIT MODEL XO-1 \$1895

This unique instrument separates high and low frequencies and feeds them through two amplifiers to separate speakers. It is located ahead of the main amplifiers, thus, virtually eliminating IM distortion and matching problems. Crossover frequencies for each channel are at 100, 200, 400, 700, 1200, 2,000 and 3,500 CPS. This unit eliminates the need for conventional crossover circuits and provides amazing versatility at low cost. A unique answer to frequency division problems. Shpg. Wt. 6 lbs.

"ADVANCE DESIGN" 25 WATT HI-FI

MODEL W5-M \$5975

Enjoy the distortion-free high fidelity sound reproduction from this outstanding hi-fi amplifier. The W5-M incorporates advanced design features for the super critical listener. Features include specially designed Peerless output transformer and KT66 tubes. The circuit is rated at 25 watts and will follow instantaneous power peaks of a full orchestra up to 42 watts. A "tweeter saver" suppresses high frequency oscillation and a unique balancing circuit facilitates adjustment of output tubes. Frequency response is ±1 db from 5 to 160,000 CPS at 1 watt and within ±2 db 20 to 20,000 CPS at full 25 watts output. Harmonic distortion is less than 1% at 25 watts and 1M distortion is 1% at 20 watts (60 and 3,000 CPS, 4:1). Hum and noise are 99 db below 25 watts for truly quiet performance. Shpg. Wt. 31 lbs.





20 WATT HI-FI AMPLIFIER KIT MODEL W4-AM \$3975

This top quality amplifier offers you full fidelity at minimum cost. Features extended frequency response, low distortion and low hum level. Harmonic distortion is less than 1.5% and IM distortion is below 2.7% at full 20 watt output. Frequency response extends from 10 CPS to 100,000 CPS within ±1 db at 1 watt. Output transformer tapped at 4, 8 and 16 ohms. Easy to build and a pleasure to use. Shpg. Wt. 28 lbs.









"LEGATO" HI-FI SPEAKER SYSTEM KIT MODEL HH-1 \$2995

Words cannot describe the true magnificence of the "Legato" speaker system . . . it's simply the nearest thing to perfection in reproduced sound yet developed. Perfect balance, precise phasing, and adequate driver design all combine to produce startling realism long sought after by the hi-fi perfectionist. Two 15" Altec Lansing low frequency drivers and a specially designed exponential horn with high frequency driver cover 25 to 20,000 CPS. A unique crossover network is built in. Impedance is 16 ohms, power rating 50 watts. Cabinet is constructed of ¾" veneer-surfaced plywood in either African mahogany or imported white birch suitable for the finish of your choice. All parts are precut and predrilled for easy assembly. Shpg. Wt. 195 lbs.

"RANGE EXTENDING" HI-FI SPEAKER SYSTEM KIT MODEL SS-1B \$995

Not a complete speaker system in itself, the SS-1B is designed to extend the range of the basic SS-2

(or SS-1) speaker system. Employs a 15" woofer

and a super tweeter to extend overall response from 35 to 16,000 CPS ± 5 db. Crossover circuit is built-in with balance control. Impedance is 16 ohms, power rating 35 watts. Constructed of 3/4" veneer-surfaced plywood suitable for light or dark finish. All parts precut and predrilled for easy assembly. Shpg. Wt. 80 lbs.

DIAMOND STYLUS HI-FI PICKUP CARTRIDGE

MODEL MF-1

\$2695

Replace your present pickup with the MF-1 and enjoy the fullest fidelity your library of LP's has to offer. Designed to Heath specifications to offer you one of the finest cartridges available today. Nominally flat response from 20 to 20,000 CPS. Shpg. Wt. 1 lb.

SPEEDWINDER KIT MODEL SW-1 \$2495

Rewind tape and film at the rate of 1200' in 40 seconds. Saves wear on tape and recorder. Handles up to 101/2" tape reels and 800' reels of 8 or 16 millimeter film. Incorporates automatic shutoff and braking device. Shpg. Wt. 12 lbs.



NEW! "DOWN-TO-EARTH" High-Fidelity Book

The "HOW AND WHY OF HIGH FIDELITY", by Milton Sleeper explains what high fidelity is, and how you can select and plan your own system. This liberally-illustrated 48-page book tells you the hi-fi story without fancy technical jargon or high-sounding terminology. 25c.

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STEREO EXPERIMENTS

Continued from page 42

Other reproducing arrangements than that of Fig. 2 are possible, such as that of Fig. 3. The close similarity of this with the microphone arrangement of Fig. 4 will be noted, and it was in fact this scheme that was first tried. When listening to this in an anechoic chamber, one is surprised to find virtual sound sources in directions far beyond the loudspeaker base. A disadvantage of the arrangement is that the S sound decreases rapidly with distance; an advantage is that phase relationship of the S signal is inherently preserved.

A short loudspeaker column with four reproducers in a row has also been used. The loudspeakers were connected in a bridge circuit so that all four were in phase for M signals while the two end groups were in antiphase for S signals. Here again the stereophonic effect did not extend very far from the loudspeakers, but a very good effect was obtained at a short distance. Walking into the active zone gave the effect of going into the middle of a concert hall; the apparent volume increased, and the arrangement might have proved useful in cases where one or two people wish to enjoy a concert without disturbing the neighbours.

The introduction of stereo to live sound broadcasting would of course bring many problems in its train. One is connected with the application of multiple microphone techniques. It has generally been considered that, in stereophonics, it is preferable to rely on a single pair of

microphones in order not to spoil the directional effect. This would be quite satisfactory when broadcasting a classical symphony, for instance, where the single-microphone technique has already become almost standard. In other fields, however, such as light or dance music, this would mean a serious limitation. In cases like this it has been found that good results can be obtained by using an M-S microphone as a general microphone, supplementing this with monaural accent microphones, dividing the output of these into M and S signals which are added in correct phase relation to the output of the general microphone. It is even possible to adjust the M and S components in such a way that the virtual sound sources at the receiver have a different spatial distribution from the real sound sources. This effect might for instance prove useful in dramatic productions.

Artificial reverberation has also become a useful feature of many types of programmes. It will be obvious from the effects described at the beginning of this paper that the S channel will be specially well adapted for this, because a strong feeling of roominess can be obtained while retaining clarity of reproduction. One method that seems promising is to add reverberation to both M and S channel, but from different microphones in the echo-room or different pick-ups on the reverberation plate, delaying the input to the S channel.

The author is Chief Engineer of the Statsradiofonicon of Denmark, and has done extensive research and experimentation on stereo reproduction. This article is reprinted from the European Broadcast Unions' E.B.U. Review, published in Brussels.

MUSIC, MAIL, MIKES

Continued from page 21

production on the air—is carefully planned and executed; every program is evaluated both as to its intrinsic merit, and as to how well it fits into the overall scheme of things. Not surprising, then, that it takes a staff of close to one hundred specialists - announcers, engineers, musicians, salesmen, programmers, writers, executives, secretaries and others — to put WQXR's programs on the air (and this count does not include the dozen or so at The New York Times who write and edit the hourly news reports). What a contrast with the early days, when the station's only studio was a corner of the transmitter space on the second floor of a garage building in Queens, and the two staff members timed records, designed programs, put the discs on the turntable, identified the music on the air, and otherwise made themselves generally useful!

Although special-event programs and live music broadcasts are always welcome additions, the stock in trade of any good music station remains its collection of recordings. At WQXR a large, temperature-controlled room contains dozens of wooden, sliding-door cabinets, housing the famous library of more than sixty thousand records and transcriptions, and well over five hundred tapes. And what a treasure trove of music can be found in that room, ranging from Adelina Patti's 1902 recording of

Home Sweet Home to the latest experimental discs of Musique Concrete. There are thousands of rare old 78's, many still good enough for regular use, others honorably retired from active service, but still available should they be needed.

When a recording or tape is received at the station, it is timed, tested for quality of performance and reproduction, and given a library number. A file card is made out in duplicate for each composition, listing the title, composer, performer, library number and timing, along with any incidental information that might prove helpful. One of the two copies is permanently filed, by composer, in our master Kardex, an imposing wall of files some fifteen feet in length. The other copy is kept in one of six separate filing units, depending on whether the piece is classical or popular, and within these designations whether it is orchestral, vocal or instrumental. The filing here is done by time so that we are able to see at a glance all the three minute popular vocals that are in the library, right up to the longest Mahler symphony.

The actual programming of recorded shows is done about two months in advance. A huge cardboard sheet is spread across an artist's drawing board, and on it are sketched in all the major programs for the month in question. This method gives us an overall picture of the month's programming. We can tell exactly what is scheduled when, and accordingly plan pro-

grams that are balanced and interesting throughout any given day as well as for the month as a whole.

A few days before a program goes on the air, the continuity department takes over, and prepares the script. In some cases the continuity is held down to the bare essentials of identifying music and musicians, but often the programs call for serious and detailed scripts which send the writers burrowing into the many standard and special musical reference books in the office. In all but a very few instances, the commercials are prepared either by the sponsor's advertising agency or by WQXR's own copywriters; in either event the script writers remain free to devote their full attention to musical matters. And full attention it must be, for our sharp-eared listeners are quick to pounce on a wrong opus number or any bit of historically inaccurate information which might creep insidiously into a script. Fortunately most such errors are caught by the continuity editor, although he absentmindedly approved a script recently which referred to Boris Christoff's performance of an aria as having been sung "by the great Bulgarian basso, Boris Karloff". Happily, an alert announcer spotted that one before it went on the air or we'd be hearing about it yet! Another error a few weeks ago was not noticed until we received a rather touching letter from a lady who pointed out that a Ukrainian folk dance had been

Continued on page 49

MUSIC. MAIL. MIKES

Continued from page 48

erroneously identified as Russian. "The Russians have taken everything else from us", she wrote. "Please don't let them take our music too."

Finally, shortly before broadcast time, the announcers take from the record library whatever discs or tapes are called for by the script, and give them to the control room engineer. Soon another good music broadcast — the culmination of concerted efforts by scores of people — will have been completed.

GRAFONOLA

Continued from page 18

thing which was a highly creative act and a great pleasure — the art of playing and listening to the phonograph? Certainly in former days there was a wide gap between recorded and live sound. This gap we filled in, ourselves; we actually heard the missing cycles — through the imagination. It was a participation, one to which we gave all our attention and received for it a very special dividend of pleasure. Questions of value can be stated a number of ways. Why did we give more of ourselves to the old mechanisms? Because we had to. They cost more — in every sense.

So it is that I sometimes feel a small sense of guilt, of rebuke, of loss, on those occasion when my hi-fi set plays superbly on, half listened to and taken for granted.

I miss the old sense of wonder we had as children after someone said, "Let's play the victrola!"

STUMBLING BLOCKS

Continued from page 19

recorded in a very dead studio and with a frequency range that probably cut off below 8,000 cycles. Even by the standards of those days, the quality seemed exceptionally flat. Yet somehow it seemed to fit the style of the music, and there have never been any more thrilling jazz orchestral works offered to the record-buying public.

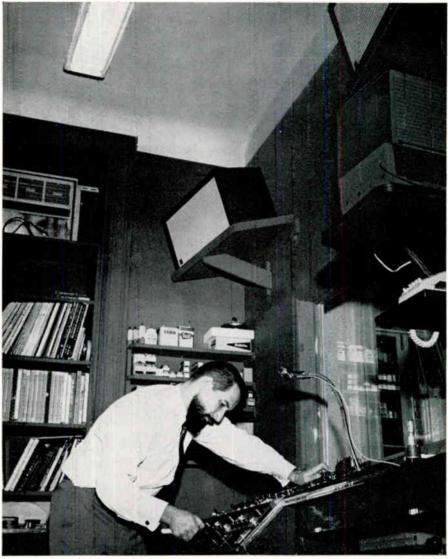
Some of these sides were re-issued, many years later, on LP's. I remember in particular that Victor put out a set a couple of years ago. Echo had been added and the sound was souped up to create an effect that was neither present nor intended in the original. The result was merely an absurd and unnatural reverberation that served only to diffuse and muddy the music. For that matter, if Ellington were to produce new versions of the same works again for a glorious, technicalor, supersonic "Duke Ellington in Stereo" album, there is nothing he or a whole corps of engineers could do to provide an adequate substitute for the freshness, the spirit of firsttime creation, that went into the original performances.

Once the initial hubbub over stereo has subsided, we can all expect to reach a more realistic level where the musical values

Continued on page 50

LARRY ELGART at the CONTROL CON-SOLE of his RECORDING STUDIO

(Note the AR-1 monitor loudspeakers, in stereo)



LARRY ELGART, RCA VICTOR RECORDING ARTIST

One of the most exacting jobs for a speaker system is that of studio monitor in recording and broadcast work. Technical decisions must be made on the basis of the sound coming from these speakers, which will affect, for good or for ill, the quality of a record master or FM broadcast.

AR acoustic suspension speaker systems, although designed primarily for the home, are widely employed in professional laboratories and studios. Below is a partial list of companies using AR speakers (all models) as studio monitors:

Dawn Records

Elektra Records

Mostercraft Record Plating

Canterbury Records

Raleigh Records

Cancert Network stations WBCN, WNCN,

WHEN, WICH

Concertapes-Concertdisc

WGBH .

WPFM

WXHR

Counterpoint Recordings
(formerly Esoteric Records)

Magnetic Recorder and Reproducer

Dubbings

AR speaker systems, complete with enclosures—the AR-1, AR-2, and AR-3—are priced from \$89 to \$225. Literature is available for the asking.

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will regain firm and complete control; where album notes will concern themselves exclusively with the singers and players and writers of the music; where a rhythm section that feels uncomfortable feeding itself into two channels will be seated according to the dictates of common sense and its own collective desires.

Until that day arrives, while not wishing to go along with the bandleader who asked me to "Help Stamp out Stereo," I can certainly understand and sympathize with his mixed emotions.

DISK EQUIPMENT

Continued from page 41

from this situation, it is frequent practice to make the ceramic pickup behave as though it were a magnetic type by connecting a suitable network of resistors and capacitors between it and the control amplifier. Most manufacturers of these pickups sell adapters for their pickups which contains such a network. Or they will supply you with a schematic showing you how to build a network into your own preamp.

Most preamps depart slightly, because of component tolerances, from the playback equalization specified by RIAA (bass boost and treble cut). Similarly, in recording there is a certain permissible latitude in following the RIAA recording curve. On top of this is the fact that recording engineers frequently add or cut copious amounts of bass and/or treble in order to compensate for various factors, sometimes including the deficiencies of their own hearing or their monitor speaker systems. Altogether, it is quite possible that frequency response will be a good way from flat when playing an RIAA disc, even though the control amplifier switch is set to the RIAA position. The moral is that you should not hesitate to follow the dictates of your own ears and use the tone controls accordingly. Many persons seem to find psychological comfort in a flat setting of the bass and treble controls. But this does not necessarily mean balanced response, for the reasons just pointed

Hum and Its Elimination

Hum can be a formidable obstacle to listening pleasure, particularly when the pickup has relatively low signal output, so that the ratio of audio signal to hum also tends to be low. The hum problem is usually less in the case of ceramic pickups because of their high output. Among magnetics, the problem varies a great deal, in large part because their maximum output may range from as little as 2 or 3 millivolts to as much as 100 millivolts. Moreover, two types of pickups with equal signal output may have different sensitivity to external hum fields because of their design.

Continued on page 51



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DISK EQUIPMENT

Continued from page 50

The hum problem tends to be accentuated in stereo systems because there are two ground connections from the stereo cartridge to the control amplifier, forming what is known as a ground loop, which picks up hum somewhat as an antenna picks up radio waves. In some cases, use of a 4-terminal cartridge, permitting separate ground connections to the control amplifier for each section of the pickup, will provide better results. In other instances, use of a 3-terminal cartridge, with a single ground lead to the control amplifier for both sections, will achieve equally good results; if the cartridge has four terminals, it can be treated as a three-terminal type by connecting the ground terminals together at the pickup.

Where hum is persistent, it is worth trying various methods of connection, even though they may not be in accord with general practice. For example, an additional ground lead from the turntable to the control amplifier ordinarily produces a drastic increase in hum. Yet the writer found in one instance that this very thing appreciably reduced hum when using one of the popular magnetic pickups. However, the expedient worked only with this cartridge, and not with other magnetics. Another suggestion for possibly reducing hum, where the ground terminals are connected together at the cartridge (the threeterminal situation), is to connect the shielding (ground lead) only one phono

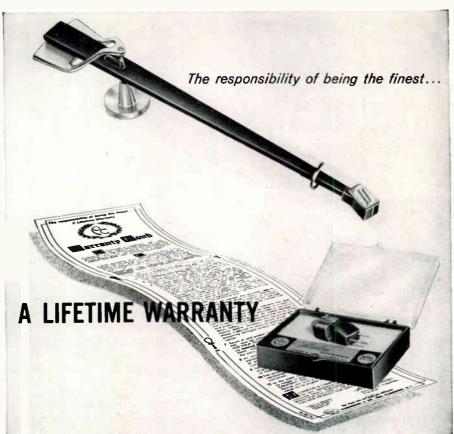
plug!

The turntable is usually, but not necessarily, the source of hum. Type of motor, shielding, and location are factors. Mounting of the arm is important, for the pickup should be a maximum distance from the motor when in playing position. Sometimes hum can be materially reduced by putting a foam-rubber pad of substantial thickness on the turntable to increase the distance between cartridge and motor; this may require raising the height of the arm. If a step-up transformer is used between the cartridge and the control amplifier, seek that location and orientation of the transformer which minimizes hum.

Especially where magnetic pickups are employed, choice of the preamp can make a vital difference. By turning the volume control on several such units to a position that produces the same sound level with a given magnetic pickup, and by turning the base control to maximum, you can readily draw comparisons between control amplifiers with respect to hum.

Many preamps and amplifiers contain hum balance controls which can be satisfactorily adjusted by ear, with the function switch in magnetic phono position and the volume and bass controls well ad vanced. It may happen that the setting of the control which minimizes magnetic

Continued on page 52



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May 1959

Sound Talk



by John K. Hilliard
Director of Advanced Engineering

WHAT SPEAKERS FOR STEREO?

Sound engineers agree that the finest stereo reproduction can be achieved only by two identical speaker systems of exceptional quality. Short of this ideal, however, the premise is muddled by an ever-increasing number of unfounded claims... most of them based on sales philosophy rather than scientific fact.

Actually, the proper selection of stereo speakers is quite clear. Due to certain psycho-acoustic effects, one exceptional speaker system and one of moderate abilities will provide better stereo than matched speakers of intermediate quality. This is only true, however, if the lesser speaker meets certain requisites.

The two speakers must be similar in frequency response and character. In the high end of the spectrum they must have the same limits. At the low end, they must be similar down to 100 cycles. Below that point, the performance of the lesser speaker is relatively unimportant.

If the lesser speaker goes down to only 300 cycles or has major irregularities in its response, a phenomenon called the "orchestral shift" will occur. This shift results from the fact that the sound from any given instrument is reproduced from both speaker systems. The comparative loudness determines the auditory location. If an instrument is "placed" in the lesser speaker and then plays into a frequency range where that speaker is inefficient, it will then be louder in the better system and will appear to shift to that better system.

Speakers that are inefficient below the 300 cycle point will not provide true stereo. This is obvious because the 300 cycle point is above middle C on the piano, 70 cycles above the primary pitch of the female voice and nearly 200 cycles above primary male pitch. For full stereo it is therefore imperative that the lesser speaker efficiently reach at least 100 cycles.

All ALTEC speaker systems are similar in their exceptional smoothness of frequency response, have a high frequency limit of 22,000 cycles, and are efficient below 100 cycles in the lower range. This regularity in response, range, efficiency and quality is the reason why ALTEC speaker systems are noticeably superior for stereo reproduction.

For further information concerning the best elements for stereo, write ALTEC LANSING CORPORATION, Dept. 5M 1515 S. Manchester Ave., Anaheim, Calif., 161 Sixth Ave., New York 13, N. Y. 12-35

DISK EQUIPMENT

Continued from page 51

phono hum does not accord with the minimum hum setting for other inputs (radio, tape, etc.). However, these other sources ordinarily provide much stronger signals than does the magnetic pickup, so it is wise to favor the phono source in adjusting the hum control.

Don't neglect the oft-stated advice of reversing the position of the power plug in the wall. Moreover, it should be remembered that the best setting of the balance control may vary with the position of the plug.

The first tube in the control amplifier plays an important role with respect to hum. Variations among tubes are such that one tube may produce 10 times as much hum as another of the same type. If you buy several of the tubes that are used in the first stage of your preamp—usually a 12AX7 (ECC83 being the British equivalent) or a British EF86—select the one that produces the least hum and noise. At least until recently, the British audio tubes have been distinctly superior to their American equivalents.

HANDEL FESTIVAL

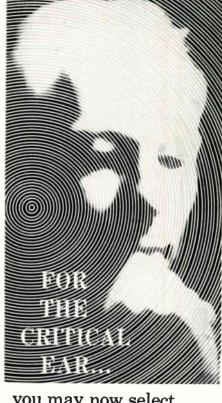
Continued from page 17

disappeared in the flesh, forming dimples. He walked bowlegged, with a heavy rolling gait, very erect, with his head thrown back under its huge white wig, whose curls rippled heavily over his shoulders. He had a long horse-like face, which with age became bovine and swamped in fat, with pendant cheeks and triple chin, the nose large, thick, and straight, the ears red and long. His gaze was direct; there was a quizzical gleam in his bold eye, a mocking twist at the corner of his large, finely cut mouth. His air was impressive and jovial. When he smiled, his heavy, stern countenance was radiant with a flash of intelligence and wit, like the sun emerging from a cloud.'

Towards the end of his essay on Handel, Rolland puts his finger on the central point of the composer's greatness. "This genial improviser," he says, "compelled during the whole of his life... to address from the stage a mixed public, was like the orators of old who had the cult of style and instinct for immediate and vital effect. Our epoch has lost the feeling of this type of art and men — pure artists who speak to the people and for the people and not for themselves or for their confrères."

Who is better able to perceive and express the greatness of Handel than the master musicians who followed him? Haydn, listening to a festival of Handel's work in 1791, said, "He is the master of us all," and Beethoven: "Handel is the greatest composer who has ever lived. I should like to kneel at his tomb." And at the end of his own life Beethoven said,

Continued on page 53



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Hi-Ti Music at Home

HANDEL FESTIVAL

Continued from page 52

pointing to the collected edition of Handel's works lying in a corner of the room 'See, there is the truth'

It is well, then, that such a man should be the first to be honored by a citysponsored festival in New York. And fitting that the Festival should be truly Handelian in scope. Conceived by the brilliant young conductor Newell Jenkins, founder of the Clarion Concerts, the festival has been launched with a proclamation

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by Mayor Wagner, and is under the auspices of the Department of Commerce and Public Events. No less than thirty of the city's outstanding musical organizations are co-operating to present an adequate account of Handel's genius. The organizations, to name only a handful, include the New York Philharmonic, the Dessoff Choirs, The Schola Cantorum, The Cantata Singers, the Little Orchestra Society, and the Symphony of the Air.

Let us hope that the New York City Handel Festival is only the first of such municipally sponsored multi-participacional annual events. For there are other great musicians to be honored, and in honoring them we shall join the other music capitols of the world in a friendly rivalry which can only enrich all of us.

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Continued from page 54

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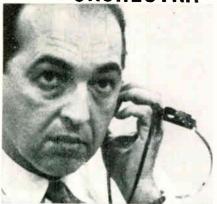
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To obtain literature or catalogs on the products described here, circle the corresponding letters on the Literature Request Card at the right, below.

Allied Knight Speaker System

Model KN-2000 speaker enclosure, 14 ins. high, 26½ wide, and 12¾ deep, contains a 12-in. high-compliance woofer, 8-in. mid-range speaker, and a tweeter, with an LC network at 800 and 3,500 cycles and an L-pad high-frequency control, adjustable from the rear. Impedance of the system is 16 ohms. Finish is walnut, mahogany, or limed oak vereer. Performance of a pair for stereo is excellent. Gircle letter A.

Atlas Sound Equipment

A new catalog from Atlas Sound Corporation shows microphone desk, floor, and boom stands, matching transformers, and various types of speakers for outdoor and indoor sound systems. Circle letter B.

Bigg Loudspeaker

Exceptionally high efficiency is claimed for a loudspeaker just introduced by Bigg of California. The enclosure, 25½ ins. by 12 by 12, can be positioned vertically or horizontally. It can be used with an amplifier of 5 watts rating, but it can take up to 50 watts. Circle letter C

Cabinart Enclosures

A variety of equipment cabinets and speaker enclosures are illustrated in a circular just released by Cabinart. Prices are shown for natural blond or brown mahogany finish, or unfinished birch. Circle letter D.

Cletron Speaker System

A matched 12-in. woofer, 8-in. mid-range speaker, and dual 3-in. tweeters are supplied with an adjustable LC network for mounting in your own enclosure, or in an enclosure of recommended design for which drawings are furnished for this model C-33812 system. Circle letter E.

Connoisseur Stereo Components

Ercona Corporation is distributing the British-made 3-speed Connoisseur turntable, the Connoisseur stereo arm and ceramic pickup, and the Dynabalanced stereo arm and Mark II magnetic pickup. All these components have very interesting design features. Circle letter F.

Dramatic Sound-Effects Disc

A total of 48 different sound effects, ranging from bells to voodoo drums, are recorded on a 12-in. LP released by the Dramatic Publishing Company. The bands are separated and indexed in a Sound Selector Guide, so that any one can be played

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directly, taped, or mixed with live recording. Circle letter G.

Duotone Turnover Stereo Pickup

The British-made Acos Hi-g pickup is now available in the U. S. A., distributed by Duotone. It is a ceramic type, with built-in RIAA equalization, and an output of .8 to 1 volt, so that it can be connected directly to a power amplifier. One model has .7 and 3-mil styli; another has a .7-mil diamond and a 3-mil sapphire. Circle letter H.

Eico 14-Watt Amplifier

A very smooth design, this kit has a Williamson-type circuit with two EL84's in push-pull for the output. Input of 1.25 volts produces 14 watts out. Power supply for a preamp can be taken from an octal socket. Dimensions are 12 ins. wide, 4 high, 3¾ deep. Circle letter K.

Fisher Remote Stereo Balance

For balancing stereo speakers from the listening position — and that is where they can be balanced accurately — Fisher Radio offers the model RK-1, comprising left and right controls contained in a small plastic case, with 30 ft. of cable and plugs for connection to the Fisher 400-C master control. Since the two adjustments can be turned independently or together, they also serve to control the total level of stereo reproduction. Circle letter L.

Heath FM-AM Stereo Tuner

Identified as Professional model PT-1, this Heathkit tuner has independent FM and AM circuits, with a selector switch that cuts in either one, or both for FM-AM stereo reception. The 3-tube FM front end is wired and aligned, and requires only a touch-up that can be done from the indications of the tuning meter. The entire AM circuit is carried on a printed-circuit board. Circle letter M.

Klein Cutting Pliers

Unlike ordinary pliers with cutting blades close to the joint, three new Klein long-nose designs have shear-type cutters at or near the tip. Thus, wires can be snipped off in places that cannot be reached by other kinds of cutters. Also, with the new designs, the pliers hold the part of the wire cut off, instead of letting it drop. Circle letter N.

Mohawk Pocket Recorder

Weighing only 3 lbs., the Mohawk 3¾-ips. tape recorder is no longer than your hand, yet it takes a 45-minute tape cartridge. It operates from a T-12 battery, since it has all-transistor circuitry. An important feature for recording is a miniature VU meter. Accessories include a wrist microphone, and another for recording telephone conversations. Circle letter 0.

Norelco Speakers

Seven speakers, ranging from 12 ins. down to 5 ins., are offered by North American Philips. A special feature is the use of Ticonal 7 for the permanent magnets, an alloy which is described as being 30% more powerful, weight for weight, than other materials used for speaker magnets. Circle letter P

Rexton Electronics Speakers

A full-range speaker system in a teak, mahogany, or cherry enclosure combines a woofer with the British Kelly ribbon tweeter. This is a high-efficiency system which can be operated from an amplifier of 10 watts output, although higher ratings can be used. Cabinet is 34 ins. wide, 29 high, 16 deep. Impedance is 16 ohms. Circle letter Q.

Robins Bulk Tape Eraser

A powerful magnet energized from AC is mounted in a metal case with two pins on the top. The pins are so located that when a 7 or 10-in. reel is put on the proper pin and rotated, the tape is in the AC magnetic field. This method of erasing is more effective than the erase head of a tape machine. Circle letter R.

Scott FM-AM Tuner

Model 320 combines wide-band FM recept on with high selectivity and sensitivity, and AM with broad or narrow AM tuning and a low-distortion detector circuit. Tuning eye works on both FM and AM, and functions as a signal-strength meter. A tuned RF stage is provided on FM and AM. Front panel controls include a level control and an FM mono-stereo multiplex switch. Circle letter S.

Stereo Specialists Tapes

Seven Stereo Age tapes, each representing exceptionally fine recording techniques, are offered by Stereo Specialists, a company devoted to meeting the requirements of the critical tape enthusiasts. Circle letter T.

Switchcraft Volume Controls

Four different volume controls for remote speakers have been introduced by Switch-craft. Each is carried on a standard 23/4 by 41/2-in. wall plate for mounting on a speaker enclosure or an outlet box. The ivory knob and the brass plate make an attractive appearance. Circle letter U.

Tandberg 4-Track 71/2-IPS. Tapes

Within the next four months, Tandberg plans to release thirty 4-track 7½-ips. tapes under the label "Tandberg Presents SMS". This will maintain the 7½-ips. quality, with twice as many minutes of music than on 2-track tapes. Tandberg, as well as other companies, has machines that play both 2-track and 4-track tapes on reels at 7½ ips. Circle letter V.

Stereo Tape Enthusiasts

HERE IS NEWS THAT YOU WILL WELCOME

If you, like most critical listeners, are satisfied with nothing less than the superb quality of music that stereo tapes can deliver, you want tapes that are made under the direction of engineers who are qualified stereo specialists—not those who are limited to the old mono techniques.

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the net price of \$39.84 for the seven tapes.

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Songs of Charles Ives—Devy Barnett soprano, accompanied by Mel Strauss—One of the most important of the American modernists, Charles Ives is associated with the New England scene. Deeply expressive of that section, these are art songs in the highest sense. Devy Barnett clearly deserves the acclaim she has won on concert and TV performances. Mel Strauss handles the difficult piano

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Jazz from New York—Bill Bailey and J. C. Jump—jazz aggregation composed of J. C. Higinbotham trombone; Coleman Hawkins tenor sax; Buster Bailey clarinet; Joe Thomas trumpet; Al Williams piano; Eddie Bourne drums; and Benny Moten bass, recorded in stereo with a realism that you have never heard before from jazz on tape. You're simply there when you listen to it! 16 minutes of stereo music at 7½ ips. \$7.50

Kabalevsky: Sonata No. 3, Op. 46—Isabelle Byman pianist—Premiered at Carnegie Hall in 1948, the Sonata No. 3 is a brilliant tour de force for Miss Byman, an accomplished pianist who has performed in major orchestras under Stokowski, Rodzinski, Smallens, and other great conductors. The music, in turn lyrical, fiery, melancholy, and archly satirical, is an outstanding example of true stereo recording. 15 minutes of stereo music at 7½ ips. \$7.50

Bartók: Four Dirges for Piano— Isabelle Byman pianist—This work (Adagio, Andante, Poco lento, and Assai Andante) is performed with the remarkable musical intelligence that Miss Byman

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THE E-V ARISTOCRAT



The new Marquis is a rear-loaded port, along-the-wall enclosure that perfectly matches the Aristocrat's famous performance and craftsmanship. Flat against the wall, it reproduces dramatic realism without the necessity of a corner. What's more, E-V's exclusive rear-loaded port design is vital too... because it gives you one extra full octave of bass range without muddiness or boom. Comparison will prove that the Marquis gives you more bass for the space . . . more bass for the price than any other along-the-wall speaker enclosure. More important, you get this extra bass without attenuation or peaks-full-range flat response. The E-V Marquis actually enhances the bass-handling capacity of any 12" speaker by as much as 30%. With it, E-V 3-way 12" speakers will deliver full-bodied response down to the lower notes of a giant pipe organ...deep down bass you can feel. The Marquis accommodates any 12" speaker . . . has built-in provisions for adding E-V wide-dispersion treble and VHF drivers (available in E-V Building Block Kits) . . . whenever you desire. Whether you're starting from scratch or converting to stereo; the E-V Marquis, in your choice of luxurious tropical mahogany, limed oak or contemporary walnut, will fit your decor and your budget. Prices start as low as \$98.00 complete with the E-V SP12B full-range speaker, or \$63.00 for enclosure alone. ¶Hear the Marquis demonstrated at your franchised E-V high-fidelity showroom. Compare sound, compare price! You'll choose the E-V Marquis...the perfect add-on speaker for stereo. Morquis Enclosure Size: 29%" high, 19" wide and 141/1" deep.



MARQUIS BY Electro-Voice

And write Dept. 59-M for your free illustrated booklet, "Guide to High-Fidelity Speakers for Stereo".

Electro-Voice, Inc., Buchanan, Michigan, Superb Products Through Research

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