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JANUARY THE MAGAZINE FOR MUSIC LISTENERS

Masters, Matrices, Mass Production

a guided tour of the stereo disc assembly line

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The Fisher XP-7

 Woofer: 12" free-piston; approx. 20 cps free-air resonance; 1½" voice coil; 5½-1b. magnet structure.
Midrange: Two 5" cones; each with ¼" voice coil and 1-1b. magnet structure.
Tweeter: 1½" soft-cotton dome type; 2-1b. magnet structure; 15.000 gauss flux density.
Crossover: Full 3-way LC-type network with air-core coils; crossover points at 300 and 2500 cps.
Impedance: 8 ohms
Frequency Response: 30 cps to beyond range of audibility.
Power Requirement: 10 watts minimum; 60 watts maximum (program material).
Cabinet: 24" by 14" by 12" deep; Scandinavian walnut.
Weight: 45 lbs.
Price: \$139.50

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The Fisher XP-9

Wooter:	12" free-piston; approx. 18 cps free-air resonance; 2" voice coil; 6-lb. magnet structure.
Midrange:	Three 5" cones; each with 34" voice coil and 1-lb magnet structure.
Tweeter:	1½" soft-cotton dome type; 2½-lb. magnet structure; 17,000 gauss flux density.
Crossover:	Full 3-way LC-type network with air- core coils; crossover points at 300 and 2500 cps.
Impedance:	
uency Response:	28 cps to beyond range of audibility.
er Requirement:	10 watts minimum; 60 watts maximum (program material).
Cabinet:	24" by 14" by 12" deep; Scandinavian walnut.
Weight:	55 lbs.
Price:	\$199.50

Freque Pow Of <u>course</u> you want the Fisher XP-10. (Who doesn't?) But if you don't have the space for it, don't give up yet!

Just turn this page.

Introducing three n Fisher bookshelf sp design principles of

No loudspeaker design in recent years has caused as much excitement among high fidelity connoisseurs as the Fisher XP-10. (Audio magazine called it "truly a step forward in smoothness, transient response and musical quality.") The superb performance of the 5-cubic-foot XP-10 is the result of several highly sophisticated engineering features, two of which are now incorporated in the new bookshelf-size Fisher systems. One is the exclusive Fisher soft-cotton dome tweeter, whose exceptional dispersion characteristics and uniquely smooth, resonance-free response result in the most natural-sounding treble range ever achieved. The other important feature is the assignment of more than three octaves of the audible spectrum to the midrange channel, with a considerably lower bass-to-midrange crossover than is conventional. This flattens the upper bass and lower midrange response to an unprecedented degree, completely eliminating the slightest suggestion of boxed-in 'bookshelf' sound. Thus it becomes possible to own a moderately priced bookshelf speaker whose sound is a close approximation to that of the XP-10 -which is just about the best sound there is.



The Fisher XP-

Woofer:	10" free-piston; appr
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	coil: 51/2-lb. magnet :
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FRIDENTS WRITE TO TRI-TEL ASSOCIATES, LTD., WILLOWDALE, ONT



The Fisher XP-10

Woofer: 15" free-piston; approx. 16 cps free-air resonance; 2" voice coil with exclusive eddy-current damping; 6-lb. magnet structure. Midrange: 8" cone; 1½" voice coil; 5½-lb. magnet structure; Tweeter; 2" cotton, soft-dome type; 5½-lb. magnet structure; 14,000 gauss flux density.
Crossover: Full 3-way LC-type network with air-core coils; crossover points at 200 and 2500 cps.
Impedance: 8 ohms.
Frequency: Response: From below 28 cps to beyond range of audibility.
Power Requirement: 10 watts minimum: 60 watts maximum (program material), Cabine: 30½" high, 24½s" wide, 14¾" deep; Scandinavian walnut. Weight: 80 lbs. Price: \$249.50

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JANUARY 1965

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Well! We should hope not . . . But, then again, if you are still buying old fashioned conventional length recording tapes, you are either wasting a lot of music or a lot of money. Let's face it; Schubert, Brahms, Beethoven and Company didn't write music to fit a reel of recording tape.

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"Professionals in the recording and broadcasting industries know that Altec has been making solid-state amplifiers for some time now-for professional use only. The Thur Sixty reflects the experience Altec has achieved in making these amplifiers." AUDIO Magazine, April, 1964

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

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Altec's wide experience in designing solidstate circuitry for audio frequencies has given us a lead over other companies. This experi-



Four extra-heavy heat sinks in Altec Three Sixty make possible continuous operation with virtually no rise in temperature. Internal-external heat is kept well below industry standards to guarantee lifetime troublefree, service-free operation. Two power output transistors (four per channel) on each heat sink.



Top view of Three Sixty. All-transistor circuitry eliminates hum and hiss common with vacuum tube amplifiers. Features 3 automatic resetting circuit breakers-one in main power circuit, one in each speaker output circuit.



JANUARY 1965

ence made the Three Sixty possible. Over five years ago, we designed the first all-transistor amplifier (the 351A) for high quality applications. We also developed the first successful all-transistor repeater amplifiers for use by telephone companies. We also were the first to combine transistors with vacuum tubes in the famous 708A "Astro".

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

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

You'll like the looks as well as the sound of the Three Sixty. And, its size is smallest of



Modular preamplifiers are completely shielded from output and power circuits to assure long life, minimum maintenance. Another Altec exclusive!



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

Visit your nearest Altec Distributor (Yellow Pages) and hear the finest equipment in the world of sound: Altec PLAYBACK Equipment. Be sure to ask for your courtesy copy of Altec PLAYBACK and Speech Input Equipment for Recording and Broadcast Studios. Although prepared specifically for the recording/broadcasting industry, the conclusions to be drawn about your own home music center will be obvious. Or, for free copy, write DEPT. HF1







Plug-in facilities provide independent voltage output to drive separate remote power or booster amplifiers (Altec all-transistor 351B) for patio, poolside, recreation room, other remote areas. Impedance selector switch eliminates confusion about multiple speaker terminals.



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



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



to acquire, at once, a sizable collection of classical records HOROWITZ Chopin - Liszt Rachmaninoff -and even a record rack in which to hold them Schumann OLUMBIA 1067 Gaite Parisienne PORTS OF CALL NONE BUT ANDRE WATTS CHARLES MUNCH PHILADELPHIA ORCH LISZT: Plans Co erto No.1 BERLIOZ . FAURE RAVEL COLUMBIA ISAAC STERN La Valse AEN HIGHLIGHTS Plays As a new member you will receive BERNSTEIN COL Andre Kostolanotz FAVORITES HILADELPHIA ORCH NEW YORK PHILHARMONIC 1523. 1300 1330. 1074. 1296. 194 SHOSTAKOVITCH SYMPHONY No. 5 TCHAIKOVSKY WAGNER: BERNSTEIN THE THE BLUE DANUBE A lohann Strauss Festival Symphony No. 7 COPLAND World Premiere Recording El Salon Mexico \$.---Appalachian Spring ... **REGULAR or STEREO** LEONARD BERNSTEIN N.Y. Philharmon ORMAND BRUNO WALTER CLASSICAL RECORDINGS HILADELPHIA ORCH. COLUMBIA 1283. 1279. 1573. 1094 1288 ARTOK: CONCERTO OR ORCHESTRA EOMARD BERNSTEIN A FESTIVAL OF MARCHES GRIEG: SCHUMANN: Plano Concertos VIVALDI This Is My Country Piano March of the Toreadors American Salute Stars and Stripes Forever Meadowlands COLUMBIA 9 more FOU'R CONCE. LEONARD BERNSTEIN renderlag (br MORMON TABERNACLE CHOIR Star-Spangled Banner America, The Beautiful 194 101.4 Finlandia • Marseillaisi PHILHARMONIC PHILADELPHIA DRCH LEON FLEISHER COLUMN 10 IN ALL COLUMBIA ORMANDY 1 FOR ONLY 1289. 1083 1529 1271 1366 SAINT-SAENS an Symphony (No adelphia Dich + Orma UMBIA PROKOFIEV: if you join the Club now - and agree to purchase a SONGS OF THE THE BLORIOUS NORTH & SOUTH 1861 1865 record a month during the coming nine months (you Alexande will have over 200 records a month to choose from) OF WAGNER Nevsky Plus FREE Record Rack Philadelphia Orchestra COLUMBIA ORMANDY E. POWER BIGGS SCHIPPERS N Y PI ernacie Ch As our 10th Anniversary Gift to you, we will include this record rack FREE. You'll find it extremely useful, for this compact, brass-finished rack 1096 1278. 1574. 1084 1076. RACHMANINOFF Plane Concertos Hos. 1 6 BERNSTEIN TCHAIKOVSKY obos · Guar STRAVINSKY: SWAN opland - Chavez - othe CONDUCTS OEDIPUS REX adjusts to your specific needs . . . holds from one to sixty records securely. Folds flat when not in use. LAKE ESTA **Ballet Suite** ١. COLI MELA A BERNSTEI ENTRE MC COLUMBI V York Philharm 1525 1328 1285. 1102 1322 CHOPIN: Les Sylphides DELIBES: PROKOFIEV THE GOLDEN AGE OF HARPSICHORD MUSIC Rimsky-Korsakov WALTER / OVORÁK MUSIC OF JUBILEE SCHEHERAZADE Bach Favorites for Organ and Orchestra BIGGS Classical Symphon "NEW WORLO" Symphony (No.5) ANNIVERSARY OFFER! The Love for Three Oranges Suite Philadelphia Suites from Sylvia, Coppelia (Orch. 13 Lieutenant Kije Suite Eugene ORMANDY Philadelphia This Deluxe 4-Record Set -ORMANDY Ormandy --PHILADELPHIA ORCH. Orchestra OLUMBLA **Counts as 3 Selections** RAFAEL PUYANA 1370. 1089 1475 1081. 1321. 1605. MUSSORGSKY'S CLAIR de LUNE BARTÓK: Saint-Saens: STRAVINSKY BERNSTEIN BERLIOZ CARNIVAL of ANIMALS A Debussy CONDUCTS STRAVINSKY BLUEBEARD'S CASTL conducts Plano Recital by PHILIPPE ENTREMONT **Boris** Symphonie TCHAIKOVSKY ROSALIND ELIAS Fantastique (1812 Overture JEROME HINES Marche Slave Godunov ORMANDY Philadelphia Orch W YORK PHILHAR PETROUSHKA COLUMB -Starring 1265. 1479 1100 1603 1093. 1405 **GEORGE** The Cuckoo and the Nightingale SERKIN THE LORD'S PRAYER BACH: THE A CHOPIN RECITAL WELL-TEMPERED CLAVIEI MENDELSSOHN LONDON 77.174 STRAVINSKY ncertos Nos 1 & Four Handel Organ Concertos AVE MARIA O SUITE HALLELUJAH, AMEN COME. SWEET DEATH Preludes and FIREBIRD SUIT 1656-1657-1658. The magnificent perform-Fugues 9-16 E. POWER BIGGS ance that took Moscow by storm. This Bolshoi Theatre production is "one of the finest ever heard." -Life OMEO AND JULIET IN ADRIAN BOULT GLENN INCOMPLAT and others LEONARD BERNSTE LONDON ORMON TABERNACLE CHOIR Amandy - Philadelphia Orch GOULD lexander Brailowsk

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HIGH FIDELITY MAGAZINE



It's Columbia Record Club's 10th Anniversary and we're celebrating with our most generous offer ever . . . an extraordinary offer that enables you to add *nine* truly superb classical recordings to your collection at once!

Yes, if you join now, you may have any nine of these recordings for only \$4.95... and if you select any of the four deluxe Anniversary Offer sets, you will actually receive more than nine records! In short, you will therefore receive nine (or more) records for the price of one! And as our 10th Anniversary Gift to you, we'll even include an adjustable record rack *free*!

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FM-Matters of Opinion

Sir:

WRUN-FM is one of those stations that has stayed on the air since 1947. We were a part of the New York State division of the QXR Network until its demise and are now trying desperately to replace its excellent classical music programming with programs of our own . . but we agree wholeheartedly with Leonard Marcus' conclusion ["FM on the Threshold," November 1964] that the apathy of the classical music listener is preventing most stations, including ours, from adding a great deal of classical music to our schedule or improving the quality of what is now broadcast. As he points out, sponsor support is far more difficult when you are not in the top twenty-five markets, as is our case.

Because we consider Mr. Marcus' such a valuable article, we have scheduled announcements on our station suggesting that our listeners read it.

Richard E. Thomas

FM Program Director, WRUN Utica, N.Y.

SIR:

Articles about FM radio such as Leonard Marcus' often strike us for their omissions of fact and for the implication that a station which duplicates AM/FM occupies some lower rung on the culture/ respectability scale.

WGMS AM/FM—the RKO General Broadcasting station in Washington, D. C.—programs a schedule of virtually a hundred per cent serious music, occasional lectures and readings from the Library of Congress Literary Series (which are not broadcast elsewhere), and other special spoken word and musical features. These programs have been enthusiastically accepted by an audience that surely must be a reasonably sophisticated one.

Specifically, Mr. Marcus says, "... live stereo broadcasts are unknown in nearly all communities." Specifically, we would like to say that for about fifteen consecutive years WGMS has carried the annual twenty-six-week Library of Congress chamber music series live from the Coolidge Auditorium. (This distinguished musical event now presents the Juilliard String Quartet; formerly, the Budapest String Quartet was the quartet-in-residence.) For the last two years we have broadcast the programs on AM and FM monophonically and on

Continued on page 10



The new Miracord 40 would have been great at \$99.50.

At \$79.50, it's sensational!

Imagine a 4-speed auto-manual turntable with dynamically balanced turntable platter, 4-pole induction motor, dynamically balanced tone arm, and automatic pushbutton con-trols at under \$80. Until now, no turntable below the \$100 price class even claimed these features.

The new Miracord 40 plays single records manually or automatically, and stacks of up to 10 records in automatic sequence. As in the case of all Miracords, the platter is a one-piece, machined casting, 12 inches in diameter, weighs about 6 pounds, and is individually dynamically balanced. The 40 also has the famous FEATHERTOUCH automatic push buttons.

The tone arm is new - dynamically balanced and equipped with a gramcalibrated dial for adjusting stylus force directly. It will track any cartridge at recommended stylus force settings to less than one gram. The arm also provides an ingenious

method for interchanging cartridges.

A simple retaining mount, which accepts all standard cartridges, snaps into the head of the arm making instant, positive electrical contact. It also snaps out for easy removal. Extra accessory retaining mounts are available where cartridges are to be interchanged frequently.

Wow and flutter are less than 0.1%; and rumble, better than 50db below average signal level. Miracord 40 is \$79.50, less cartridge and base. See it at your hi-fi dealer. For details, write:

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LETTERS

Continued from page 8

FM in multiplex stereo, though your article does not report this information. We would add that a mere glance at FM programming among other stereo stations in Washington would show that WHFS FM-a competitor-broadcast in live FM stereo the whole Watergate 1964 summer season of lighter music.

Relevant to your discussion of circular polarization, WGMS was also the first or second FM station in the United States to install a horizontal plus vertical antenna system for improved FM stereo transmission. In fact our antenna system is the prototype for all such antenna systems. Your article can be confirmed in one detail: we agree that circular polarization greatly improves FM transmission, most noticeably in automobile reception.

Victor R. Hirsh, Director Program Operations, WGMS Washington, D.C.

SIR:

Radio Station KFUO-the unidentified "current [italics in original] major classical station" in Saint Louis-has faithfully served this area as a strong cultural force for forty years. Leonard Marcus' quick dismissal of KFUO's programming because it "devotes 50% of its time to gospel music" is unfortunate and inadequate.

"Gospel music" and "classical music" are not mutually exclusive terms. KFUO's religious broadcasts regularly include much of the Lutheran heritage of great musical religious literature. Bach wrote a lot of "classical gospel" music, you know.

> Donald R. Hoger. Pastor Holy Cross Lutheran Church Crawfordsville, Ind.

Mr. Marcus replies: Ah, would that "nearly all communities" were like Mr. Hirsh's Washington-at least insofar as live stereocasting is concerned. I did not mean to imply that AM-FM duplicating stations were ipso facto on a lower cultural rung than nonduplicating stations, merely that they were de facto generally lower.

Unfortunately, most communities are more like Mr. Hoger's St. Louis. 1 did not identify KFUO, for my point was not to denigrate a particular station. which obviously contributes a service to its community, but to note that this is the very best that St. Louis seems able to support. It remains a fact that the city's only all-classical station of a year or so ago, KSHE, had to become a pop station in order to stay in business.

Mr. Pirie Speaks Up

SIR:

In his letter [October 1964] referring to my article "Fie Upon Freud!" Mr. Jack Diether is of course right about the location of the Mahler-Freud encounter. But

Continued on page 14



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HiFi/Stereo Review



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So writes Julian D. Hirsch of Hirsch-Houck Laboratories, in his "Technical Talk" column in HiFi / Stereo Review.

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ing room was equally so. This is the way he sums it up:

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HIGH FIDELITY MAGAZINE

TEXAS

Everything Fisher knows about tuners, preamplifiers and power amplifiers is in this transistorized stereo receiver.



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

JANUARY 1965



We give it to you at no charge!

The popular Rek-O-Kut R-34 turntable, already the best value in a single-play unit, is now even better . . . and at no price increase! Constantly watching for changes that will improve quality and convenience in record playback systems, Rek-O-Kut has determined that the tonearm on the R-34 simply *must* have a plug-in shell to make cartridge mounting simpler. So the new S-440 tonearm now comes mounted on the R-34; now an even greater value . . . still \$89.95.



Specifications: Complete 2-speed turntable, tonearm, and solid walnut base. All with a 5-year Warranty, unheard of in the audio industry! Exclusive Rekothane belt reduces noise and rumble to minus 6 db lower than any other belt. Exclusive Instant Speed Selector changes from $33\frac{1}{5}$ to 45 rpm with a mere flick of your finger. Specifications: Noise and rumble: -60 db below average recorded level (@ 7 cm/sec. @ 1000 cps). Flutter and wow: .08 0/0 RMS.



LETTERS

Continued from page 10

he is ill advised to describe as wild and fanciful the theory that Beethoven's deafness was at least in part self-induced and psychosomatic, since that diagnosis is made by some orthodox Freudians and lies well within the canon. It has been put forward recently, for example, by Hans Keller, musician and Freudian, who went far beyond my remarks in criticizing the Sterbas' *Beethoven and His Nephew*. He called the book "pitiable nonsense."

> Peter J. Pirie Shoreham-by-Sea, Sussex England

Opera Fans United

Sir:

I have just finished reading the editorial in the November HIGH FIDELITY and wish to console John Brow that he definitely is not alone in his feelings as more *Bolièmes* and *Rigolettos* flood the market. I too would rejoice if we were to be blessed by recordings of *La Juive*, *Les Huguenots*, *Rienzi*, *Otello* (Rossini's), and *Lucrezia Borgia*, to name but a few. . . And undoubtedly. Mr. Brow is just as eagerly awaiting RCA's release of *Luisa Miller* as I am. As was suggested in your editorial. I hope the opera-buying public will show RCA that future releases of *Nabucco*, *Ernani*, and *I Vespri siciliani* would be amply justified.

Robert E. Browne Mount Vernon, O.

The Shostakovich Syndrome

SIR:

Peter Heyworth's attempt to divorce Shostakovich from Soviet ideology [October 1964] is interesting but superficial. The article fails to account for two facts which, when fully considered. make the author's thesis untenable: (1) the political pressures in Soviet musical life are more complex than the direct. specifiable actions (e.g., Stalin's rejection of *Lady Macbeth*) noted by Mr. Heyworth; (2) the inability of Shostakovich to create. with any consistency. music of lasting (or even immediate) interest is common to other Soviet composers.

The Shostakovich phenomenon is not a unique instance. but is characteristic of the whole Soviet school. Of all the contemporary Russian composers whose works are available to American audiences, Shostakovich is the only one whose music occasionally rises above monumental dullness. Though we don't expect the U.S.S.R. to turn out music masters at the same rate at which they put satellites into orbit, we may legitimately wonder why Shostakovich alone ranks with our finest half dozen or more composers.

Mr. Heyworth marvels at "the flood of Khrushchev's thaw," but is blind to its most obvious offspring—nothing. . . . The pressures demanding conformity are

Continued on page 16

The powers that be: 50 watts



THE FISHER X-100-C SIZE: 15-1/8" WIDE, 4-13/16" HIGH, 11-7/8" DEEP. WEIGHT: 23 LBS. PRICE: \$169.50*



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T

LETTERS

Continued from page 14

more subtle than Kremlin edicts: once imposed by the State, they have become engrained in the composers' minds and now take the form of inner compulsion. . . . Freedom is often a matter of degrees, and not all of the limits to freedom are catalogued in books of laws. Shostakovich's frustrated talent (perhaps genius) is sad testimonial to the unwritten, but no less real, restrictions to freedom of expression existing in Soviet life. Perhaps someday a young, gifted Russian composer will develop a compositional style allowing full expression of his imagination. He will be a Russian-not a Soviet-composer.

> LeRoy E. Doggett Ann Arbor, Mich.

Stereo Budget: Addendum

SIR:

Re: Edward F. McIntyre's article "A Budget for Stereo," p. 111, your October 1964 issue.

Mr. McIntyre seems to have missed one important point in his stereo budgeting. Many qualified experts have pointed out to us that a system can be improved more by a 2:1 increase in speaker dollars than by a 5:1 increase in amplifier dollars. We have tried this test on any number of people, and I personally do not recall any who remained unconvinced. Lest any amplifier manufacturers take issue with me. I suggest they try the test first. The good speaker will in turn do its sales job on the better amplifier.

Long before I took employment with a speaker manufacturer, my own system consisted of two \$700 speakers and a \$190 amplifier-preamplifier combination. Now the system has grown without changing speakers to include over \$800 worth of amplification and well worth it, but not first.

Robert L. Moers, General Manager Klipsch and Associates, Inc, Hope, Ark.

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MAXIMUM PERFORMANCE COMPONENT STEREO MUSIC RE-CREATION SYSTEM

CIRCLE 63 ON READER-SERVICE CARD

LETTERS

Continued from page 16

Thank-you Note

Sir:

Generally speaking, the manufacturers of high fidelity equipment are most accommodating to their consumers. Recently this was demonstrated to me in an act above and beyond the call of duty, and I thought it was worth bringing to the attention of other readers.

After completing the wiring of an Acoustech IV preamp I proceeded to blow fuses (within the unit). Several hours later I was still unable to find the reason. At this point I wrote to the Acoustech people asking for authorization to return the unit to the factory for their inspection and correction (a \$12 fee is the cost of this service). Two days later I received a telephone call from a Mr. Scott Kent of Acoustech, at their expense, and during the next fifteen to twenty minutes he helped me find the problem and advised me as to its correction. Incidentally, he was right.

Emmanuel R. Riff, M. D. Maple Heights, O.

Egge's Concerto: Correction

Sir:

Regarding Alan Rich's review of CRI 184 in your November issue, I hasten to inform you that the recording of the Egge Piano Concerto is not a reissue of the old Mercury tape but a new recording done in June of 1963. As the person responsible for procurement, mastering, and release of both versions, I can say that the Mercury tape was from a series of special recording sessions of Norwegian music conducted during 1950 by the BBC for the Norwegian Performing Rights Society TONO. David Hall, President

David Hall, President Composers Recordings, Inc. New York, N.Y.

Price Correction

SIR:

The prices of the RCA Victor Othello, reviewed in your December issue, were erroneous. The monophonic set is \$15.00, the stereo \$17.00.

Herb Helman RCA Victor Records New York, N.Y.



HIGH FIDELITY MAGAZINE

Two features of the new Ampex 2000 stereo tape recorders are unique. Automatic threading. And automatic reverse. The rest are merely Ampex exclusives.



MODEL 2080 (deck only, with walnut case—\$469°)



With automatic threading you can now thread tape in just 2 seconds. We call that simplicity of operation! And with automatic reverse, you add a subsonic signal at any point on the tape (no fuss, no foil) for unlimited, uninterrupted, unrepeated music.

Now for the exclusives (some tape recorders have got them, but the way Ampex makes them—that's exclusive!).

Fingertip manual reverse—merely flip a switch and the unit reverses. Dual capstan drive—permits extra long play recording at $3^{3}/_{4}$ ips with fidelity crowding $7^{1}/_{2}$ ips. No pressure pads—for increased head life. Automatic shut-off (of everything—recorder, motor, amps, everything!). 3 speeds. 3 heads (*Ampex* heads). Optional automatic slide synchronization. Rigid-block head suspension—for constant alignment under *any* conditions (like dropping!). Automatic lifters. And solid state power amplification.

Then there are the specifications. They're Ampex specs. That's why Ampex guarantees them. 20 years of successful experience in every area of magnetic tape electronics, instrumentation products, video tape television recorders, and professional studio recorders, backs up the guarantee. Here's a sample:

Frequency response at 7¹/₂ ips:

average (production run): ± 2 db, 30-18,000 cps guaranteed minimum: ± 3 db, 50-15,000 cps Signal-to-noise at 7¹/₂ ips:

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Wow & Flutter at $7^{1}/_{2}$ ips:

average (production run): 1/13 of 1% (.0007) guaranteed minimum: 1/8 of 1% (.0012)

Since styling is a matter of personal preference, let your own eyes be the judge. Form here, truly follows function.

And under all that styling, these new units are built like the proverbial truck. That's why we offer a full year warranty on *all* parts and *all* labor.

Anything else? Yes. Each of these new Ampex units comes with an unusual "Owner's Kit," which includes a vivid stereo "demo" tape, *plus* a reel of Ampex recording tape, also a complete Operator's Manual.

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CIRCLE 8 ON READER-SERVICE CARD

JANUARY 1965



Says Julian D. Hirsch in Dec. HiFi/Stereo Review:

In my review of the Dual 1009 . . . its performance was comparable to the better manual arm and turntable combinations. The Model 1010 . . . is designed to deliver essentially the performance of the 1009, but at a considerably lower price.

"... can be used with practically any cartridge on the market.

"With the 1010 on the bench next to the speaker, I was unable to induce any acoustic feedback, even at high volume and with maximum bass boost.

"(speeds) unaffected by line voltage variations from 95 to 135 volts.

". . . low rumble figure is approximately the same as I measured on the 1009.

". . , wow (0.06% at 33 rpm) and flutter (0.02%) were very good. 99

This astonishing performance in a \$69.50 turntable is possible only because it shares the precision engineering and many advanced features of the incomparable DUAL 1009 itself . . . including the renowned Continuous-PoleTM motor. For example: automatic and manual single play, Elevator-ActionTM changer spindle, feather touch slide switches. acoustically damped soft spring footings. For more, see your United Audio dealer.

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CIRCLE 69 ON READER-SERVICE CARD



NEW YORK

It might appear at first glance that when a pianist chooses to undertake an entire concerto cycle sans conductor, taking on the chores of leadership

himself, he is simply adding trouble to an already difficult task. This, of course, is what Géza Anda decided to do with the concertos of Mozart almost six years ago for Deutsche Grammophon, and it is a pleasure to report that halfway through the project, with five years of recording still to go, Mr. Anda shows no signs of being in trouble at all. "Why shouldn't I conduct?" he asked rather indignantly, when I talked with him during his American tour not long ago. "It is only the twentieth century that says a man must do just one thing. Now if you have a pain in the left side of the heart you go to one doctor, and if it is on the right side you go to a different doctor. But look at Liszt. He composed, he played, he conducted, he taught, he transposedhe thought no one would know Rigoletto, for instance, so he wrote the Rigoletto Paraphrase. His letters fill up twenty-five volumes, and he had an amazing number of women," Mr. Anda finished with appreciative emphasis.

The Resolute Mr. Anda. At forty-two, this Budapest-born and -trained pianist looks as if he might match Liszt in any of these fields, and play a good game of tennis besides. He made it clear, however, that his concerto conducting is done neither in imitation of historical precedents nor as an artistic whim, but as a means of achieving a closer sense of ensemble between soloist and orchestraand among members of the orchestra themselves. "The men must listen to each other as if they were playing chamber music," he pointed out. "It makes them play better. What I am doing is nothing new, of course. It's been done many times before, by Bruno Walter and Leonard Bernstein, for instance. But the difference is that they were conductors playing the piano. In such cases the piano playing is apt not to be good enough." Mr. Anda went on to say that he has never studied conducting per sea fact which worries him not at all. "Conductors are not trained, they are born. I have played with many of the world's first-rate conductors, and many of the second-rate and the third-rate. From this,

you learn. And after all, what is a symphony but an orchestrated sonata?"

His long involvement with the Mozart concertos has led Mr. Anda to the conviction that very little in the way of ornamentation need be added to the written score. "Most of the ornamentation in Mozart's time was done as a concession to the audience. You know the slow movement of the Concerto K. 451 exists in two versions-the original unornamented one, and another in which Mozart added embellishments because his sister told him to. And the second one is not good-even though it is Mozart. It sounds as if there are things in it which don't belong. But these fellows-these scholars-write books about this kind of thing. And our friends the critics, they read Einstein, for instance, and repeat whatever he says because he is supposed to know everything. In one of the Concertos now everybody plays four movements-an extra minuet-because Einstein says it belongs. But it doesn't. I will let my my head be cut off if it does!

When it comes to recording, Anda is strictly a leave-the-dials-alone man. "I want to hear on tape what I hear in the hall. I don't want the engineer to play around with the controls to bring up the bass, for instance. It is none of his business! Do you know my recording of the Schumann and Grieg Concertos? We spent, for the Schumann, four and a half hours for rehearsing and recording, and for the Grieg, three and a half. This is the way I think recording must be done: all in one piece. If you have to

Continued on page 27



Géza Anda: pianist and conductor.

NEUMON QUENTLY EXPECT TO My occupation is BANKES TREASURER PAY FOR IT. ty used a .. Thend I when a other I purchased it because I falt that friend R der ____ other I termenty wood a REK- D. KUT this was a beto and mes I purchased it because I faure GREGO CHECKER Enscare Ala terntable but like the versitile instrument a editorial mention in Mite ABLES OF N With this, I have t I friend D deeler I other Marty ward a BEK- D- KUT of FARELHIK diambane of the Lat and the I purchased it because na under quelity twateble Wanter My occupation is 19512 else changer cepabilit My occupation Jeschen turntable CONVENCENCE OF CHANGER -Who ever heard with change used a Editchild TRACKING AT 1-2 GMS mpire Tures nion is Engineer of trading up GOUD APPEACANCE + REPUTATION strict Sale I formerty used a WEATHERS TURNTAGE di dese to an automatic I I Decause I NEEDED ENGNER 10 treat 45 MANGER - PLUS THE Multer dealer D aller from a NTABLE Li other ... I purchased it because JUANTED manual turntable? FYERY S COMPACT CHANGER WITH THORENS TO 124 - To 86 TURNTABLE QUALITY ST STLLER Lots of people, now. Witness these ARKET . love notes to Dual.* Not that we I wanted the termerty was ._________________ Rok-o-cu hold any grudge against manual Supetion In ELECT t possible changer replac turntables ... especially the better STORE ON turntable STEED + ALSO ANTOMATIC ones. On the contrary. We appre-PLUS IT WAS EASY FOR MY ciate their help in proving just how cther___ Feirchild Turntab good the DUAL 1009 really is. WIFE TO MON PULATE . Lugate is Res . Engineer And what a value at just \$99.50. I formerty used & THORENS . make wet the I purchased it because of My occupation is LAWYER + BUSINESS *From actual warranty cards sent in by DUAL 1009 Superority owners. All are available for examination upon request. IN OF THE WIS I purchased it because / DIN MANY mor changers' Pek-s-Kut over IT THE MAN OPERA RECHADINGS + CAN purchased it because trac NOW HAVE SUPERA PERMEN ixe The Best Omerning in ween in y used a Thoreas. ER-O-ENT ETAK & The MARKET, WHAT AS WELL AS CONTENIERCE The work a warra (reaso wa har B lion is Electronic Frie Jue Seen Proyes I formerly used a REF.O. KUT ENFINE morty used a Fare cain Aar My occupation is ACCO UN TA ME I purchased it because 2F socupation is INUCATURS HAL. TY FANIS SUPERIER QUALITIE: N DECENSE SUPERIOR CINERS FOR COMPON . Emp TRACKING REPUTATION AND WORKMAN SHIF in U.S. Gerennet DUAL 1009 AMONG PRIFESSIONALS I formarty used a SEK C KLT 5 BRST LE SUPERLATIVE QUALT My occupation is POSTAL CLE Auto/Professional Turntable NUMBE purchased REKOCUT mouse wante to have all features of a pro-· tracks flawlessly tion table which could as low as 1/2 gram fessional tumbable & mand : 1st class castro des b · dynamically bal-R anced tonearm . red a changer access changer --- I'm satufied it due fine-thread adjust ECT counterweight : I formerly used an AR Turntable continuously var-I formerly used and and for forsel fant purchased it because I nearly merty used a Thorens in at denuitraiable direct-reading stylus force Francisco from O grams up . automatic and manual single play Elevator-Action :: changer spindle . constant speed lity Show automatic Continuous-Pole™ motor • 71/2 lb. dynamically bal-Cleribility of a changer for anger anced platter + anti-skating compensation + and Varias close to turntable performance Pitch[™] speed control (±3%) for all four speeds! Ret-o-cut + Empire as possible nerly used a Presto turnte UNITED AUDIO UNITED AUDIO UNITED AUDIO UNITED AUDIO UNITED AUDIO UNITED AUDIO DUAL Radio Station 1 formerty used a Fairchild 412 DUAL'S THE FINEST ... THE RECORD PROVES IT SINCE 1900 In Canada: DUAL OF CANADA, 24 Milford Ave., Toronto 15. Ontarlo manager -- ientist My occupation is Buyer CIRCLE 69 ON READER-SERVICE CARD litorial mantion in: I DEMAND

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Heywho shrunk yer tuner?

To lots of people, there's trauma in a small stereo tuner. Traditionally, the multiplex tuner has been a big heavy monster. It's hard to accept that a unit that sits easily in the palm of your hand can outperform most of its bulky and cumbersome predecessors.

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

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

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

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

Like the most expensive tuners, you'll find the

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

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

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

KLH RESEARCH AND DEVELOPMENT CORPORATION

Just don't call it cute. It's very sensitive.

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SIX HEADS ARE BETTER THAN THREE!

No matter how you look at it, six heads can outperform three anytime. And only Concertone's incomparable 800 has them. Six heads let you record or play four-track stereo tapes in both directions—without reel turnover. And Reverse-o-matic[®] gives you continuous music programming at the push of a single button. No one in the industry can give you six heads and Reverse-o-matic[®]. No one in Concertone's Series 800 price range can give you these features either. Entirely self-contained. Twin speakers. Two microphones. Three motor system. Echo control. Sound on sound. Center capstan drive. You will be astounded at what you get with Concertone's incomparable 800. And it costs less than \$399. For complete details and the name of your nearest dealer, write Concertone, P. O. Box 3246, South El Monte, California 91733.



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NOTES FROM OUR CORRESPONDENTS

Continued from page 22

repeat, repeat the whole movement. None of this snipping and cutting and fitting little bits together. This is death, inside."

The Gospels Dramatized. A million-dollar recording project reached completion a few weeks ago when LOR Productions of Los Angeles announced the release of a six-disc album dramatizing the Life of Christ. "Journey to Bethany," purposely nondenominational in concept. employs nearly two hundred anonymous actors and actresses; a script (based on the four Gospels) by English-born novelist Cecil Maiden; and a score by Irvine Orton, performed by the Copenhagen National Symphony. Walter X. Boeckley. a Cincinnati businessman who conceived the undertaking, felt the need for an "audible representation of the Bible in the home," and has devoted the past three years to seeing his plan to fruition. The set, which sells for \$59.95, is available from LOR Productions. 9229 Sunset Blvd., Los Angeles, Calif. S.F.

ROME

Long before the opening of the season at the Teatro dell' Opera (this year on November 28. exceptionally early), the Rome musical year began with

the first concert in the annual subscription series of the Accademia Filarmonica. This inaugural concert is always a great social—and musical—event: in the past Hindemith and Stravinsky have appeared, conducting new works: and this year, interest was equally high. thanks to the appearance of pianist Arturo Benedetti Michelangeli. At forty-four. Benedetti Michelangeli is already legendary: his fast cars, his taciturn misanthropy, his fondness for canceling concerts, his reluctance to make recordings—all these myth-making elements guarantee that when he *does* appear in Italy, the hall is sold out.

The New Michelangeli. His Roman recital confirmed another part of the legend: he is, indeed, a very great artist. The program included a great deal of Debussy and the Beethoven Opus 111, underlining this pianist's range of sympathies. It would also seem that this appearance marks a new decision on Michelingeli's part to concertize more frequently and more widely. He has a new manager (the American Jacques Leiser, formerly with EMI/Angel, and one of the prime movers of the "Great Record-ings of the Century" series of reissues). With Leiser handling his engagements, Michelangeli has already signed contracts for concerts in Paris and for an extended tour in Japan. According to Leiser, the pianist will also make from eight to ten records within the next twelve months. The tapes will probably be made private-

Continued on page 30

Featherweight...



with a wallop

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

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

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

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

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

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

We saved the best for last. The price is a featherweight, too.

Just \$219.95. The cabinet is optional at \$19.95.*

That's less than you'd pay for one of those big heavy old-fashioned jobs.

We designed it that way.

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KLH RESEARCH AND DEVELOPMENT CORPORATION 30 CROSS STREET, CAMERIDGE 39. MASSACHUSETTS CIRCLE 46 ON READER-SERVICE CARD

*Slightly higher on the west coast.







Mr. Miller is an audiophile. He's also a cost-conscious accountant who wants a new stereo receiver.

He listened to Brand X. \$425.

He listened to Brand Y. \$319⁹⁵.

Then he saw the new Bogen RF35, a 35 watt FM-stereo receiver. "Interesting," he said, "What are the specs?" The salesman told him. "Hmmmm," said Mr. Miller, "35 watts will drive most any speaker system." The salesman nodded: "Thirty-five clean, useable watts." "It sounds like 60." "That's right; distortion is almost unmeasurable." "And," said Mr. Miller, "20 to 20,000 cycles is more than anyone can hear." "Unless your name is Lassie." "How about that 0.85 uv. sensitivity for 20 db. of quieting? The RF35 actually meets broadcast-monitor standards." "That's Bogen. All that performance," said the salesman, "for only \$234.95." Mr. Miller computed rapidly. "Wrap it up," he said decisively. "And add," his voice trembled, "the new Bogen B62 stereo turntable. The \$64.95 model with variable speed control and automatic cueing." The audiophile/ accountant wore a smile all the way home.



For complete details on the remarkable RF35 and the new illustrated Bogen catalog write Bogen, Dept. A-1, Paramus, New Jersey.

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We aim at



KLH makes speaker systems that sell from \$50 to \$1140. Each of these systems delivers the cleanest, best balanced performance you can buy for the price.

But the one by which we judge every new product we make is the Model Six.

How does such a modestly priced speaker become the standard bearer for an entire line?

It isn't just that the Six is a magnificent speaker. More than any other speaker we have ever made, the Model Six embodies the qualities that the name KLH stands for — an engineering approach that separates the trivial from the important; cuts through the accepted to find the exceptional — a patient, painstaking effort to give you cleaner, finer performance at lower cost.

We aim at the Six because it gives you the highest quality of performance, *per dollar*, of any speaker we make. Or anybody else makes. That's why we call the Model Six:

the lowest priced speaker you can be satisfied with for the rest of your life.

CIRCLE 47 ON READER-SERVICE CARD

KLH RESEARCH AND DEVELOPMENT CORPORATION 30 CROSS STREET, CAMBRIDGE 39, MASSACHUSETTS

You can't tell the difference between the Oki 555 and any other stereo tape recorder

until:

You lift it. It's the lightest portable stereo tape system in the world. Under 25 lbs.

You check for tubes. It has none. It's solid state (all transistors...27 of them).

You hear it. It has 2 unique two-way speaker systems for cleaner stereo sound reproduction. (4 speakers.)

You check its dependability. It's guaranteed for 1 full year.†



\$289.95 *

Now you can tell the difference. The Oki 555 surpasses all previous achievements in tape recording and stereo sound reproduction in its price range. It has full solid state circuitry, which assures cooler operation and more complete reliability of performance. And its price is less than you'd expect to pay. \$349.95.*

Oki has a fine choice of other solid state tape recorders.

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Newark, New Jersey	City State Zip #
jone year parts. 6 months labor	*manufacturer's suggested list pric

CIRCLE 18 ON READER-SERVICE CARD

NOTES FROM OUR CORRESPONDENTS

Continued from page 27

ly, then sold or leased to some major company. Negotiations, at this writing, are in progress.

Opera News. At least two events scheduled for the current opera season will be reflected in forthcoming recordings. The much heralded Traviata at La Scala, staged by Franco Zeffirelli, conducted by Herbert von Karajan, and starring Mirella Freni as Violetta is-according to rumor-the prelude to a new Traviata recording by EMI/Angel, also with Miss Freni and Karajan (rumor doesn't explain how this fits in with the conductor's exclusive Deutsche Grammophon contract). And Régine Crespin's debut at the Rome Opera in Tosca is, naturally, linked with her recording of that opera. Originally scheduled for last summer, the Tosca sessions will be held later this year. with Tito Gobbi as Scarpia.

At RCA Italiana. The mammoth studios out on the Via Tiburtina have not been idle since RCA's opera recording activity ceased at the end of summer. From opera they have become the scene of other, more adventurous projects. In October the Società Corelli, one of Italy's finest chamber groups and well known to American concert audiences, recorded the complete Concerti grossi of Francesco Geminiani. Like the Società Corelli's earlier Vivaldi and Corelli recordings, the three-disc Geminiani set will no doubt be exported.

From the eighteenth century, RCA Italiana then turned its attention to the music of today. Under the guidance of conductor-composer Bruno Maderna, RCA has prepared three records of contemporary music. Italian composers like Luigi Nono (and Maderna himself) are represented along with the leading names in international avant-garde circles: Stockhausen, Boulez, Krystof Penderecki, Roman Haubenstock-Ramati, and the American composer Earl Brown. Maderna conducted elements of the Rome Radio Orchestra, including its first flutist, that pillar of all far-out music festivals, Severino Gazzelloni. The records will be issued both separately and in a special three-disc album limited to one thousand copies-the latter with a cover by the Venetian painter Emilio Vedova and an essay by Massimo Mila, one of Italy's leading critics.

WILLIAM WEAVER



The idea of recording serious music in the spectacular stereogenics of Decca/London's Phase 4 system may make purists apprehensive, but Leopold

Stokowski's new London Symphony/ Phase 4 account of Rimsky-Korsakov's Scheherazade stands a good chance of

Continued on page 34

Oki 333: 4 track full

stereo record and playback.

Oki 222: 4 track monophonic record

Oki 111: 2 track monophonic record

Like the Oki 555, they are guaranteed

for 1 full year. See and hear these superbly engineered tape recorders now

and playback. \$179.95.*

and playback. \$129.95.*

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BRAND	IHF POWER	TUNER	CIRCUIT	PRICE
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"E" is the Heathkit AR-13A All-Transistor, All-Mode Stereo Receiver. It's the first alltransistor stereo receiver kit. It costs from \$75 to \$425 less than the finest stereo receivers on the market today. This alone makes the AR-13 unique. But dollar savings are only one reason why it's your best value.

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Even if you can afford to buy the costliest model, you can't buy better performance. Start with the AR-13A's 43-transistor, 18diode circuit. It's your assurance of cool, instant, "hum-free" operation; long, trouble-free life; and the quick, clean, unmodified response of "transistor sound" . . . characteristics unobtainable in tube types.

Next, there's wide-band AM, FM, FM Stereo tuning for distortion-free reception to delight the most critical ear. It has two preamps. And its two power amplifiers provide 66 watts of IHF Music Power, 40 watts of continuous sine-wave power. And it's all housed inside one luxurious, compact walnut cabinet . . . just add two speakers for a complete stereo system.

There are plenty of operating conveniences, too. Like *automatic* switching to stereo; automatic stereo indicator; filtered tape recorder outputs for direct "beat-free" stereo recording; dual-tandem controls for

JANUARY 1965

simultaneous adjustment of volume, bass, and treble of both channels; 3 stereo inputs; and a separate control for balancing both channels. The AM tuner features a high-gain RF stage and a high Q rod antenna. The FM tuner has a built-in line cord antenna plus external antenna connectors.

In addition, there's a local-distance switch to prevent overloading in strong signal areas; a squelch control; AFC for driftfree reception; plus flywheel tuning, tuning meter, and lighted AM & FM slide-rule dials for fast, easy station selection. The secondary controls are concealed under the hinged lower front gold aluminum panel to prevent accidental system setting changes. Both of the AM and FM "frontends" and the AM-FM I.F. strip are preassembled and prealigned to simplify construction.

Compare its impressive specifications. Then go direct to the coupon, and order the AR-13A. Now sit back and relax... you've just saved \$75 to \$425 without compromising!

Kit AR-13A, 34 lbs.....\$195.00

SPECIFICATIONS-AMPLIFIER: Power output per channel (Heath Rating): 20 watts /8 ohm load. (IHFM Music Power Output): 33 watts /8 ohm load. Power response: 11 db from 15 cps to 30 kc @ rated output. Harmonic distortion: (at rated output) Less than 1% @ 20 cps: tess than 0.3% @ 1 CIRCLE 40 ON READER-SERVICE CARD Ic: less than 1% @ 20 kc. Intermodulation distortion: (at rated output) Less than 1%, 60 & 6,000 cos signal mixed at), Hum & noles: Mag. phono, 50 & below rated output: Aux. inputs. 65 db below rated output. Channel separation: 40 db. Input sensitivity: Mag. phono, 6 MV. Outputs: 4, 8, a 16 ohm and low impedance tabe recorder outputs. Controls: 5-position Setector: 3-position Mode: Dual Tandem Volume: Bass & Troble Controls: Balance Control; Phase Switch; Input Level Contro's: Push-Pull ON/OFF Switch. FM: Tuning range: 88 mc to 108 mc. IF frequency: 10.7 mc. Frequency: 10.4 mc. Fisedency and the set of the

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"Until just recently, I have been somewhat skeptical about low priced transistor amplifiers. However, after testing and listening to the Heath AA-22, I feel it is time to revise my opinion. This remarkable amplifier can easily hold its own against any amplifier — tube or transistor anywhere near its price range."

JULIAN D. HIRSCH, Hi Fi/Stereo Review, Nov. '64



Heathkit[®] 40-Watt Transistor Stereo Amplifier \$99⁹⁵!

Mr. Hirsch Went On To Say: "It is the embodiment of the so-called 'transistor sound' — clean, sharply defined and transparent. It has the unstrained effortless quality that is sometimes found in very powerful tube amplifiers, or in certain expensive transistor amplifiers." "The AA-22 is almost unique among amplifiers at or near its price, since it delivers more than its rated power over the entire range from 20 to 20,000 cps" ... "The power response curve of this amplifier is one of the flattest I have ever measured" ... "Its RIAA phono equalization was one of the most precise I have ever measured" ... "Intermodulation distortion was about 0.5% up to 10 watts, and only 1% at 38 watts per channel, with both channels driven" ... "The hum and noise of the amplifier were inaudible" ... "Hi Fi/Stereo Review's kit builder reports that the AA-22 kit was above average in "buildability" ... "In testing the AA-22, I most appreciated not having to handle it with kid

gloves. I operated it at full power for long periods, and frequently overdrove it mercilessly, without damage to the transistors, and with no change in its performance measurements" ... "One of the best things about the Heath AA-22 is its price, \$99.95 in kit form, complete with cabinet."

Let's Look Closer! The AA-22 provides 40 watts continuous, 66 watts 1HF music power at ± 1 db from 15 to 30,000 cps. Features 5 stereo inputs to handle mag. phono, stereo-mono tuners, tape recorders, & 2 auxiliary sources. There are 4, 8 & 16 ohm speaker outputs plus tape recorder outputs; a 5-position selector switch; 3 position mode switch; dual-tandem control; bass & treble controls.

"WILL GET ANY STATION THAT CAN POSSIBLY BE PULLED IN"



Matching AM /FM /FM Stereo Tuner The above quote comes from July '64 issue of *Radio-Electronics*.

The matching AJ-33 tuner features a built-in stereo demodulator; AGC for steady volume; AFC for drift-free reception; stereo indicator light; stereo phase control for maximum separation, minimum distortion; filtered stereo outputs; tuning meter; flywheel tuning; voltage regulated power supply; illuminated slide-rule dial; and pre-built, prealigned FM "frontend" tuner and AM-FM I.F. circuit board for fast, easy assembly.

Kit AJ-33A, Tuner, 17 lbs..... \$99.95

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Who Says Great Stereo Components Aren't Decorator Designed?

Meet the new Empire Royal Grenadier...first speaker system designed and engineered in sight and sound for stereophonic reproduction. Lets you sit anywhere -hear everything. Its regal shape projects a majestic sound unlike any you've ever heard before. A 15" mass loaded woofer, world's largest ceramic magnet structure and diecast full dispersion acoustic lens allow you to enjoy the highest fidelity of music plus phenomenal stereo separation from anywhere in the room. Speaker place-ment non-cr tical. For a sound demonstration go 'round to your dealer or write for complete color brochure.



CIRCLE 34 ON READER-SERVICE CARD

Continued from page 30

proving among the most dramatically exciting on discs. Not that sonic gimmicks have been allowed to dominate: Tony d'Amato, the man in charge of Phase 4 recordings, asserts firmly that no electronic tricks have been used, at least not of the kind distinguishing Phase 4 issues in the pop field.

Stokowski and the Engineers. The sessions were held at Kingsway Hall, and D'Amato's preparations for the occasion included marking up a miniature score with some hundreds of cues, blue for the left-hand tracks, red for the right, The Phase 4 system uses up to twenty channels (i.e. separate microphones) feeding into four tracks. The instruments are so grouped as to emphasize clarity and separation even if this means doubling up on some instruments. Taking an obvious instance, D'Amato points to the fact that bassoons are commonly used in two distinct ways, either as part of the woodwind choir or as a reinforcement to the cello line. When the bassoons perform the latter function from their usual position with the other winds, the cello line comes from both left and right and thus clouds the directional effect of stereo. What D'Amato has done in this and other recordings is to use one pair of bassoons alongside the cellos and another with the winds, each assigned to a separate role.

Stokowski was very ready to go along with this sort of approach. He has, after all, been in the forefront of such experimenting for forty years or more. He agreed to D'Amato's suggestion for putting the violas over to the right with the cellos, he boosted the number of violins, and he asked for an extra harp. In the sessions themselves he was the perfect mediator between the men and the music, not dominating any more than he needed to (when things were going well he sometimes even stopped moving his hands) but keeping very firm discipline. He did not interfere with the details of engineering, but delighted the recording team when after a false start he simultaneously signaled the orchestra to prepare for an immediate restart and through the intercom ordered the engineers to "Keep running!" Only an old hand would have had this presence of mind.

Multichannel Miracles. Following D'Amato's heavily annotated score. Arthur Lilley in the control room constantly adjusted the levels of the various channels in the interest of stereophonic



separation and clarity. Broadly speaking, the violins were taped on one of the two left-hand tracks and the brass minus the horns on one of the two right-hand tracks: the other instruments were divided between the remaining two tracks. This system makes it easy for the engineers to boost the violins separately if necessary, and conversely, to tone down the brass, which quickly tends to dominate.

With the arrangement of instruments described above, the famous call and answer between trombones and trumpets in the second movement of *Scheherazade* would, of course, have been entirely over on the right. What more obvious for the Phase 4 people than to bring the trumpets over to the left during this crucial passage—something which many a conductor would like to be able to do in the concert hall? You will be able to hear the results early this year.

Unique Churchilliana. Decca/London is elated to have brought off a contract with Sir Winston Churchill, who celebrated his ninetieth birthday on November 30. There have been plenty of Churchill records in the past-the major war speeches came out in Britain on HMV at the time: later there were LP reissues; and then there was Ed Murrow's symposium taken from a CBS broadcast. What makes this new set of twelve discs of great historical interest is that it is largely based on a series of tape-recordings made by Churchill personally, with the help of an engineer, just after the war when he was out of office and in opposition. At the time he was busy writing his war memoirs, and many of the tapes consist of readings from those memoirs, particularly the summary of the interwar period, when he played such a vital part in alerting the world to the danger of Hitler.

Historically, the most important items on the tapes are Churchill's readings of two speeches given in the House of Commons in 1940. The first, made on May 13, only three days after he became Prime Minister, contains the famous statement, "I have nothing to offer but blood, toil, tears and sweat." The second, of August 20, includes his tribute to the Battle of Britain pilots: "Never in the field of human conflict was so much owed by so many to so few."

It may surprise some to learn that these speeches have never before been heard outside the Commons in Churchill's own voice. It was—and is—a strict rule of the House that no recordings should be taken of addresses delivered there, and Churchill did not repeat these particular speeches afterwards on the radio, as he did some of the others. Now we shall be able to hear two of the most resounding Churchillian statements as spoken by the great man himself.

Sir Winston seems to have enjoyed himself with the tape recorder, and the engineers have done wonders with what can hardly have been high fidelity reproduction. EDWARD GREENFIELD


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

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

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

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

Q. Is this true with weak broadcast signals also?

Mr. Marantz: Yes. In fact the model 10-B will reach 55 db quieting at only 3 microvolts! This is better than most conventional tuners will reach at 1000 microvolts. With a 25 microvolts station the Model 10-B reaches a phenomenal 70 db quieting which is about 20 db better than most conventional tuners can achieve at any signal strength. This means that with the Model 10-B there will be excellent reception even in fringe areas, particularly so because of the tuner's high sensitivity, its extremely sharp selectivity and reduced susceptibility to multipath effects, which on other tuners cause distortion.

Q. How are such improvements accomplished?

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

Q. Can you give us some examples?

Mr. Marantz: Yes. The RF section, for example, contains a balanced-bridge di-

JANUARY 1965

Mr. Saul Marantz discusses his revolutionary new model 10-B FM Stereo Tuner

ode mixer - a technique used in modern sensitive radar designs to eliminate a major source of noise, harmonic distortion and other spurious interference. The whole RF circuit is balanced-tuned, using a precision tuning capacitor with four double sections, for further reduction of spurious images.

For the critical IF strip, we've developed the first commercial application of the "Butterworth," or phase-linear filter. This new concept provides a number of distinct characteristics essential for good results. The passband, for example, is phase-linear for extremely low distortion - especially at high frequencies and it remains essentially phase-linear at all signal levels.

Cutoff slopes beyond the passband are extremely steep, allowing unprecedented selectivity; it is much less subject to the effects of multipath, and it doesn't require realignment with tube changes or aging. The old standby coupled IF circuits currently in use do not have any of these characteristics.

Q. Are there any innovations designed specifically for multiplex?

Mr. Marantz: Yes. For multiplex reception we've developed our own unique



1F Passband retains phase linearity and sharp slopes at any signal strength for low distortion, sharp selectivity.

Conventional mutually-coupled 1F circuits change characteristics drastically depending on signal strength.



Station tuning is simply and accurately adjusted by centering the trace.



variation of stereo demodulator, which

permits phase correction to maintain a

very advanced order of stereo separa-

tion throughout the whole audio band.

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

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

Mr. Marantz: The Model 10-B is a laboratory instrument of extremely high quality which will never be mass produced in the usual sense. However, production has been stepped up fourfold and all back-orders are now being filled by Marantz franchised dealers.



MARANTZ MULTIPATH/ TUNING INDICATOR Multipath (Ghosts) shows up as 'wiggles' on the tuning trace. Antenna is simply rotated until trace is smooth.



CIRCLE 51 ON READER-SERVICE CARD



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HIGH FIDELITY MAGAZINE

HIGH FIDELITY BY NORMAN EISENBERG NEWSFRONTS

Short-Changing on Long-Term Purchases? The purchase of a high fidelity system is hardly ever made lightly. For most of us it represents a substantial outlay of funds; the returns-in terms of performance and reliability-are anticipated for years to come. In view of this long-term investment aspect, we wonder about a recent marketing trend. Exact data is impossible to obtain, but it seems that some retail dealers have been pushing speaker systems of their own design, using unbranded driver units installed in cabinets of their own making. This practice in itself is of course legal and in accord with our notions of free enterprise and competition. If carried out conscientiously, it can even result in very good speaker systems; after all, a good part of the original impetus to the high fidelity idea came from hobbyists and experimenters installing individual drivers and home-made crossover networks in "cut-and-try" boxes. There is, however. a very real danger

in the commercialization of this practice, and it is inversely proportional to the honesty of the dealer and the technical sophistication of the buyer. For instance, an unwary purchaser may be sold highperforming, well-known components up to the speaker systems, at which point his attention is diverted to an anonymous and impenetrable box that is purported to be "all that you need" to realize the full potential of all the other equipment that precedes it in the stereo-reproducing chain. The "felony" that is possibly committed at this point, while not one of statute, could well be one of sonics. In any given line-up of audio components a better speaker system almost invariably makes everything "sound better." Thousands have discovered this simply by connecting the sound output of a TV set to a speaker better than that supplied with the set. When dealing with the response capabilities of today's high fidelity program sources, pickups, and amplifiers, the need, and acoustical justification. for using the best speakers one can afford becomes quite obvious. The very notion of discouraging the serious music listener from seeking such quality, and urging him to settle for "something less." is inimical to the meaning of high fidelity. It also can make for some "disorder and early sorrow" in the listening room.

If the unsuspecting buyer is thus shortchanged sonically, what about his being short-changed in terms of hard cash as well? How can he be sure, if he buys an unbranded speaker system, of getting his money's worth. vis-à-vis what is available in brand-name speakers of known performance characteristics and manufacturers' reputations?

In truth, there is no clear answer to this question. Individual speaker systems, whatever their origins, must be judged on their own merits. Some help, however, may be found in the laws of physics and the laws of economics. The full, clean sound of high fidelity is not likely to be realized by using cheap replacement speakers, no matter how artful the "box magic" that is employed with them. The sow's ear still, even in our age of technical miracles, cannot be made into the silk purse. Drivers that are ordered to specification, and which in addition may be modified by a speaker system designer, of course represent something else. These fall into the category of custom-made speaker systems, fairly costly, recognized by experts as unique products. and-in any case-are never offered as minimal substitutes for the real thing. But the "cheapy," the atypical "bargain speaker" should be suspect to the qualityminded listener. It may, indeed, represent "value for the dollar spent." but then, so too does a \$15 table-model radio. Whether this product concept really has anything to do with genuine stereo or high fidelity sound is quite another matter.

New Test Record. CBS Laboratories, known for its professional test records on which the signals are designed for metering by laboratory instruments, has issued a release intended for use by the nonprofessional ear. The new disc. "Seven Steps to Better Listening" (STR-101; \$4.98 at Columbia record dealers'), contains readily conducted tests for channel identification, loudspeaker phasing, balance, tone control adjustment. channel separation, buzzes and rattles due to mistracking of the pickup or defects in the speaker, and stylus adjustment for reduced record wear. All manner of exotic tones are used, including the relatively new one known as "pink noise." Accompanying the record is a detailed and lucidly written sixteen-page booklet by Edward Tatnall Canby. Our only real criticism of this record is that in the first test, for left-right identification, it could be the signal cable leads (between turntable and preamp, or between preamp and power anip) that are reversed; the explanation mentions only the speaker leads. Aside from this minor omission. STR-101 is a carefully engineered and well-planned guide for setting up, or checking out, a stereo (or monophonic) system. In fact, Dr. Benjamin B. Bauer -who engineered this record-told us that by using it about once every two or three months, the owner of a playback system can discover and then correct small departures from optimum performance. It should make a useful and handsome addendum to the library of any serious listener, whatever his technical level—and is an excellent choice for a belated seasonal gift.

Literature, Mostly Free. Multiple power outlet boxes, including some with controls and circuit breakers, are described in Brochure No. 564, available on request to Waber Electronics, Inc., Hancock and Somerset Sts., Philadelphia, Pa. 19133. . . . The New Fisher Handbook offered by Fisher Radio, 21-21 44th Drive, Long Island City 1, N.Y., includes four articles on stereo as well as descriptions of products and attractive photos. ... More than 250 kits-including audio products as well as a transistor organ and a genuine computer-are described in Heath's new catalogue; for a copy write to the Heath Co., of Benton Harbor, Mich. . . . A colorful brochure issued by Pickering & Co., Plainview, L.I., N.Y., describes this company's new series of V-15 phono cartridges and specifies the models of turntable or changer recommended for use with each cartridge. . . An illustrated booklet on "How To Clean, Maintain, and Protect Records" written by the British authority Cecil E. Watts, is available for 25 cents from Elpa Marketing Industries. New Hyde Park, N.Y. The booklet contains pointed advice on stylus pressure, dirt, groove wear, and such-and has some of the best photomicrographs of record grooves we have ever seen.

Booked for Stereo. A very literal interpretation of the idea of a "bookshelf installation" is embodied in a new product concept announced by Eric Electronics, West Coast audio manufacturer. Solid-state design has enabled Eric to produce an FM stereo tuner and a 20watt (rms) stereo amplifier-each so compact that it can be fitted into the space normally occupied by a good-sized book. Accordingly. Eric has packaged the two components in book bindings, and labeled the set Dictionary of Music. Anyone seeking musical definitions, however, will be in for a surprise inasmuch as the binding of "Volume 1" opens on hinges to reveal tuner controls, and that of "Volume 2" hides the front panel of the amplifier. Two compact speakers complete the system which ought to appeal strongly to the most hidebound exponent of equipment camouflage.

"Can serve admirably to help you derive greater enjoyment from records or broadcasted programs. It covers almost every aspect of high fidelity reproduction with special emphasis on stereophonic equipment." HARVEST YEARS

PARTIAL CONTENTS

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The AR-4-\$51 to \$57, depending on finish

Excerpt from a column by Robert Marsh, music editor of the Chicago Sun-Times. A reprint of the complete AR4 review is available on request.

The AR-4 is a best buy in any comparative shopping survey. It is going to attract a lot of interest in the low-price bracket, but, more than this, it is going to raise a big fuss in the next bracket up, competing with its own big brothers the AR-2 and the AR-2a.

Development work on the AR-4 has made possible an improvement in the AR-2 and AR-2a speakers as well. The AR-2a has a new mid-range unit of improved smoothness and dispersion, and has had its name changed to AR-2a^x. The AR-2, with the same new unit installed as tweeter, has become the AR-2^x.

These new models are entirely compatible in stereo with the original speakers. The grille cloths are new, but the older grilles are still available. The AR-2 and AR-2a speakers are also still available for those who want exact matching, or the owner of either of these speakers can convert to the corresponding new model for \$15 and about half an hour of his time. Conversion kits are available at your AR dealer or direct from Acoustic Research.

The AR-2a^x is \$109 to \$128, depending on finish, and the AR-2^x is \$89 to \$102. These prices are the same as for the original models. AR's five-year speaker guarantee (covering all costs including freight) applies, of course.

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channels...locks into position...cannot resonate or become misaligned. Because of the offset angle used to minimize tracking error...all tone arms CIRCLE 16 ON READER-SERVICE CARD have an inherent tendency to move inward (skate) toward the center of the record. This tiny side pressure must be cancelled out accurately, to permit the arm to track sensitive cartridges without distortion. The Lab 80 accomplishes this with a patented adjustable anti-skating compensator, making it possible to use cartridges with the highest compliance and most delicate stylus assemblies.



This total performance tone arm system, plus an ingenious eneing control (built into an automatic unit for the first time) and the other advanced features which distinguish the Lab 80, are detailed, illustrated and explained in the Garrard 32-page Comparator Guide covering the entire line. For your complimentary copy, write: Garrard, Dept. GA-25, Port Washington, N.Y.





The New Conductor

 $T_{\text{HE ELOQUENCE}}$ of conductor George Szell has never been confined solely to the podium. Unlike some of his colleagues, who can say it with music but are verbally at a loss. Szell has always been able to articulate his musical purposes and principles in words as precise and illuminating as his platform gestures. It is thus with particular pleasure that we provide this month an opportunity for readers to eavesdrop on George Szell, in conversation with an old friend, critic Paul Henry Lang.

What Szell is largely concerned with-and what he himself represents-is the concept of a new type of conductor, one who seems likely to dominate the scene for the balance of this century. The role of the man with the baton has, in fact, been evolving steadily since the conductor became a well-defined part of orchestral performance about 150 years ago. At that time, and for many years subsequently, standards of instrumental playing made it inevitable that he should be a ruthless lawgiver. As ensembles improved, he appeared in a different manifestation: the virtuoso orchestral builder who played on his complex, symphonic instrument as a virtuoso violinist might play on a violin. The apogee of this development was reached with Toscanini, Mengelberg, Stokowski, and Koussevitzky in the eastern United States, with Beecham in England, with Walter and Furtwängler in Central Europe. Their epoch seemed the final evolutionary phase in the history of orchestral music.

It was not, of course. Splendid as were the achievements of these men, one could also say that this species of conductor often superimposed himself between the music he was supposedly transmitting and the composer who wrote it, between the printed score and the playing of it. A change in the conductor's role was in the offing, and in recent years that change has defined itself. The new conductor has become a peer among peers, a synthesizer, a point of focus in an orchestra that has both a personality of its own and a gift of tongues allowing it to communicate a variety of musical styles.

With the new conductors, the emphasis is not on Maestro's Beethoven Fifth, but on Beethoven's. While the presence of the ensemble leader is felt in the way the ensemble plays, the idiom of the composer is more conspicuous than the individualism of the re-creative artist. Earlier conductors professed this goal, especially Toscanini, but their personalities were too strong to permit any real self-effacement. In Szell's ideal of playing symphonic works by the ground rules of chamber music, we find a key to the new type of conductor. Primitive autocracy has been replaced by self-imposed artistic discipline.

Thus, just as the conductor came out of the eighteenth-century orchestra, he is now tending to fade into the collective skill of the twentieth-century symphonic group. Conductors of the older generation could breeze into town, whip the local band into shape, and put on their show. The new conductor is heard at his best with orchestras that he has directed for long enough to have established a bond of mutual understanding, for he works from within the ensemble rather than from without.

Conductors of the new persuasion can be stimulating performers on both the intellectual and emotional level, as George Szell has so brilliantly demonstrated in his American career. Unfortunately, for those reared on the virtuoso conductors of the Thirties, some apostles of the new school appear too bland and self-effacing in their approach to music. They are high on scholarship but low on magic. One misses from them the vitality and magnetism that audiences once expected as a matter of course.

All this has had its effect on the box office, as concert managers and the a & r men at record companies will attest. The public is searching for something out of the ordinary—and it is not always finding it. But as the outlook and method of the new conductors become more widely understood, these musicians will gain in confidence and begin to put forward a more distinct artistic profile. Increasingly, they will show, as Szell has already shown, that it is possible to speak for the composer and yet possess the boldness in concept and execution which make for the strongest ties between the conductor and his public,

"A Mixture of Instinct and Intellect"

Some revealing shop talk on the fine art of conducting between

GEORGE SZELL and PAUL HENRY LANG

LANG: Mr. Szell, I shall not ask you about your favorite dishes, nor about whom you consider your ten favorite composers. Since this is an opportunity for HIGH FIDELITY's readers to be admitted to the workshop of a conductor, let us engage in shop talk. Conducting, like other forms of executing music, relies, of course, both on instinctive musical feeling and on technical mastery of a craft. But, unlike a solo performer, a conductor is engaged in making others carry out his wishes. Therefore, another dimension is involved. Would you care to comment on this?

SZELL: To make an orchestra-to make playersrealize the diverse characteristics of various styles and to transfer this realization to their music making -is one of the most important tasks of a conductor. The means to this end are, of course, partly of a technical nature. I personally like complete homogeneity of sound, phrasing, and articulation within each section, and then-when the ensemble is perfect -the proper balance between sections plus complete flexibility-so that in each moment one or more principal voices can be accompanied by the others. To put it simply: the most sensitive ensemble playing. Perhaps I can best characterize my idea when I say it should be a chamber music approach, not a hundred men playing while looking, like slaves, at the stick, but a hundred men playing, each of them listening, so far as possible, to the ninety-nine others, and trying to make music together the way a string quartet does. Because of the size of an orchestra it has to be done under the guidance of a conductor, but not under his knout—if I may put it that way. Does this give you an answer?

LANG: It certainly does—and it's an interesting counterbalance to the widespread belief that the conductor elicits sounds from the players solely by his choreography.

SZELL: Now here I must go one step further. While

the choreography is really not essential—and sometimes it's even harmful because aimed primarily at the audience, not at the player—the posture, the gestures, and the facial expressions of a conductor are of tremendous importance—as you yourself recognize, because as I happen to know, as a very young man you played in an orchestra.

LANG: And on one occasion under you-when you were also a very young man.

SZELL: And under me! Even that! After more than fifty years' experience as "conducting" conductor and as "observing" conductor, it still seems to me miraculous how the sound of an orchestra can change from one minute to another according to what type of person stands in front, and according to what type of hand the players watch, and what type of eye looks at them. I found in our tests for the Ford Foundation's project for young conductors a very vivid demonstration of this miracle, when one contestant stepped up and conducted for ten minutes and then another took over and the orchestra sounded completely different. Now, I wish I could explain this to you, but I think that it is really inexplicable-we just have to put it down to the miraculous little residue that remains probably in each artistic discipline and which can fortunately never be explained.

LANG: While you are catholic in your tastes, you have acquired a reputation as a specialist in the works of the so-called classical composers of the eighteenth and nineteenth centuries. Would you comment on the widely shared bit of nonsense that this music must be doctored for modern audiences? What are your beliefs in this regard, and how did you bring your men to so felicitous an understanding of this music?

SZELL: Well, I'm certainly of the opinion that this music does not have to be, and should not be, doc-

tored. I think it is perfectly possible and even necessary to play it without any doctoring. What is essential is a feeling for the style of the music. The approach, particularly on the part of the strings, will have to be a little bit different from the approach that some take to Tchaikovsky and Rachmaninoff and which they then like to apply to older literature. The works of the eighteenth and early nineteenth centuries demand a distinct curbing of exhibitionist tendencies, at the same time that the delivery must not be allowed to become cold or dry or doctrinaire. It should be very warm, yet chaste, graceful, and elegant-yet not affected. It's the man of a different period who expresses himself. And then, there are technical questions that come into play, as to how many strings.... You have another question?

LANG: Yes. It is understood that in our large concert halls the typical eighteenth-century orchestra would be somewhat lost. Some conductors just go ahead and play Mozart with the standard modern complement, which of course does not do, while others reduce the strings, which in itself is not an ideal solution. You seem to employ a much more subtle procedure. Would you describe it?

SZELL: Yes, I think I can give you a very exact answer. In some works, in some of the more majestic or festive works, where we know that even Mozart himself was enchanted by performances with a big string choir and with doubled woodwinds, I proceed in the same manner. With other works, I reduce the number of strings, but then I have a variable reduction scheme. Supposing I take a standard complement of strings in a given composition: twelve first, ten second violins, eight violas. five or six cellos, three or four basses-I like, incidentally, to lighten up the basses for obvious reasons. This probably will give me the proper balance for most of the piece. But if I find that in some spots it does not, I reduce all sections or some sections even further, albeit often only for certain passages.



LANG: I have noticed that, and I have wondered how you arrived at these differences. Here you reduce, there you add, and the statements are always clear.

SZELL: It's a question of balance. You see, it is the balance I pre-hear that I go after—and if you ask me how I do that, what I do, then perhaps the best answer is, I have a conception; I have an aural image of what I want, and I go after it *coûte que coûte*, with all the means at my disposal.

LANG: Well, it's very interesting because clarity, of course, is the first thing in this music and you get it by balance.

SZELL: Absolutely. But let me add one thing. Though I don't want to reflect on my colleagues, I feel that not very many present-day conductors are basically and constitutionally attuned to polyphonic hearing, if you know what I mean. For my part, I have been trained to hear in my mind the whole texture and I hear the various parts and voices in their relationship and proportion before I hear the actual sound. Then I try to match the actual sound with this preconception.

LANG: I have a concrete example in this regard. In one of your recent recordings, Mozart's Piano Concerto No. 19 with Serkin, the complicated polyphonic passages came out with exceptional clarity. How do you approach this situation, the most difficult task in orchestral playing?

SZELL: I think I have given you the main answer but I have to add something. If an orchestra is trained to honest chamber-music-like playing, with the result that every player in every section plays every note with the proper articulation and emphasis in dynamics . . . if that is the case, the task of the conductor is made very much easier. Then he can put together a few strands which already are clean and balance them properly. Now, how does one train an orchestra to do this? By simply not putting up with anything less.

LANG: And if the players are constantly reminded to listen to each other. . .

SZELL: It becomes second nature for them.

LANG: But you see, in our youth, you and I were brought up on chamber music. That's missing today.

SZELL: Unfortunately, yes. There has been a greater and greater separation between chamber music and orchestral music. Today you have elite chamber music players who never play in an orchestra, and you have orchestral players who never play chamber music except sometimes for their own entertainment —and then most of the time it's pretty awful. I would remind you that the Rosé Quartet—which was for a generation probably the best string quartet in



Central Europe and which studied the repertoire with a certain Gustav Mahler who happened to be the brother-in-law of the first fiddler. Rosé—this Rosé Quartet was nothing but the section leaders of the Vienna Philharmonic and the Opera.

LANG: Our musicians have become specialists.

SZELL: Yes, but this is a very dangerous type of specialization. The divorce between chamber music and orchestral playing is ruinous. I stoutly maintain that whatever is possible to attain in the way of performance clarity and purity and cleanliness in chamber music is possible with an orchestra if you know how and if you devote enough time and attention to this end.

LANG: Attention to detail is always the mark of a good conductor. But fullness of detail is not always a merit. In your own work it seems to me that you never miss the thematically relevant passages but are averse to the kind of clinical examinations some conductors are fond of. Is this instinctive or planned?

SZELL: I suppose it is both. Altogether, if I may digress for one moment, I think that what we should aim at is the perfect mixture of instinct and intellect in the application of what we are able to do. and sometimes I am tempted to tell my students that the ideal thing would be if we could arrive at the point where we think with our hearts and feel with our brains. But to answer this question a little more specifically, I believe that awareness of the relationship of details to the whole is what is most important. If details are lifted out of proportion simply because the conductor is proud to have discovered something which seems to have been hidden, then the performance can very easily become a travesty or a caricature. But every detail in its proper place and with its proper emphasis will enhance the effect-and by effect I mean not an outward effect but the result desired by the composer. I start out with the assumption that everything a good composer writes down is supposed to be heard except in obvious cases where a coloristic impression is intended, as for instance the violin figurations in Wagner's "Magic Fire Music."

LANG: I asked this because the other day I heard a recording by a very distinguished conductor of advanced years who brought out every little detail with the utmost clarity—to the point where eventually it seemed merely meaningless precision.

SZELL: Because probably the big general line was lost. Well, there are also aesthetic questions involved. You see, one term which was used one hundred and fifty years ago so very, very frequently and which is not used any more except very rarely is the term "taste."

LANG: Yes, it's curious—everything is technique and precision and volume, and other things are forgotten.

SZELL: But this term "taste" was used in the most serious evaluations of musicians.

LANG: What is historically wrong is nine times out of ten aesthetically wrong. Do you find it imperative to keep abreast of the serious literature on music and new critical editions of the great masters?

SZELL: Yes, indeed, I find it extremely important to keep abreast of all these things, but—and here I may step into a hornet's nest—I have my reservations about some of the musicologists. Many of them are not musicians. The trouble is that many performing musicians have absolutely no musicological background and many musicologists are dry-as-dust scholars without any live contact with real music and music making.

LANG: And then the trouble is that they edit.

SZELL: Exactly. They edit; and even if they edit Urtexts, they are apt to go much too far in dogmatic adherence to a manuscript, without taking into account that in many cases the first printing supervised by the composer may be more authentic than the manuscript-he might, for example, have made changes which he did not bother to incorporate in the manuscript. Also, I have found that some problems of authenticity simply cannot be considered as finally solved: later versions, later authenticated copies may very well be found and our understanding of the work changed. So, while I'm certainly in favor of knowing as much as can be known about these things and following every bit of musical research, there comes a moment when I feel-and I may be a heretic here-that my instinct and judgment as an experienced performer must be the guiding and, at last, the determining factor.

LANG: You are right.

SZELL: Simply because if I cannot perform something with complete conviction. I cannot make it sound convincing to the listener. LANG: What do you do with scores, such as Chopin's concertos, where even a conductor with abiding respect for the composer's intentions must take hand in rectifying miscalculations?

SZELL: Well, I would like to answer this question in two parts. If we take Chopin's concertos in particular, I am afraid that there is no remedy except complete reorchestration. Now, if we talk about certain other scores, I must confess to some retouchings, but I try to make them so discreetly that they are not really noticeable—at least I hope they're not. In Schumann's symphonies, for instance, in order to clarify the real intent of the composer it is absolutely necessary to retouch. One must exercise a careful hand, of course—that is, acting as if Schumann had had as much skill as an orchestrator as Weber but not making his work sound as if it had been orchestrated by Richard Strauss. I think you'll agree with that.

LANG: Yes, I do. As long as the retouching is imperceptible and sounds natural, it is fine. But how do you feel about these cadenzas foisted on great concertos?

SZELL: I'm afraid that we could get into a real argument here. If you mean only the bad cadenzas that violin and piano pedagogues made for these concertos, I'm all with you. But if you say that cadenzas should be abolished altogether, I'm afraid I would not go along.

LANG: I wouldn't say that . . . but some of these cadenzas are a third again as long as the movement itself.

SZELL: That of course is very bad, but let's not forget one thing. The cadenza was thought of by the composer as something that *should* be happening. Just what, and to what length, was left originally to the taste of the performer. There is a *juste milieu* for this as well. If the cadenza has too little specific weight, it is not good. If it is exaggeratedly long and verbose, it is also bad. So how do we decide this question?

LANG: It would be ideal if the performer still could improvise.

SZELL: Exactly.

LANG: Some can.

SZELL: I have always been a bit skeptical about this sort of improvisation because I have often found, particularly after repeated listening to the same organist improvising, that there are a few stock formulas on which he falls back, no matter what the thematic material imposed upon him is. Now, since we have spoken about the separation between chamber music and orchestral music, why don't we speak about the regrettable separation between the composer and the performer? And why don't we say that actually every performer should be trained as a composer even if he has no talent for composing, so that he at least knows what the music universe looks like from the composer's vantage point?

LANG: In the old days they didn't teach conducting; they taught music, and then you started to conduct. Now, if I may, I'd like to ask you a few concrete technical questions. The phrasing and bowing of your strings is such as cannot be ascribed solely to a knowledgeable concertmaster. To what extent do you control your strings in this regard?

SZELL: A hundred per cent, my dear Paul. You know that I own the complete orchestral materials of the whole standard repertoire. I take these orchestral parts everywhere, and they contain all the bowings and phrasings marked by me. I sometimes consult with my concertmaster, not to learn what is feasible but to find out what his personal preference may be in cases where there is more than one solution to a given problem. Basically, my bowings and phrasings are completely my own-and have been for the past thirty-five or forty years. I have made this a study as long as I have been connected with orchestras and strings; and I have found that not being a string player myself but having intimate knowledge of bow technique makes me less hidebound in habits and conventions. As a result, I sometimes can invent highly serviceable if unorthodox bowings for certain passages, which then enhance the effect, the plasticity, and the clear articulation.

LANG: I asked the question because I noticed it.

SZELL: Well, I'm glad you did.

LANG: And the woodwinds. Yours sing. They are in perfect tuning, and the chord-defining tones are always on top. How is this done?

SZELL: Here I must give very great credit to my woodwinds. I can think of no orchestra having a finer set of first wind players than the Cleveland Orchestra—and I don't want to overemphasize the word "first" because the sections as such are really distinguished. Of course, these players are not only highly competent; they are real artists. They have been working together and with me over a period of fifteen, eighteen years. And we have grown together, we have adjusted to each other. . . .

LANG: Their intonation is marvelous.

SZELL: Also as far as phrasing is concerned, they aim at the homogeneity Continued on page 110

Masters, Matrices, Mass Production

A look at what's involved these days in making records by the millions.

by Shirley Fleming

T WOULD BE A PROSAIC SOUL indeed who failed to marvel at the process by which sound—that most fleeting and intangible of natural phenomena —is captured literally out of thin air and stored on records for future use. Here we propose to take up the story *in medias res*: that is, at the point at which the electromagnetic patterns "frozen," as it were, on an edited master tape are ready to be converted into the physical form of grooves cut into a lacquer disc. From there the story leads on to the mechanical operations involved in producing thousands (or millions) of commercial records from the original set of lacquers.

And so, plunging into this modern tale of high adventure, we find ourselves in the cutting room and concerned first with the new, untouched lacquer —or more accurately, acetate—disc which is to be the progenitor of countless offspring. The material itself, coating an aluminum base fourteen inches in diameter, is soft (relatively speaking) and volatile. It must be capable, in recording engineers' parlance, of "throwing the chip"-that is, giving off in one continuous and unbroken strand the waste thread that is to be sheared away by the cutting stylus; it must be free from the tiniest imperfection, for cutting differentiations can be made on the order of one millionth of an inch and the slightest irregularity could wreak havoc; it must be comparatively free from oil, which will interfere with the subsequent silvering process (bearing in mind that too much washing, to get rid of excess oil, will make the surface rough). And it must, of course, be as flat as human ingenuity can make it, with an absolute minimum of warp or unevenness to interfere with the path of the cutting stylus.

This stylus is an instrument of the greatest delicacy.

A chisel-shaped cutting point measuring less than .0002 of an inch in diameter and made of ruby (formerly sapphire), it is heated to a temperature which will soften the acetate just enough to facilitate cutting and will polish the walls of the groove as the stylus moves through. The shank of the cutter too, microscopic though it is, is critical, for it must be strong enough to resist the tremendous force brought to bear on it as the stylus bites into the lacquer. Any measurable amount of bend or sway would, of course, change the angle of the stylus in relation to the surface of the disc.

This last matter brings us to a third crucial factor in the cutting process: vertical cutting and tracking angles. As anyone who has followed recent discussions of this subject is doubtless aware, the angle at which the cutting stylus tilts forward from the vertical becomes a source of distortion when it differs substantially from the angle at which the playback stylus tilts forward in tracking the record. This differential is most critical with stereo records; since the grooves incorporate the differing signals of left and right channels, the stylus must move not only from side to side (as on monophonic discs) but vertically as well. (For those who have never had the experience of viewing a stereo groove through a microscope, let me digress for a moment to say that it is like peering into a V-shaped canyon each wall of which runs in its own varying pattern of bends and curves.) The over-all shape of the groove is the result of a combination of two factors, frequency and loudness: low frequency signals cause the cutter to move in a wide side-to-side excursion, high frequencies in a much smaller one; loud passages cause greater "agitation" than soft passages. In a stereo recording with a loud bass passage in the right channel, for example, the right groove wall will be bent out in response to this signal, while the left may make very little excursion at all. Since the curvature of the two walls differs, the depth of the groove also differs-hence the stylus' vertical movement (though it should be noted that the playback stylus properly picks up left and right channel signals by riding along the walls of the groove; it should not touch bottom).

It is easy, then, to see that the angle at which this complex V-shaped groove is cut should, for the greatest fidelity, correspond to the angle at which it will be played back. As it happens, however, many (perhaps most) playback pickups differ from the cutting stylus in this respect. Of recent years this discrepancy has been somewhat modified by the adoption on the part of the major record companies of a 15-degree cutting angle for stereo discs, and cartridge manufacturers are currently giving the problem new attention.

HE CUTTING APPARATUS is a complicated affair, and I shall here consider only its basic features. The cutting head itself, carrying the stylus which is activated electronically by the master tape, is

mounted in one of two ways: either borne on a stable arm which spans the lacquer disc from center to outer edge; or held on a movable structure which follows the inward spiral of the cutting path. In the first case, the stylus is suspended over the disc; in the second, its minute weight actually rests upon the disc, and is preceded by a tiny, counterbalanced "advance ball" which "feels" the terrain just ahead of the cutter and enables it to follow any slight deviations in the plane of the disc. In both cases, the stylus is kept in a constant position in relation to the grooves it is cutting: it does not, like the playback stylus, turn at an increasing angle across the grooves as it approaches the center of the disc. Herein, of course, lies an inevitable source of lateral tracking error when the disc is played back with an arm that is mounted on a pivot; but this particular discrepancy has been well known for years, and has been compensated for by the design of modern tone arms.

Two other aspects of modern microgroove cutting are, however, of particular importance. One is the ability to "warn" the cutter ahead of time to vary the depth of the groove---so that, for example, a segment involving wide side-to-side swing may be cut deep enough to prevent the stylus from jumping out of the track entirely. This is known, logically enough, as variable depth cutting, and is used in making most classical records today. The other feature is "variable pitch," which refers (not so logically, to the layman) to the ability to vary the number of grooves per radial inch. Sections of a groove with wide excursion require more space, naturally, than those with narrow motion; yet the land between grooves must be broad enough at all times to prevent adjacent groove walls from interfering with each other. The number of grooves per inch can run as high as 420; the usual standard, where length of playing time is not important, is 210. The "warnings" which prepare the cutter to vary both depth and pitch are transmitted by a prehead, attached to the cutting room tape deck. The prehead monitors the contents of the tape about 1.8 seconds ahead of the regular head activating the cutter, and its message is duly received and obeyed by the cutter.

An additional feature has been added to these standard cutting procedures by RCA Victor as part of its Dynagroove system. RCA's development stemmed, in part, from the fact that while a disc is cut by a chisel-shaped stylus, it is played by a round (or in more recent instances, elliptical) stylus. This means, of course, that the playback stylus fits the groove in quite a different fashion from the cutting stylus, and that the signal as picked up in playback may vary slightly from that transmitted by the master tape. The Dynagroove approach is to alter the shape of the grooves ever so slightly so that the motion of the playback stylus will reproduce exactly the original signal; in short, a minute discrepancy is introduced into the cutting to counteract the discrepancy in playback, and the two are intended to cancel each other out. RCA's Dynamic Styli Correlator, as it is called, is claimed to reduce distortion by a substantial amount, particularly in a record's inner grooves.

In the cutting room, the various interacting elements of the operation are adjusted with hairsbreadth precision on equipment worth, in the aggregate, about \$20,000. The place itself is as austere and aseptic as a hospital laboratory, and a visitor is apt to find himself involuntarily whispering. (He is actually cautioned not to speak if he leans close to the turntable to look at the lacquer, for the condensation of breath can be harmful to the surface.)

The rack of amplifiers supplying power for this critical phase of record making stands six feet or so in height, and combines in one chassis the cutting amplifier (with a potential power output of 75 watts), a feedback amplifier (which enables the engineer to audit the signal from the quarter-inch, 15-ips master tape) and a jack panel (which can accommodate any additional switches needed in the circuit during a particular operation). The cutting lathe itself bears a massive 17-inch turntable, over which a microscope is mounted. This microscope, let us note, is in many cases the only means of "auditing" a lacquer intended for production use: stereo lacquers in particular are never actually played, for the grooves must be in pristine condition for plating. An engineer's prime concern, as the cutting proceeds, is to check the grooves by sight, and an experienced operator can tell at a glance if the cutting is too deep, too close, or too shallow. He must also keep careful watch over the behavior of the "chip," which can damage both lacquer and the stylus if it becomes tangled. A small suction tube is mounted very close to the stylus to draw this waste strand away into a closed container of water mounted behind the lathe. Since it is highly flammable, there are jokes in most cutting rooms about "the last time we had a good blowup."

It is the aim of most record companies to produce a disc that is sonically identical with the master tape, and therefore all adjustments are made at the start of the cutting operation; the engineer leaves his control settings untouched once the tape is rolling, and his only manual chore during the cutting is that of regulating the groove spiral between bands.

Before working lacquers are shipped to the pressing plant, one important step remains: a sample disc is turned over to the a & r man who was in charge of the recording session, and passed upon by the artist himself. With their approval, the second phase of production can begin.

FOLLOWING the new lacquer from the cutting room to the pressing plant, we leave an environment that is primarily electronic and enter one that is primarily mechanical. The job remaining, put succinctly, is one of duplication.

The lacquer disc, from the moment it enters

the door of the pressing plant, is treated as if it were a fine jewel—and with good reason. The flick of a fingernail across a groove could be fatal, and a further hazard arises from the fact that with the passage of time certain volatile components of the acetate evaporate, leaving the disc dry and brittle. Most companies do not even bother to store a lacquer for any length of time when its purpose has once been served. I.

Taken at bird's-eye view, there are four steps leading from the lacquer disc to the finished commercial record. First, a mold of the lacquer is made —which is, of course, a negative impression; this is called the master. Second, a mold of the master is made, which is positive, called the mother or matrix. Third, a mold of the matrix yields another negative—which is the stamper put directly into the hydraulic press. There, like the proverbial cookie mold, it stamps out finished discs by the hundreds. The record on the home turntable, in short, is a fourth-generation descendant of the original lacquer cut from the master tape.

One may wonder why four generations are necessary instead of only two—why, in other words, the first negative impression made (the master) should not go directly onto the press. The answer lies in the necessity for mass production; since only a limited number of masters can be made from the delicate lacquer, it would be dangerous to consume these masters on the presses, where they are subject to damage and wear. Much better to use them to create matrices, which in turn can produce stampers in limitless quantities. In this way the master—the closest living relative, so to speak, of the shortlived lacquer—is preserved intact.

One of the impressive aspects of the system as a whole is the minute and thorough inspection which occurs each step of the way. The Manager of Quality Control in the modern record plant is perpetually on the hunt for scratches, pops, ticks, dents, dust, and other despoilers of the microscopic hills and valleys of a disc surface. At no point in the entire process does a disc—lacquer, master, matrix, or stamper—change hands without undergoing a check, either visual or auditory. In the area of Quality Control the human eye and ear still reign over the machine, and one major company estimates that 40 per cent of every production dollar goes into the maintenance of these demanding standards.

On its arrival at the pressing plant the lacquer undergoes a very thorough examination by microscope and is then washed with equal thoroughness (through two cycles, with a mild detergent). Next, since it is to be subjected to electroplating and is itself a nonconducting material, it must be sprayed with a fine coating of silver. This can be done either by hand or automatically in a silvering machine, the entire operation taking no more than three minutes. In either case, the coating must be uniform and even; any spot too thinly covered will fail to respond properly to the plating process.

After silvering, the disc, mounted on a rack

through its center hole, is immersed in the churning green nickel solution of the plating vat, where, in the course of approximately three hours, it is coated with a substantial deposit of nickel. It is then rinsed, and the two sides of this imposing sandwich are carefully (by hand) peeled apart: the original lacquer is left intact on one side, the silver facing with its backing of nickel is on the other. The lacquer is ready to be used all over again; the silver-faced master, bearing the negative impression of the lacquer, is ready to be plated, in turn, to produce a positive matrix.

The master, therefore, after a series of chemical rinses, is duly coated with nickel. That facing too is peeled away, and the resulting matrix (a replica of the original lacquer) is ready, after steam cleaning, for what is perhaps the most critical phase in the process of quality control: the Ordeal by Audio Inspection.

The matrix inspector (they were invariably women, I noticed, at the plants I visited) is established in a tiny soundproof listening booth fitted out with stereo playback equipment, a beam of light centered on the record grooves, and a supply of water-soluble crayon or plain Ivory soap sharpened to a point. The playback assembly is designed specifically not to flatter the record: flat response is used, speakers are of the infinite baffle variety (bass reflex is avoided because a strong bass tends to cover defects), and playback level can only be described as loud. In this no-nonsense setting, the nickel matrix is placed on the turntable and first spot-checked to ascertain if it is worth a full twenty-five minutes of the inspector's time. If the answer is affirmative, the inspector sets to work at Groove 1 and listens with a concentration which any music critic might respect.

She may be guided (as was the case in one



In the photograph at left an engineer inspects through a microscope the pristine lacquer disc as the cutting head is borne across it and a suction pipe draws off the "chip." Below, the lacquer has been shipped to the pressing plant: here it is sprayed with a fine silver coating prior to electroplating.

RCA Victor Records









RCA Victor Records

Columbia Records



RCA Victor Records

Above, the silver-faced master is peeled away from the nickel matrix, a replica of the original lacquer. After steam cleaning, the matrix is subject to a rigorous andio test and then passed on to a repair man for correction of minute flaws. From the matrix is made the stamper, final progenitor of the vinyl disc. At left, operator places bot vinyl compound in hydraulic press, where it will be molded into shape by top and bottom stampers. A last inspection is given the finished records as they pass through conveyor-belt assembly lines and are slipped, by hand, into their inner protective envelopes and outer jackets.



Columbia Records

plant) by a check sheet tacked to the wall bearing the interesting vocabulary listing: "echo, pop, swish, pit, grit, zip, scrap, dash, break, stain" . . . and last but not least, "clean better." When a flaw is detected, the inspector moves the turntable back and forth under the stylus by hand in order to pinpoint the spot; she then touches the tiny area with soap or crayon and once again allows the stylus to travel through the faulty groove. As the stylus moves, of course, it takes the soap with it, leaving a single clean groove at the outer edge of the marked area. Thus the offending spot is indicated. The matrix is then handed over to a repair man who, with the aid of a microscope, cleans the groove with a brush or a fine-pointed instrument. Sometimes the correction is simply a matter of removing a fingerprint or a stain left from the steam washing. If the flaw cannot be eliminated, the matrix is destroyed and the master rechecked. Or if necessary, a matrix may be sent to the cutting studio for comparison with the master tape, in order to determine whether flaw occurred in the tape itself, or in the lacquer.

Once a matrix passes this rigorous examination, it is pronounced fit to produce the third-generation in the record family, the stamper. The matrix itself is plated with nickel to a thickness between .008 and .01 of an inch, and this plate is peeled away to form the stamper. The back side of this stamper is smoothed carefully on a rotating wheel, using emery cloth of increasing fineness; then, after exact centering by means of microscopic measurement of grooves, a "pilot hole," one inch in diameter, is punched dead center. Next, the edge is trimmed and "coined" (shaped into a small ridge all the way round to enable the disc to be locked into the press). Finally, the stamper is cleaned, inspected as to weight, thickness, accuracy of centering; and last of all it is coated with chrome to increase its strength and resistance. It is then ready to be fitted into the large hydraulic press, where (with its companion, the stamper of the reverse side of the commercial disc) it is plunged full tilt into the operations of mass production.

THE PRESS ROOMS in the two plants I visited were approximately the same size: one housed ninety-eight machines, the other ninety-four. (And if you have ever stood amidst a forest of hydraulic presses going at full roar, you can appreciate the din which surrounds the actual birth of a high fidelity record.) It is in the press room that the disparate elements of the final record package come together: labels (printed on large sheets in an adjacent room, cut apart, center-holed, and then brought into the press room for a final drying in electric ovens so that no possible moisture can mar the vinyl disc); paper or plastic inner sleeves; cardboard album covers (shipped in from an outside source); and--most important of all-the vinyl compound which becomes the finished disc itself.

This compound, purchased from outside manufacturers, arrives in the form of black, shiny crystals. When heated to a specific temperature they dissolve into a hard though pliable doughlike mass; this substance is ejected in a series of measured coils, emerging one at a time like monstrous mounds of black taffy, onto a platter adjacent to each press. The operator places the mound of plastic into the press at the start of each stamping cycle.

The press itself, with A and B stampers locked top and bottom, operates like a giant waffle iron. At the beginning of each cycle (which, incidentally, takes less than a minute) the operator inserts the proper labels against each stamper and places the wad of vinyl in the center. The press closes automatically, and the stampers (heated to about 300° F.) mold the vinyl at a pressure of roughly one ton per square inch. The temperature is almost immediately reduced to about 90° so that the vinyl hardens; the press opens, and the operator moves the still hot disc (with labels actually molded into the surface) to a trimming device which cuts off excess material at the rim and produces a smooth finished edge. This excess material is eventually remelted and used again, having been demoted from first-grade to second-grade rating; three grades are acceptable for record manufacture, though only the first is used for classical recordings.

The new-born discs are stacked on a spindle which is constantly spot-checked by a roving inspector. (One record per spindle is weighed, and should be close to 140 grams.) At any hint of imperfections, most of which are visible at this stage, the disc is taken to a listening booth for audio test. If a fault is confirmed and proves to have originated with the stamper, the stamper is destroyed along with any imperfect discs it may have produced. A stamper, it was pointed out to me, seldom actually wears out. It is, however, subject to damage from a stray hard particle in the vinyl compound, or from accidental slippage in the press, or from the pressure of a bit of dust on the back side which may push a dent into the surface (in this respect, the pressing of stereo discs, with their critical hill-and-dale dimension, is particularly delicate).

The new discs, once passed by the roving inspector, are sent on for the final lap of their trip to the outside world. Through a series of conveyor-belt assembly lines, each is inspected, slipped by hand into a plastic or paper envelope, placed in its jacket, and, in some cases, run through a "shrink-wrap" machine which encloses the entire package in a tight, heat-sealed, polyethylene wrapping. Once boxed with dozens of its kind, the disc is now ready to be shipped by truck, train, and even plane to the points of distribution.

Produced in quantities vast enough to fill the demands of a mass market yet maintaining a standard of quality worthy, in most cases, of limited editions, the modern microgroove recording is surely an achievement of no mean proportions.



Recent refinements in pickup design make your system's smallest component a major factor in upgrading sound.

by Albert Sterling

To RAISE THE QUALITY of his music system, the audio enthusiast has always had an effective leverage in the replacement of an existing phono cartridge with a better one. The pickup is basic to the quality of the sound; it is also relatively inexpensive, and in most systems one cartridge can fairly easily be substituted for another. Right now, making such a change can be more rewarding than ever. Pickup design is currently undergoing a spate of activity, centering on such features as very high compliance, very low mass, the 15-degree tracking angle, elliptical styli, and new magnetic circuits. All of these developments, in sum, are producing lower distortion in sound and longer life for records.

The pickup is, of course, intrinsically a near miraculous device, performing almost the impossible in getting the patterns of sound out of a record. These patterns, or microscopic wiggles, are contained in grooves cut into the master disc by a stylus vibrating in step with the sounds from the original tape. To follow those grooves, the tip of the playback stylus must make the same rapid and complex weavings as the cutting stylus—quite a trick, inasmuch as these original sound vibrations often reach as high as 20,000 cps. A mechanical part that vibrates at 20,000 cps, incidentally, must accelerate as much as 1,000 g (i.e., 1,000 times the force of gravity).

Beyond this feat, the stylus must serve as part of a miniature electrical generator that will produce electrical signals in step with the stylus vibration. Such generators, or cartridge movements, can be designed in any of several ways, and pickups are usually classified according to the generating system. One major group is the magnetic, which includes several types—the moving coil, the moving magnet, and the moving iron or variable reluctance. Another family of pickups is the piezoelectric, crystal or ceramic. As far as superiority of performance goes, the generating method per se is unimportant; what matters is the skill with which the method is adapted to the cartridge's over-all design and functioning.

O MAKE CLEAR just what is involved, consider first the action of the stylus. It would appear that since the tip of the stylus is held between the two walls of the groove, the stylus must perforce go wherever the groove guides it. Unfortunately, not so-the tendency of the stylus to disobey the groove constitutes the main focus of the pickup designer's effort. For instance, one effect of the stylus-versusgroove conflict is "tracing distortion." The stylus used to engrave the master record is chisel-shaped, so that it will cut. The playback stylus, however, is rounded, so that it will slide. A chisel cuts a trough with a slightly different shape from that which a rounded tip needs to duplicate the cutter motions. The difference becomes greater as frequency increases, as loudness rises, and as the linear speed of the record surface under the stylus decreases-which, of course, is what happens necessarily as the stylus travels towards the label. Thus tracing distortion is at its worst on loud, high treble notes at the inner grooves of a record; it is in fact a main cause of inner groove "muddiness," accentuated by the fact that musical works often end on a sustained crescendo-right at the inner part of the groove. To some extent, the advance in tone quality that stereo generally represents has led us to overlook the rather high tracing distortion. Yet it would be patently desirable to eliminate it.

One obvious way to reduce tracing distortion is to make the stylus tip narrower or sharper (reduce the radius of the tip). Exactly this was done when we went from mono discs to stereo-the standard tip radius was reduced from 1 mil (0.001-inch) to 0.7 mil, because tracing distortion in the stereo groove, with its complex wiggles combining both lateral and vertical movement, was found to be higher than in the purely lateral mono groove. Later, many designers further reduced stylus tip size, and the 0.6- and 0.5-mil stylus appeared. Most recently, a 0.4-mil stylus has been offered. While the narrower stylus sounds a little cleaner on many stereo records, it will result in high distortion on many mono discs. The mono groove is often wider at the top, and more rounded at the bottom, than the stereo groove, and a tip as narrow as, say, 0.5 mil may ride on the bottom of the groove instead of being held between the two side walls. It can, in effect, "rattle around," and the result is shattery sound in loud passages.

Since tracing distortion is still measurable on stereo records even with a 0.5-mil stylus, should the tip radius be reduced even further? There is no clearcut answer to this question. Unfortunately, the smaller the stylus tip, the more pronounced grows another problem: the record material, as the stylus "sees" it, is not hard and rigid but more like a stiff, springy jelly. As a result, the stylus tip indents the two side walls of the groove at the two points of contact. If the indentation is not too severe, the wall snaps back after the stylus passes. As the stylus is made sharper or narrower, however, the depth of the indentation increases because the total force exerted by the stylus is applied over a smaller area. Then, distortion rises, and the wall is more likely to be permanently deformed or broken. A stylus tip, therefore, should be neither too large (for low tracing distortion) nor too small (for minimum groove deformation). "Total stylus force," however, depends not only on the tracking force ("needle pressure") but also on the very design of the pickup (more of which further on). It would then seem that for each pickup there must be a best stylus radius. For most current stereo pickups, tracking at 1 to 3 grams. I would say that the 0.5-mil stylus is about optimum. One cannot be dogmatic on this point, though, and many engineers would argue my conclusion.

An even more recent attack on tracing distortion in stereo disc playback is represented by the elliptical (oval, or biradial) stylus. This stylus—with a smaller dimension along the groove than across it has the shape of the chisel that cut the record originally. The narrower edges or radii at the sides of the tip allow the stylus to "reach into" smaller groove undulations, while the broader width across the groove keeps the tip from hitting the bottom of the groove. Just how effective the elliptical stylus will prove to be in the complex interaction among pickup and record design factors is still too early to say. Certainly, the idea is at least a highly promising one, and the first cartridges that have appeared with an elliptical stylus all are top performers.

Yet another attack on tracing distortion is implicit in one aspect of the RCA Dynagroove system for cutting records. According to RCA, signals going into the cutting equipment are "predistorted" in such a way that the cutting chisel produces the kind of groove "needed by" a conical stylus. While many Dynagroove records have indeed sounded exceptionally clean on the inner grooves, many records of other makers also sound clean on the inside grooves—which would indicate that tracing distortion can be controlled in some measure by careful attention to recording levels and by other methods. Again, more experience is needed to learn just how decisive the Dynagroove attack on tracing distortion will prove to be.

As NOTED EARLIER, a large part of the force exerted against the record by the stylus depends on the pickup design. The more this part of the force is reduced, the better; the stylus tip then could be made sharper, for instance, with a reduction in tracing distortion. Aside from this, the refinements in design necessary to reduce that force improve performance in other fundamental ways—frequency response, for one. This aspect of design divides neatly between highs and lows. In reproducing the lows, a crucial factor is the tension of the spring that returns the stylus to center. If this spring pulls too

REPRESENTATIVE STEREO CARTRIDGES

Cartridges, or pickups, are specified in terms of various performance characteristics, such as compliance, rated output (sensitivity), and so on. Actually, the methods used for deriving, and expressing, these and other figures vary among manufacturers. Compliance, in particular, seems one of the least standardized of measurements. It may, for instance, be obtained "dynamically" (the pickup's behavior while tracing a test record), or "statically" (the maximum displacement of the stylus while the cartridge is held rigid). In general the static figure will be much higher than the dynamic; for this reason, some experts hold that static compliance is an unrealistic measurement; they favor the dynamic test. On the other hand, proponents of static compliance and ynamic test the compliance of the pickup can be influenced by the nature of the test signal on the record, the tone arm bolding the cartridee. and other compliance test.

holding the cartridge, and other confusing factors. One manufacturer has suggested, and at least two others partly agree, that compliance figures in general have been overemphasized and that, in any event, since they can be derived by different methods, they serve little useful purpose.

Ågain, the signal output, or sensitivity, of a cartridge is usually stated in terms of the reference level of 5 cm/sec. Yet many are specified in other terms. Another area for variation is in stylus tip measurements: a "0.5-mil" stylus actually may describe a stylus that measures from 0.4 mil to 0.6 mil. For all this, the data shown here cannot be taken as an absolute comparison among different makes but rather as a general reference guide and, perhaps more to the point, as relative indications among several models offered by the same manufacturer. Note: compliance figures are given as (x 10^{-6} cm/dyne).

ADC cartridges are induced magnetic types. Model Point Four: \$50; rated compliance, 30; stylus, 0.4-mil; vertical angle, 15 degrees; weight, 6.5 grams; rated output, 5 mv per 5.5 cm/sec; tracking force, 34 to 1½ grams. Point Four/E, same, except: cost, \$60; stylus, 0.8-mil by 0.2-mil elliptical. Model 660E: cost, \$39.50; rated compliance, 20; stylus, 0.8-mil by 0.3-mil elliptical; vertical angle, 15 degrees; weight 6.5 grams; rated output, 7 mv; tracking force, 1 to 3 grams. Model 770: cost, \$29.50; rated compliance, 15; stylus, 0.7-mil; vertical angle, 15 degrees; rated output, 8 mv; tracking force, 2 to 6 grams; cartridges recommended for use in any arm capable of tracking at indicated forces.

ASTATIC offers its Model 45D, a ceramic type supplied with matched plug-in equalized networks for connecting to magnetic phono inputs. Cost, \$44.50; rated compliance, 10; stylus, 0.7-mil; vertical angie, 11.5 degrees; weight, 5.7 grams; rated output, 0.2 volt; tracking force, 2 to 4 grams.

DUAL DMS-900, offered by United Audio, is a moving-magnet type. Cost, \$34.50; rated compliance, 4 horizontal, 3 vertical; stylus, 0.7-mil; rated output, 6 mv; tracking force, $1V_2$ to 5 grams.

DYNACO STEREODYNE cartridges are moving-iron designs, made by B&O of Denmark, and distributed in the U.S.A. by Dynaco, Inc. Stereodyne III: cost, \$19.95; rated compliance, 12; stylus, O.7-mil; vertical angle, 15 degrees; weight, 12 grams; rated output, 7 mv at 5 cm/sec; tracking force, 1 to 3 grams. Stereodyne II, same, except: cost, \$17.95; rated compliance, 5; vertical angle, 25 degrees; tracking force, 2 to 4 grams. According to Dynaco, the Model III has less tip mass than the II; either cartridge is recommended for use in any type of arm that will track satisfactorily within the indicated range of stylus forces.

ELAC moving-magnet cartridges are made in West Germany; distributed in the U.S.A. by Benjamin Electronic Sound Corporation. Model 322: cost \$49.50; rated compliance, 14; stylus, 0.52-mil; vertical angle, 15 degrees; rated output, 7 mv at 7 cm/sec; tracking force, 1½ to 3 grams in most arms, 1 gram in some; offered primarily for sterei discs. Model 222: cost, \$39.50; rated compliance, 8; stylus, 0.7-mil; vertical angle, 15 degrees; tracking force, 2.4 to 4.5 grams; offered for both mono and stereo discs.

EMPIRE has three models of its 880 moving-magnet cartridge. Model 880: cost, \$17.95; rated compliance, 15; stylus, 0.7-mil; vertical angle, 15 degrees; weight, 10 grams; rated output, 10 mv; tracking force, 34 to 6 grams. Model 880P: cost, \$19.95; rated compliance, 15; stylus, 0.6-mil; vertical angle, 15 degrees; weight, 10 grams; rated output, 8 mv; tracking force, ½ to 4 grams. Model 880PE: cost, \$29.95; rated compliance, 20; stylus, 0.9-mil by 0.2-mil elliptical; vertical angle, 15 degrees; weight, 10 grams; rated output, 8 mv; tracking force, ½ to 4 grams; rated output, 8 mv; tracking force, ½ to 4 grams. Table angle, 15 degrees; weight, 10 grams; rated output, 8 mv; tracking force, ½ to 4 grams; rated output, 8 mv; tracking force, ½ to 4 grams. Note: all styli are interchangeable in all three models.

GENERAL ELECTRIC VR 1000 series contains two variable reluctance pickups. Model VR-1000-5: cost, \$29.95; rated compliance, 6 lateral, 9 vertical; stylus, 0.5-mil; rated output, 1 mv per cm/sec minimum; tracking force, 1 to 3 grams. Model VR-1000-7: cost, \$24.95; rated compliance, 4.5 lateral, 4 vertical; stylus, 0.7-mil; rated output, same as VR-1000-5; tracking force, 3 to 7 grams. Recommended for use in arms capable of indicated tracking forces.

GRADO MODEL A is moving-coil design. Cost, \$50; rated compliance, 12 (specified as dynamic and claimed to be equivalent to 37 static); stylus, "twin-tip" radius, each 0.3-mil spherical and separated by 0.6mil area (both tips ground on a single tip); vertical angle, 15 degrees; weight, 6.5 grams; output, 4 mv at 5 cm/sec through transformer supplied; tracking force, 1 gram in light arms, $1\frac{1}{2}$ to 2 grams in other arms. Cartridge supplied with tiny, wide-band transformer. Same pickup, with complete calibration curves, available for \$75. IMF Mark III is a "summation variable reluctance" type made by Decca Gramophone Co., Ltd., of England and distributed in the U.S.A. by IMF Products. Cost, \$70; rated compliance (specified as dynamic). 15 lateral, 4 vertical; stylus, 0.8-mil by 0.3-mil elliptical; vertical angle, 6 degrees (considered by manufacturer to be compatible with any cut record); weight, 12 grams; output, 6 mv at 5 cm/sec; tracking force, 1 to 2 grams. Mark II: cost, \$60; rated compliance (dynamic), 10 lateral, 2 vertical; stylus, 0.5-mil; vertical angle, 6 degrees; weight, 12 grams; output, 6 mv at 5 cm/sec; tracking force, 2 to 31/2 grams. Either cartridge is for use in integral IMF arm or, with adapters (\$5.00 each), for use in SME arm or in Garrard Lab-80 and A-70 players. ı.

MICRO M-1007/D is a Japanese model moving-magnet cartridge made by Micro Seiki Company, Ltd., Tokyo, and included here as a point of general interest. Cost, in Japan, 7000 yen (less than \$19); rated compliance, 10; stylus, 0.4-mil; weight, 10 grams; tracking force, l/2 to 1 gram in high quality arms; l/2 to 2l/2 grams in "changer-type tone arms."

ORTOFON moving-coil cartridges are made by Ortofon of Denmark and distributed in the U.S.A. by Elpa Marketing Industries. The tiny transformer in this design is housed in the body of the cartridge itself. Model SPU/GT: cost, \$50; rated compliance, 10; stylus, 0.7-mil; vertical angle, 18 degrees; weight, 17 grams without shell; output, 7 mv; tracking force, 1 to 2 grams. Supplied installed in shell for Ortofon or SME arms. Available also as Model SPU/T for use in other arms, same cost. Model SPE/GT is the same except: cost, \$75; stylus, 0.8-mil by 0.3-mil elliptical Supplied in shell for Ortofon or SME arms. Available, same cost, for use in other arms as Model SPE/T.

PICKERING offers four versions of its V-15 moving-magnet cartridge. V-15 AC-1: cost, \$15.95; compliance, not specified; stylus, 0.7-mil; vertical angle, 15 degrees; weight, 5 grams; output, 7.5 mv at 5 cm/sec; tracking force, 3 to 7 grams; recommended for use in any changer. Model V-15 AT-1: cost, \$17.95; stylus, 0.7-mil; vertical angle, 15 degrees; weight, 5 grams; rated output, 7.5 mv; tracking force, 1 to 5 grams; for use in automatic turntables. Model V-15 AM-1: cost, \$21.95; stylus, 0.7-mil; vertical angle, 15 degrees; weight, 5 grams; output, 5.5 mv; tracking force, 34 to 3 grams; recommended for use in manual turntables. Model V-15 AME-1: cost, \$29.95; stylus, elliptical (dimensions not stated); vertical angle, 15 degrees; output, 5.5 mv; tracking force, 34 to 1½ grams; recommended for use in manual and late model automatic turntables.

SHURE cartridges employ the moving-magnet design. V-15: cost, \$62.50; rated compliance, 25; stylus, 0.9-mil by 0.2-mil elliptical; vertical angle, 15 degrees; weight, 11 grams; output, 6 mv at 5 cm/sec; tracking force, 34 to 1/2 grams. Model M55E: cost, \$35.50; rated compliance, stylus, vertical angle, output, and tracking force same as V-15; weight, 7 grams. Note: according to Shure, the M55E is similar to the V-15 except that the V-15 is literally handmade, while the M55E is made under standard quality control conditions. M44-5: cost, \$21.95; rated compliance, 25; stylus, 0.5-mil; vertical angle, 15 degrees; weight, 7 grams; output, 6 mv; tracking force, 34 to 1/2 grams. Model M44-7: cost, \$19.95; rated compliance, 20; stylus, 0.7-mil; vertical angle, 15 degrees; weight, 7 grams; ouptut, 9 mv; tracking force, 1/2 to 3 grams. Model M7/N21D: cost, \$17.95; rated compliance, 9; stylus, 0.7-mil; vertical angle, not stated; weight, 7.9 grams; output, 4 mv; tracking force, 2 to 2/2 grams. Model M30: cost, \$15.75; rated compliance, 4; stylus, 0.7-mil; vertical angle, not stated; weight, 8.5 grams; output, 5 mv; tracking force, 3 to 6 grams. Cartridges may be used in arms-manual or automatic-capable of operating at recommended tracking forces.

SONOTONE's Velocitone Mark IV cartridges are ceramic types supplied with a pair of plug-in equalized networks for connecting to magnetic phono inputs. Model 9TAFHC-D77V: cost, \$24.25; rated compliance, 15; stylus, two 0.7-mil diamond styli on turnover assembly; vertical angle, 15 degrees; weight, 3.2 grams; rated ouput, 7 mv; tracking force, 1½ to 3 grams in professional type arms, 3 to 4 grams in changers. Model 9TAFHC-SDV: same cartridge except supplied with 0.7-mil diamond and 3-mil sapphire stylus assembly; cost, \$20.25.

STANTON 481 series employ the moving-magnet design. All are supplied with calibration curves for professional use. Model 481EL: cost, \$49.50; compliance not stated; stylus, elliptical, dimensions not stated; vertical angle, 23 degrees; weight, 11 grams; output, 5 mv at 5 cm/sec; tracking force, $\frac{3}{4}$ to $1\frac{1}{2}$ grams; recommended for use in high quality, professional type arms. Model 481AA: cost, \$49.50; stylus, 0.5-mil; vertical angle, 23 degrees; weight, 11 grams; output, 5 mv at 5 cm/sec; tracking force, 1 to 3 grams; recommended for same type arm as 481EL. Model 481AA: cost, \$48; stylus, 0.7-mil; vertical angle, 23 degrees; weight, 11 grams; angle, 23 degrees; weight, 11 grams; as 481EL and 481AA plus late model, high quality automatics.

WEATHERS stress-generator pickups employ ceramic movements. Model LDM: cost, \$22.50; rated compliance, 2C; stylus, 0.7-mil; vertical angle, not specified; weight, 4 grams; output, 5 mv at 7 cm/sec; tracking force, 1.9 \pm 0.15 grams; supplied with plug-in equalized networks for matching output to magnetic phono inputs. Model PS-11 pickup system (includes tone arm and sciid-state equalized preamp for direct connection to high-level inputs): cost, \$99.50; rated compliance, 30; stylus, 0.5-mil; vertical angle, not specified; output from preamp, 0.5 volt; tracking force, 1 gram. hard, it will pull the tip up the side wall of the groove—in other words, the wall acts like a wedge, sliding under the tip. Or the wall may be temporarily or permanently deformed. In either case the result is a severe muddiness or shatter on loud bass and some midrange notes. Of course, the stylus tip can be kept down in the groove by heavier tracking force; but if this force is allowed to become excessive, it will itself become a cause of record deformation and distortion.

What is needed, then, is reduced stiffness in the spring, or "high compliance." With it, the tip can be kept in contact with the groove at a low tracking force; as a consequence, at low frequencies record deformation and wear are reduced, and distortion is low. Yet too much of a good thing is to be avoided: if compliance is too high, the pickup becomes unstable, tending to flop around from side to side rather than stay firmly over the center of the groove. "Too high" a compliance depends on the mass of the arm and other factors. In general, the lighter the arm, the higher the compliance can be.

The fine performance of some current pickups proves that a number of interdependent factors in arm and pickup design can be controlled to permit very high compliance with very low tracking forces. "Very low" tracking force, incidentally, translates generally to no less than 11/2 grams-which is remarkable enough-and with some cartridges forces of 21/2 to 3 grams provide highly refined performance. The point is that you do not necessarily get better and better sound by simply lowering the tracking force on the pickup ad infinitum. If it is set so low that the stylus tip begins to slide around the groove, the result is high distortion and increased record wear; and as the force approaches the "breakaway" value, the listener gets an uncomfortable sense of instability in the music. In this case increasing the tracking force will help the middles and lows sound firm, and this force should be maintained. For stereo records, however, tracking force should never have to be more than about 4 to 5 grams.

Compliance is most relevant to the reproduction of low frequencies; in reproducing the highs, it scarcely matters. The stylus moves such a short distance (at the top frequencies a few *millionths* of an inch!) that the spring is hardly put under tension. What does matter for high frequency reproduction is the effective mass of the stylus and of everything that vibrates with it. At accelerations as high as 1,000 g (corresponding to 20,000 cps), even the tiniest mass has high inertia, which resists the push of the groove, with consequent groove bending, high distortion, and accelerated record wear.

These effects are at their worst at the high-end resonance of the cartridge, the frequency at which the springiness of the groove wall and the mass of the stylus combine in a strong natural vibration. This resonance is responsible for several bad effects. Not only is groove-bending apt to be high, but channel separation may disappear, or the two channels may even change sides! The smaller the stylus mass, the higher this resonance is on the scale. In most modern pickups it is above 8,000 or 9,000 cps. If the resonance is untreated, it causes a large peak in response, above which the response falls away rapidly towards zero.

The resonance can be treated, of course—the peak in response can be flattened by circuit design, often simply by using the right load resistor with the cartridge. But although this method reduces the most obvious effect of the resonance, it does not alleviate its basic cause: the fighting against the groove at the resonance is still there, and it now seems that this is one of the main causes of record wear. It first shows up, on top-grade equipment, as a slight fuzziness in the highs. The action at the resonance also can be controlled by friction deliberately introduced into the stylus ("damping"), but the amount of damping that can take the resonance out fairly completely also makes the stylus more resistant, and thus less responsive, to the middles and lows.

The most desirable answer to this problem is to make the stylus mass so small that the resonance occurs at some very high frequency-say, 30,000 cps-where its effects will not become a factor in the audible response, or at least not relate to the signal engraved on the record. A pickup so designed should result in low record wear and extremely smooth highs. A number of pickups are very close, with resonances in the 12,000- to 20,000-cps range, which gives results nearly indistinguishable from the 30-kc resonance. The advantage of the wider response is very small, but it will probably come to seem more important as the audio art in general advances, and it seems likely that most top-grade pickups will fairly soon move into the ultrasonic resonance class.

ADDITION to having a stylus tip of the right size (and perhaps shape, if the elliptical stylus proves essential), high compliance, and low mass, a cartridge also needs a stylus that meets the record at the correct vertical angle. If the line along which the stylus moves up and down, when viewed from the side, makes a different angle to the record ("vertical tracking angle") from that of the cutting stylus, distortion can be high. It is much like viewing a drawing from a sharp angle to the paper; a circle will look like an ellipse, for instance. An analogous change in the geometry of the playback stylus vis-à-vis the cutter means a change in the path that the tip follows. A good deal of attention has been focused on this problem in the last two years, and with some reason. Both cutter angles and playback stylus angles have varied throughout the industry, and various studies of the resultant discrepancies have shown distortion figures that are astonishingly high. Apparently we haven't been acutely aware of this distortion for several reasons: it tends to be masked by other kinds of distortion, especially tracing distortion; we are used to hearing it; it is not very troublesome unless a record Continued on page 112

by John T. McClure

The Cheerful Ghost of Eisenstadt

W. Blickenstaff

Wily monks, roaming chickens, and authentic goulast? can all be involved in recording Haydn on his home grounds.

Тне cliché that Austria

is a poor country acquires the hard crunch of truth if one drives a Volkswagen Microbus over her roads in early spring. E. Power Biggs and I survived this undulant fever last year, searching for an organ on which he could record, with orchestra, works of Bach, Haydn, and Mozart. Bach's Leipzig lying inaccessible behind the Iron Curtain, we steered instead for the Vienna of Haydn and Mozart, with its pregnant resources of recording equipment, musicians, and historic organs.

In April the city has not yet acquired its crawly covering of tourists and it is still possible to hear German spoken. Mindful of the imminent invasion and accompanying price spiral, we begin our quest and immediately encounter the Supreme Truth of the Austrian Church: COLD-sinister, penetrating, damp, and supernatural chill. (How much quicker and cheaper Napoleon's defeat had he marched on Austria's cathedrals instead of Moscow.) We are met at the door of the ancient Franciskanerkirche by a wonderfully gentle and preoccupied Franciscan monk who never speaks above a whisper (to conserve body heat?). The tiny sixteenth-century organ he shows us intrigues our historical sense, but produces sadly prehistoric noises and keyboard action. Our guide, unable to sell us an organ, volunteers to show

The author is Director of Masterworks at Columbia Records, which is this month releasing the Biggs-Eisenstadt recording of Haydn's organ concertos. us the crypt and cloister, but our stiffening jaws and lowered heartbeat warn us to move on.

The impressive Piaristenkirche has a bigger, more promising instrument in breath-taking acoustics, but, as with many old and ill-maintained tracker organs, playing a simple scale reveals some keys that sound with a touch and others that need a stiff-armed jab. Moreover, the organ is inexplicably a full tone flat. They are thinking of restoration; after all, Bruckner had taught organ here for a time: "Vielleicht die berühmten Amerikaner möchten uns mit der Restauration helfen. Wir brauchen nur hundert tausend Schillinge." We promise to send them something from America. Our separate breaths mingle visibly as we stand baroque-shocked, reluctant to leave. I wonder how organists can manage to play even with the usual four electric heaters, two on the manuals, two on the pedals. The quarter-inch thickness of the monk's habit over layers of undergarments, his hands tucked in opposing sleeves, seems a natural survival technique.

The remaining Viennese organs are either quasimodern electropneumatic instruments, inappropriate to our repertoire; or are in unplayable condition; or have no surrounding gallery where musicians might be placed. So our search broadens. Our Microbus bounds like a crippled but determined Pegasus over the Austrian cobbles to the famous cathedral of Klosterneuberg, one of the baroque's greatest treasure houses. We are shown a distinguished organ with ample orchestra space, and the smiling sacristan who accompanies us says that his superiors will grant two hours to record the organ for 500,000 Austrian Schillings. We play along with the joke and point out that it takes two hours just to set up equipment. Then buy another two hours to record, he answers. Our friendly smiles recede like water down a bathtub drain. "You've made a mistake," we say, "500,000 Schillings is \$20,000." "Ja, wir wissen dass. Zwanzig tausend dollar. Ja. Nicht zuviel für eine grosse Amerikanische Gesellschaft." Repeated attacks of incredulity produce only inflation, so-sadder and wiser-we revise our thoughts about the decline of the Church in Austria and bound farther west through agricultural countryside to the cloister of Herzogenburg.

Although only thirty miles from Vienna, the streets of the town are unpaved and, in places, hubcap-deep in mud. Chickens roam about trying to look intelligent. Great bundles of straw and fagots sway by on the backs of antique peasant women. Bicycles and horse carts together outnumber the automobile. The decrepit cloister, stucco falling off. paint peeling, grass and trees completely unmanicured, holds the typical Austrian surprise: a beautifully gilded and painted interior; altars, pulpit, frescoes, and statues immaculately and lovingly maintained. Alas, the high water mark of maintenance stops short of the organ. Six pedal notes don't speak and everything else is screamingly out of tune. "Wunderbare Orgel, nicht wahr? Sie war in dem achtzehnten jahrhundert gebaut." And untouched ever since, I mutter. We follow the brother's swishing robes back along the fifteenth century, through dark galleries of closed doors and echoing stone passages unrelieved by any hints of later, more comfortable ages. In emerging from this cold, underpopulated silence into the shabby, sunlit present, we jump five centuries in a step.

At Hollabrun, to the north, a superb new tracker and a new problem: the church is in constant use from morning until nine in the evening, seven days a week. Total defeat. We bounce back to Vienna bone-cold and disgruntled.

The third day is pleasanter. South of Vienna we climb through lovely Mödling into the mountains -Mayerling country. Ruined castles and abbeys (looking just like Frankenstein's) sprout from wild rocky crags as we approach the famous monastery of Heiligenkreuz. Once a self-contained city, its several thousand inhabitants supplying all their own needs, it is now the target of two dozen tourist buses daily. As one enters through wooden doors old as the Ark and proceeds along the gloomy Gothic nave to the famous choir of carved wooden heads, the impression is of a mean and limited building. Then suddenly at the transept, the cathedral plunges violently upward and outward in a blaze of jeweled windows and a forest of fluted columns. The very barococo organ stands to one side looking as splendid as we hope it will sound. Alas, it is disappointingly mild and asthmatic with no bite or definition. Biggs looks depressed. The cold and the disappointments are beginning to get to him.

Now THERE IS only one more possibility before we must return to Vienna and demand our money back: the Parish Church (Stadtpfarrkirche) in Haydn's own town. Eisenstadt lies in Austria's fertile Burgenland, a plain which runs south between the Hungarian border and the eastern foothills of the Austrian Alps to Yugoslavia. It is genial country of farming and wine making with frequent Slavic outcroppings in the faces and accents. The town is immediately likable: open and unpretentious. If any tourists are visible, they seem to be Austrians. Throw away your crutches: no English spoken here. We pass the architecturally unbelievable Bergkirche without even a pause to pay our respects to Haydn's restless bones, so anxious we are to see if our last bubble will burst or soar.

The Stadtpfarrkirche is architectural antacid after a gluttony of onion spires and baroque excess. It is pure, square, clean, Middle-Aged Gothic. We walk inside with the Pfarrer, the parish priest, who speaks the clearest, most careful German I have vet heard in Austria, allowing several cramped auditory nerves in my brain to relax. The interior has been beautifully restored and is of a spare Protestant severity. The priest leads us through a low door and up some stairs, across a dusty and cluttered room and out onto a small choir loft on which the organ sits. I decide, rather than be defeated by them later, to eliminate potential disasters prima vista. In silence we listen for Austria's peculiarly penetrating motor scooter and truck noises. Naught, thanks to a side-street location. Biggs switches on the organ blower, and though it is somewhat audible we can guiet it with a heavy quilt. With breath held, he plays a chord on the compact but healthy-looking console. There are not many stops for the two manuals and three divisions, but they speak promptly and brightly, and with a distinct character. Moreover, the church is live and adds a clean bloom to the sound.

We hardly dare smile for fear the Pfarrer will demand the national debt for two hours of recording. With elaborate negativism I say to Biggs (deliberately in English), "Well, the sound isn't too bad, but I don't see how we can pack twenty-five musicians into this choir." Very difficult: shaking the head slowly and frowning, while jumping up and down inside. "Pfarrer," we begin, "wenn wir einige Aufnahmen hier machen werden, wieviel müssen wir der Kirche bezahlen?" Pfarrer is waiting for this. In the same slow careful German he explains that when they heard we were coming, his bishop had called all the Viennese recording studios to make an average of their prices. They would charge us accordingly. Ah, simple, pastoral little Eisenstadt, still naïvely napping in the eighteenth century. Had I at this juncture pointed out the lack of facilities here and the expense of bringing everything down



The organ in the Stadtpfarrkirche at Eisenstadt, Haydn's own town. He played the dedicatory recital on the organ's completion in 1770.

by truck from Vienna, I would have had no arguments available when the church tried to raise the rates halfway through the week's sessions. Relief being a primary emotion, I merely nod agreement, scarcely noticing the *Pfarrer*'s gift of the sacristy for the installation of our *Technik*.

The thirteenth-century walls of the church tower are eight feet thick at ground level and the windows seen from inside are tunnels ending in narrow slots. The *Pfarrer* explains that throughout Austria's history of bloody battles with Bohemians and Hungarians and even occupation in the 1680s by the Ottoman Turks, the fortified tower, entered by a small tunnel, served as refuge for the town when under attack. He shows us the four overhanging bartizans in the top corners of the tower, each with its keyhole-shaped balistraria through which crossbows could be shot or hot pitch poured to keep things lively down below. The Turk's response to this unfriendliness was to camp around the tower for a month and starve out the unfortunates.

WE DECIDE to stay on in Eisenstadt while an orchestra is recruited from the Vienna Symphony and the equipment brought down and set up. The Schwechaterhof, without calling Vienna for averages, gives us room and breakfast for four dollars a day and introduces us to the excellent local red wine from Rust on the nearby shore of the Neusiedler See, a vast shallow lake. Fortified with superb veal and real goulash, we set out to explore a bit.

Haydn's cheerful, matter-of-fact ghost lies lightly on Eisenstadt and on his cozy low-ceilinged house, now a museum. Less gracefully lies the weight of the palace of the Esterházys, a monstrous yellow pile where Haydn directed his winter seasons of operas, Masses, and symphonies. Schloss Esterházy is also a museum, supported by the government, which houses a summer music festival complete with musicians in period costumes. Across the main street, more towards the center of town, the Bergkirche rambles down the hill under the improvised protection of a most comical undulating tile roof. peppered with statues. It is here that Havdn lies in a marble sarcophagus seemingly more formal than its inhabitant. Haydn is now complete. His skull, which was stolen by a grave-robbing fanatic three days after his burial in Vienna, was finally surrendered and returned in 1951 to Eisenstadt, where Prince Esterházy had moved the composer's body in 1820.

During the arrival of the recording equipment we discover new treasures in the dusty room behind the choir gallery: an ancient contrabass and two miniature kettledrums wearing the dust of ages, obviously part of Haydn's orchestra. which used the church as a rehearsal hall. We feel as moved as Haydn scholar H. C. Robbins Landon did when he tound the rain-drenched music of an unknown Haydn motet. signed by the master. lying on the floor of this same room in 1951. In the adjoining corner, half-buried in religious props and piled high with *Continued on page 113*



New Scott Solid-State Amplifier Passes Rugged Torture Tests

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

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

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

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



(1) Rugged silicon direct-coupled transistor output stage (2) Preamps on separate modular-type printed circuit boards (3) Stereo headset output (4) Master volume control (5) Separate bass and treble controls (6) Complete tape recorder input and output facilities (7) Massive power supply provides high power surges when music demands it (8) Handsome styling matches Scott Transistor Tuner model 312



ExPort: Scott International, 111 Powdermill Boad, Maynard, Mass. Canada: Atlas Radio Corp., 50 Wingold Ave., Toronto. Cable HIFI. Price slightly higher West of Rockies. Subject to change without notice.

CIRCLE 100 ON READER-SERVICE CARD



If, in 1631, you went to rent a horse from Thomas Hobson at Cambridge, England, you took the horse that stood next to the door. And no other. Period. Hence, Hobson's Choice means No Choice.

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

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

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

IS YOUR BEST SELECTION

ITS FUNCTION. ITS FEATURES ...

THE CARTRIDGE

The ultimate! 15° tracking and Bi-Radial Ellip- tical stylus reduces Tracing (pinch effect), IM and Harmonic Distortion to unprecedented lows. Scratch-proof. Extraordinary quality con- trol throughout. Literally handmade and in- dividually tested. In a class by itself for repro- ducing music from mono as well as stereo cliscs.	If your tone arm tracks at 1½ grams or less (either with manual or automatic turntable)— and if you want the very best, regardless of price, this is without question your cartridge. It is designed for the purist,, the perfection- ist whose entire system must be composed of the finest equipment in every category. Shure's finest cartridge. \$62.50.
Designed to give professional performance! Elliptical diamond stylus and new 15° vertical tracking angle provide freedom from distor- tion. Low Mass. Scratch-proof. Similar to V-15, except that it is made under standard quality control conditions;	If you seek outstanding performance and your tonearm will track at forces of ³ /4 to 1 ¹ /2 grams, the M55E will satisfy—beautifully. Will actually improve the sound from your high fidelity system! (Unless you're using the V-15, Shure's finest cartridge.) A special value at \$35.50.
A premium quality cartridge at a modest price. 15° tracking angle conforms to the 15° RIAA and EIA proposed standard cutting angle re- cently adopted by most recording companies. IM and Harmonic distortion are remarkably low when cross-talk between channels is ne- gated in critical low and mid-frequency ranges.	If you track between ³ / ₄ and 1 ¹ / ₂ grams, the M44-5 with .0005" stylus represents a best-buy investment. If you track between 1 ¹ / ₂ and 3 grams, the M44-7 is for you particularly if you have a great number of older records. Both have "scratch-proof" retractile stylus. Either model under \$25.00.
A top-rated cartridge featuring the highly compliant N21D tubular stylus. Noted for its sweet, "singing" quality throughout the audi- ble spectrum and especially its singular re- creation of clean mid-range sounds (where most of the music really "happens".) Budget- priced, too.	For 2 to 2 ¹ / ₂ gram tracking. Especially fine if your present set-up sounds "muddy." At less than \$20.00, it is truly an outstanding buy. (Also, if you own regular M7D, you can up- grade it for higher compliance and lighter tracking by installing an N21D stylus.)
A unique Stereo-Dynetic cartridge head shell assembly for Garrard and Miracord automatic turntable owners. The cartridge "floats" on counterbalancing springs, makes the stylus scratch-proofends tone arm "bounce."	If floor vibration is a problem. Saves your records. Models for Garrard Laboratory Type "A", AT-6, AT-60 and Model 50 automatic turntables and Miracord Model 10 or 10H turntables. Under \$25.00 including head shell, .0007" diamond stylus.
A best-seller with extremely musical and trans- parent sound at rock-bottom price. Tracks at pressures as high as 6 grams, as low as 3 grams. The original famous Shure Dynetic Cartridge.	If cost is the dominant factor. Lowest price of any Shure Stereo Dynetic cartridge (about \$16.00) with almost universal application. Can be used with any changer. Very rugged.
	 tical stylus reduces Tracing (pinch effect), IM and Harmonic Distortion to unprecedented lows. Scratch-proof. Extraordinary quality control throughout. Literally handmade and individually tested. In a class by itself for reproducing music from mono as well as stereo discs. Designed to give professional performance! Elliptical diamond stylus and new 15° vertical tracking angle provide freedom from distortion. Low Mass. Scratch-proof. Similar to V-15, except that it is made under standard quality control conditions. A premium quality cartridge at a modest price. 15° tracking angle conforms to the 15° RIAA and EIA proposed standard cutting angle recently adopted by most recording companies. IN and Harmonic distortion are remarkably low. cross-talk between channels is negated in critical low and mid-frequency ranges. A top-rated cartridge featuring the highly compliant N21D tubular stylus. Noted for its sweet, "singing" quality throughout the audible spectrum and especially its singular recreation of clean mid-range sounds (where most of the music really "happens".) Budgetpriced, too. A unique Stereo-Dynetic cartridge head shell assembly for Garrard and Miracord automatic turntable owners. The cartridge "iloats" on counterbalancing springs makes the stylus scratch-proof ends tone arm "bounce."



HIGH FIDELITY PHONO CARTRIDGES... WORLD STANDARD WHEREVER SOUND QUALITY IS PARAMOUNT Shure Brothers, Inc., 222 Hartrey Ave., Evanston, Illinois CIRCLE 63 ON READER-SERVICE CARD The consumer's guide to new and important high fidelity equipment



EQUIPMENT REPORTS



THE EQUIPMENT: Annpex 2070, a three-speed $(7\frac{1}{2}, 3\frac{3}{4}, and 1\frac{7}{8}$ ips), four-track stereo/monophonic tape recorder supplied in an integral carrying case with built-in speakers and one Ampex Model 2001 high-impedance microphone. Dimensions: 19 inches wide, $13\frac{1}{2}$ inches deep, $7\frac{1}{2}$ inches high. Price, \$499. Other models in the 2000 series: Model 2050, same as 2070 but without built-in power amplifiers, speakers. or carrying case, suitable for custom installation, \$439; Model 2080, same as Model 2050 but supplied in oiled walnut cabinet base, \$469. Manufacturer: Ampex Corp., Consumer and Educational Products Div., 2201 Landmeier Rd., Elk Grove Village, Ill. 60007.

COMMENT: One of the recent products from Ampex's new consumer manufacturing division is the Model 2070, a uniquely and handsomely styled tape recorder which is loaded with features. What's more, according to reports from United States Testing Company, Inc., the 2070 is built to Ampex's usual high standards and offers unusually fine performance in both playback and recording.

The 2070 is designed to record and play quarter-track (four-track) stereo and monophonic tapes. It also will play half-track and full-track mono tapes, and the older

Ampex Model 2070 Tape Recorder

¹/2-track stereo tapes. It operates at any of its three speeds in either the normal (left to right) direction or in the reverse (right to left) direction. The change from one direction to the other during playback-which takes only a few seconds and is much faster than the changecycle of a record changer—may be made automatically once a 20-cps "reversing signal" has been recorded on the tape-by means of a switch on the deck. This signal can be added anywhere along a tape, as well as at its end, so that automatic reversal is possible for an entire tape or for portions of it. Two reversing signalsrecorded at the ends of a tape or at any desired spots along it-will cause the tape to be played indefinitely, or until the machine is shut off manually. When playing a commercially recorded ("prerecorded") tape—which would appear to be the most immediate practical use of this feature-the signal will cause the tape to reverse itself automatically, without the need to flip reels and rethread. The reversing signal of course may be removed from a tape by recording over it. The automatic reverse feature, incidentally, operates only for playback.

The recorder's unusual appearance is due to the fact that only the left reel (nominally the supply reel) is visible during normal use, the right (or take-up) reel being enclosed under plastic covers. To thread the tape on the

REPORT POLICY

Equipment reports are based on laboratory measurements and listening tests. Data for the reports, on equipment other than loudspeakers, is obtained by the United States Testing Company, Inc., of Hoboken, New Jersey, a completely independent organization not affiliated with the United States Government which, since 1880, has been a leader in product evaluation. Speaker reports are based on controlled listening tests. Occasionally, a supplementary agency may be invited to contribute to the testing program. The choice of equipment to be tested rests with the editors of H1GH FIDELITY. No report, or portion thereof, may be reproduced for any purpose or in any form without written permission of the publisher. No reference to the United States Testing Company, Inc., to its seals or insignia, or to the results of its tests, including material published in H1GH FIDELITY based on such tests, may be made without written permission of United States Testing Company, Inc.

Ampex Model 20 Lab Test Data	
Performance characteristic	Measurement
Speed accuracy, 7½ ips 3¾ ips 1⅔ ips	0.96% slow 1.1% slow 1.3% slow (all at 117 volts AC; no change in speed due to line voltage change o ±10%)
Wow and flutter, 7½ ips 3¾ ips 1⅔ ips	0.04% and 0.07% 0.06% and 0.06% 0.12% and 0.06%
Rewind time, 7-in., 1,200-ft. reel	1 min, 45 sec at all speeds
Fast forward time, same reel	1 min, 45 sec at all speeds
NAB playback response (ref Ampex test tape No. 31321-01, 7½ ips) tape running from I to r	l ch: +2, -1 db, 50 cps to 15 kc
tape running from r to l	r ch: +3.75, -0 db, 50 cps to 15 kc l ch: +2.5, -1 db, 50 cps to 15 kc r ch: +4.25, -0 db, 50 cps to 15 kc
Max output level, 700 cps, test tape: with 0 VU signal with -10 VU	l ch: 385 mv; r ch: 395 mv
signal	l ch: 130 mv; r ch: 132 mv
Record/playback response, -10 VU recorded signal, Scotch 111 tape: 7½ ips	l ch: +1.5, -4 db, 26 cps to 15.5 k r ch: +1.5, -4 db, 27 cps to 15.5 k
3¾ ips	I ch: +1, -3 db, 36 cps to 9 kc r ch: ±2 db, 34 cps to 8 kc
1 % ips	1 ch: + 1.5, -5 db, 29 cps to 4.6 kc r ch: + 2, -5 db, 29 cps to 4.4 kc
Ampex tape: 7½ ips	l ch: +1.25, -4 db, 30 cps to 17 kc r ch: +1.75, -3 db, 30 cps to 17.5 k
S/N ratio (ref 0 VU, test tape): playback record/playback	l ch: 49 db; r ch: 47 db l ch: 44 db; r ch: 42 db
Sensitivity for 0 VU recording level: mic input line input	l ch: 2.2 mv; r ch: 2 mv l ch: 74 mv; r ch: 71 mv
THD, record/playback (for -10 VU recording): 7½ ips	either ch: less than 2% at 1 kc I ch: less than 3%, 30 cps to 12.5 k r ch: less than 3%, 36 cps to 10 kc
3¾ ips	either ch: less than 2% at 1 kc 1 ch: less than 3%, 35 cps to 7.6 kc r ch: less than 3%, 40 cps to 7.2 kc
1 <i>%</i> ips	either ch: less than 2% at 1 kc l ch: less than 3%, 40 cps to 3.5 k r ch: less than 3%, 40 cps to 3.3 k
IM distortion record/play- back	
back -10 VU recorded level -5 VU recorded level 0 VU recorded level	l ch: 1.8%; r ch: 1.9% l ch: 2.8%; r ch: 3% l ch: 4%; r ch: 4.5%
Recording level for max 3% THD	1 ch: +7.6 VU; r ch: +7.2 VU
Power output, built-in amp	l ch: clips ot 6.8 watts r ch: clips at 6.3 watts





machine, the free end from the supply reel is brought around in front of the heads and then up through a slot between the plastic covers. A push of the play/record lever then starts the transport and the tape winds itself onto the take-up reel automatically. The secret here is a specially designed take-up reel under those plastic covers which-combined with the automatic reverse feature-makes the playing of reel-to-reel four-track stereo tapes about as easy as playing a tape cartridge, or even a disc. The plastic cover, incidentally, can be removed and the special reel replaced with a standard 7-inch reel to permit the machine to be used in the more conventional manner. This removal and replacement would, in fact, be necessary when recording a tape on all four tracks inasmuch as the 2070 records only in the left-to-right direction.

The 2070 has three heads and two drive capstans, located under the head cover. At the left of this assembly are the capstan and the quarter-track head for the reverse, or right-to-left, direction of tape travel. To the right are the erase head and the quarter-track record/ playback head for the normal, or left-to-right, direction of tape travel.

The machine's operating controls are simple to use and the recorder responds to them perfectly. In the center of the head cover is a direction-lever which can be operated manually or automatically and which determines in which direction the tape will move for either play/record or fast wind. The play/record and fast wind controls themselves are located just above this lever.

Electronic controls, arranged in a vertical line to the right of the transport, include, top to bottom: a stereo/ mono switch, a mode selector (which furnishes the reversing signal), a tone control that serves simultaneously for both channels, and a volume control for each channel which operates for recording and playback. Recording level indicators, found between the mode and tone controls, are neon indicator lamps. Microphone input jacks are on the front panel; high-level input jacks and the speaker and preamp output jacks are at the rear of the machine. A special output jack also is provided for connecting an Ampex slide projector actuator to the recorder for synchronizing sight-and-sound showings. Circuitry in the Ampex is solid-state.

In USTC's tests, the 2070 provided excellent performance, meeting its specifications with ease. The recorder was tested using Scotch 111 magnetic tape, which—for purposes of standardization—is used in all of USTC's tape recorder tests. However, the 2070 came supplied with a short reel of Ampex brand tape—unidentified by number but apparently a 1-mil polyester (Mylar) type —which USTC used for a repeat of the frequency response measurements at 7½-ips speed. The response, using the Scotch tape, was fine enough, but slightly improved at the high end with the Ampex tape—which would indicate that the unit's record/playback characteristics are closely matched to those of the company's own brand of tape.

Playback response was about the same in either direction of tape travel, or good any way you looked at itindicating that the 2000 series is eminently suited for high fidelity playback of prerecorded tapes. Both harmonic and IM distortion were low, and signal-to-noise ratio favorably high. Specific measurements, at all three speeds, are given in the accompanying charts and table; they are, in sum, among the best found in a machine of this price class. The 2070 also proved to be a top mechanical performer; speed accuracy was high, wow and flutter were low (these characteristics, in our tests, were better than specified), and tapes were handled positively and gently. The machine obviously has been designed to serve as a flawless and convenient device for playing prerecorded stereo tapes, with the added option of being able to make excellent recordings as well -the latter function requiring perhaps a little experimenting with recording levels as shown on the neon tube indicators.

As a reliable, versatile, clean-sounding, smooth-running tape recorder for use in a high quality home music system the new Ampex, in sum, leaves little to be desired. It may, of course, be hooked into a component system for top results on playback, although its own power amplifier is capable of supplying better than six clean watts per channel, and its built-in stereo speakers do sound remarkably good. A final fillip: the entire 2070 may be used as a public address or "general purpose" sound system; in the PA position of the mode switch, signals (from mikes or other sources) connected to the recorder will be heard through its speakers.

Scope/Castagna Model A Tone Arm

THE EQUIPMENT: Castagna Model A, a professional tone arm for use with manual turntables. Maximum length, 13-7/16 inches. Price, \$125. Manufactured by Castagna Research and Development Corp., New York, N.Y. Distributed by Scope Electronics Corp., 235 East 42nd St., New York, N.Y. 10017.

COMMENT: In this day of ultrarefined designs in which the turntable and tone arm are "integrated," one would think that the separate tone arm would have gone the way of the buggy whip. Yet, the separate arm, supplied without cartridge and intended for installing on one's own turntable, still has its unique appeal—to those

who want to experiment. either professionally or for their own edification, with different setups as well as to those who care to incorporate the latest developments into their own systems. Such products, virtually custombuilt and selling in smaller quantities, understandably are higher-priced; the Castagna is, at this writing, the costliest tone arm yet reported on.

The arm, to begin with, is precision-made of brushed aluminum. Its most novel feature is a pair of ring magnets mounted within the pivot system so that their forces are in opposition. This design is intended to suspend the complete weight of the arm, including that of whatever cartridge is installed in it. Vertical and horizontal pivots utilize precision jeweled bearings. According to United States Testing Company, Inc., the pivot system is, for all practical purposes, friction-free.

In addition, the arm is provided with adjustments for both vertical and lateral static balance, stylus overhang, vertical azimuth angle, and—most unusual—lateral tracking angle. As is standard practice with all arms, this last adjustment is preset at the factory for minimum tracking error across a 12-inch record. However, there are detailed instructions for varying this angle for experimental purposes. In our view, such variation should not be attempted except by an experienced professional for a specific purpose, inasmuch as the minimizing of tracking error over one portion of a record will necessarily increase the error over the rest of the record. As supplied, the error is minimized over the largest possible portion of a 12-inch record.

Stylus force is set by a knob which, when rotated, varies the tension on a spring. This adjustment is calibrated in increments of one gram up to five grams; USTC found it to be accurate to within 0.1 gram over its range. The arm is counterbalanced by a rear weight, attached to the arm tube through a rubber isolation mount that helps reduce the low-frequency resonance of the arm. The arm tube itself is narrow in diameter and filled with a rubber-like potting compound to further reduce its resonance. In actual tests, the arm had no resonance above 10 cycles, which is excellent.

The arm is mounted through a neat-fitting collar which itself fits into several holes that must be predrilled by the owner on the turntable mounting board. Connections to the leads from the pickup are made via a sturdy cable-and-plug assembly that is supplied with the arm.

The cartridge shell contains a snap-in mounting board that greatly simplifies the installation of any cartridge. Instructions—for installing both arm and cartridge—are unusually clear, well presented, and amply illustrated. Indeed, our only criticism of this arm has to do with the location of the screw for adjusting stylus overhang; it would be easier to get at if it were a little nearer on top of the arm rather than toward its underside.

The Castagna arm, correctly installed and with all adjustments properly made, will afford any cartridge a smooth and flawless ride through the record groove. Its over-all tracking ability was found to be extremely good, certainly above average. What constitutes "average" in this day of generally refined design is hard to specify; the Castagna, in any case, joins the class of the best separate arms now available. This was verified with a number of different cartridges, using the lower limits of tracking force recommended by the cartridge manufacturers. The connections are hum-free, and the total record-playing assembly using the Castagna arm proved immune to the effects of external shock and mechanical feedback. What's more, the arm-because of its design and damping-will not exaggerate, by transmission, the effects of turntable rumble.



THE EQUIPMENT: Knight KN-999, a solid-state integrated stereo amplifier. Dimensions: front panel, 14-1/8 by 4-3/16 inches; chassis, 13-5/8 inches deep including clearance for knobs. Price, less case, \$179.95. Manufacturer: Allied Radio Corp., 100 N. Western Ave., Chicago, III. 60680.

COMMENT: The KN-999 is the highest-rated of the recent line of Knight solid-state amplifiers. Built around 19 transistors and 8 diodes, the circuit employs a pair of driver, but no output, transformers. The front panel is made of gold-colored anodized heavy-gauge aluminum on which a full complement of controls are neatly and logically arranged. Across the top are eight slide switches in two groups of four each. The left-hand group includes switches for: tape monitor, stereo/mono, channel reverse, and low-frequency filter. The right-hand group contains the switches for high-frequency filter, loudness contour, phase reverse, and power off/on.

A pilot lamp and a low-impedance stereo headphone jack flank the row of switches. The lower half of the panel contains control knobs for bass and treble (ganged and operating simultaneously on each channel), a balance control, and the loudness or volume control. Centered

Knight KN-999 Integrated Amplifier

between these is a series of four push buttons for selecting input signals: tape, phono, tuner, and auxiliary.

On the rear of the amplifier are five sets of stereo input jacks (tape head, phono, tuner, tape monitor, and auxiliary) plus a pair of output jacks for feeding signals to a tape recorder. There also is an output jack for feeding a derived "A + B" signal to a separate amplifier. Level controls are provided for the tuner and auxiliary inputs so that they may be equalized with respect to a given setting of the volume control and to prevent overloading of the amplifier's input stages by an extra-strong signal. Speaker connections are made by a four-conductor jack-and-plug rather than by the familiar individual terminals. No impedance ratings are indicated, and the same set of speaker outputs are intended for use with various speaker impedances.

In addition to the fuse, the KN-999 is protected by a thermal circuit breaker which shuts off the amplifier if ambient temperature gets too high, that is, from about 112° upward. The amplifier is designed for full performance up to 100° F.

The KN-999 is rated by the "music power" method at 50 watts per channel. In tests conducted at United States Testing Company, Inc., using the more rigorous ŗ

"continuous power" method, the amplifier—with both channels driven simultaneously—produced a little better than 25 clean watts per channel. This much power, by any standard, is quite respectable and puts the KN-999, conservatively speaking, in the "medium-power" class, capable of driving virtually any speaker system in most size rooms.

On the subject of power, incidentally, the KN-999 has an unusual and useful feature in the line voltage



Square-wave response to 50 cps, left, and 10 kc.



adjustment taps on its power transformer. These taps permit the transformer to be connected for optimum operation with varying-input AC line voltages. Thus, in locales where the supply voltage is known to run high (relative to the nominal 117-volt rating), the transformer may be connected accordingly, and the amplifier will produce higher output power. This was verified by USTC in a special test in which the power transformer was connected for 127-volt operation, and the input voltage to the amplifier was varied. Audio output power then was measured at 1% harmonic distortion with the following results: at 117 volts AC line input, the KN-999 produced (on one channel) 31.2 watts; at 120 volts, it produced 32.4 watts; at 127 volts, it produced 36.1 watts. (This variation in output power, with regard to available line voltage, also would help explain the difference in the manufacturer's rating of the amplifier and our own lab measurements, which are made at 117-volt line input.)

Equalization for disc playback was satisfactory; the NAB characteristic (for direct playback from tape

Knight KN-999	Amplifier	
Lab Test Data		
Performance characteristic	Measurement	
Power output (at 1 kc into 8-ohm load): I ch at clipping I ch for 1% THD r ch at clipping r ch for 1% THD	36.1 watts with 0.67% THD 39.5 watts 33.2 watts with 0.72% THD 36.1 watts	
Both chs simultaneously at clipping: I ch: r ch:	26.6 watts with 0.74% THD 26.6 watts with 0.76% THD	
Power bandwidth for 1% THD	50 cps to 15 kc	
Harmonic distortion 36.1 watts output 18 watts output	under 2%, 25 cps to 12 kc under 1%, 50 cps to 20 kc	
IM distortion 8-ohm load	6% at 1-watt output; 3.4% at 10 watt output; 2.4% at 30-watt out- put; 2.8% at 37-watt output	
4-ohm load	8.2% at 1 watt; 3.9% at 10 watts, 6.4% at 30 watts; 14% at 36 watts	
16-ohm load	4.7% at 1 watt; 2.9% at 10 watts, 1.9% at 30 watts; 9% at 36 watts	
Frequency response, 1-watt output	±2.2 db, 5 cps to 20 kc; down to -3.6 db at 25 kc	
RIAA disc characteristic	+3, -0.8 db, 20 cps to 20 kc	
NAB tape head character- istic	±2 db, 40 cps to 20 kc; down to -5 db at 21 cps	
Damping factor	1.6	
Sensitivity for full output	phono 2.65 mv tape head 3.1 mv tape monitor 300 mv tuner 220 mv aux 400 mv	
S/N ratio	phono 55 db tape head 60 db tape monitor 70 db tuner 65 db aux 67 db	

heads) was smooth from about 40 cps upward. Squarewave response was about average for an integrated amplifier: the 10-kc response had a moderate rise time but no ringing or tilt; the 50-cps response showed some distortion in the deepest bass. The stability of the KN-999 was very good, and there was no tendency toward oscillation with capacitive loading.

The amplifier's response frequency, tone control, and filter characteristics were adequate, although the high filter reduced the midrange too much for our tastes. Harmonic distortion was low, but IM—following the pattern that seems typical of many recent solid-state amplifiers—varied with the load and the power output demanded of the amplifier. In general, the lowest IM was measured with the highest impedance load (16 ohms), although at 8 ohms output—the load that represents most of today's high fidelity speaker systems—the IM was not much higher. In any case, as with other amplifiers of this type, the IM was not discernible when listening to normal program material reproduced, via the KN-999, over speakers that were moderately efficient and fairly well damped.





Acoustic Research AR-4 Speaker System

THE EQUIPMENT: AR-4, a compact full-range speaker system with integral enclosure. Dimensions: 9 by 10 by 19 inches. Cost: in oiled walnut, \$57; in unfinished pine, \$51. Supplied with hardware to facilitate hanging the speaker on a wall with ordinary picture hooks rated for a 30-lb. load. Owners of AR-4s who did not receive this hardware may write to the manufacturer for a free set, stating serial numbers of their speakers. Manufacturer: Acoustic Research, Inc., 24 Thorndike St., Cambridge, Mass. 02141.

COMMENT: Since its introduction by AR some years ago as the first compact speaker system of sonically authoritative caliber, the acoustic suspension reproducer has become quite popular-in its original form as well as in many variations and applications. AR's own optimum system of this type, of course, is the AR-3, reviewed in this journal some years ago and generally regarded as one of the finest, most natural-sounding systems available. The new model, AR-4, is AR's first venture into the under-\$60 price bracket. It employs the same operating principle as the AR-3: the woofer is housed in a completely sealed, internally padded cabinet to "stiffen" the unusually loose suspension of the cone, and a specially designed 31/2-inch tweeter disperses midrange and highs. Input impedance of the AR-4 is 8 ohms; efficiency is moderately high and the AR-4 can be driven by a clean amplifier in the 15- to 20-watt (rms)-per-channel power class.

Our tests of the AR-4 indicate that although it does not reach as far down into the deep bass, nor as high up into the extreme treble, as the AR-3, it nevertheless is an extremely clean-sounding reproducer of music with a nice, open tone and very good balance within its range. The bass holds up cleanly and without audible distortion to below 40 cps; some rolloff begins higher than that frequency and dips to inaudibility below it. There is no definite frequency at which one can say that "doubling" begins; in fact, the AR-4 seems to resist this tendency to distortion in the bass even when enormous amounts of amplifier power are fed into it. The bass simply is produced cleanly to the speaker's lower design limit and then disappears. Upward from the bass region, response is consistently level; there are no significant peaks or dips and everything seems very smooth and widely dispersed. A 5-kc test tone was clearly audible from all around the system, and this effect remained perceptible to as high as 10 kc. There seems to be a rolloff just above 11 kc; a 12-kc test tone still was audible but noticeably diminished in strength. White noise response was moderately smooth and fairly well dispersed at the recommended setting of the tweeter level control (about "10:45 o'clock"); at higher settings of this control, the white noise became somewhat "harder."

Reproducing program material, the AR-4 sounded definitely superior for a speaker of its size and cost. The sound in general was more "open" and much "bigger" than one might expect from a system of less than 1 cubic foot in size. If by comparison with something as good as the AR-3, the ultimate heft of the deepest bass and the elusive "air" of the top highs were missing, the range that was covered by the AR-4 sounded to us smooth, natural, and musical. Transient response, in the handling of percussives and plucked strings, was crisp and clean. Virtually no hint of boxiness colored the sound of this speaker, regardless of the size of room or where in the room it was auditioned.

In general, the AR-4 is exemplary of many speaker systems in the under-\$60 class that are designed to serve in a compact, modestly priced system. To say that the AR-4 is the "best" of this class would be to presume too much in the way of individual listener preference; it would perhaps be more to the point to say that we have heard nothing better, so far at least, in this price class.

Magnecord 1024 Tape Recorder Goodmans Maximus Speaker Systems

REPORTS IN PROGRESS





CULPRIT

VILLAIN

Tubed components are doomed. It is now common knowledge among hi-fi engineers that tubes and output transformers play a major role in creating distortion.

Why transistor components are better. Transistor units produce better frequency response (cleaner, more "transparent" sound) because they don't use output transformers. Transistors are the best switching devices known to man, give better response to sounds of verv short duration. Speakers are coupled directly to the output transistors, giving you crisp, solid bass. Tubed receivers require realignment at least every other year. Transistors simply do not age ... and they run cool.

Why invest in obsolescence? As you approach the extremely important purchase of your next stereo system, bear in mind that the very finest tubed equipment will soon be hopelessly obsolete. Harman-Kardon, possessing the industry's longest, most extensive experience in solid-state audio design, is and will remain many years ahead of the field.

The industry's only all-transistor line. While an occasional solidstate component has appeared in other lines, only Harman-Kardon now offers the fabulous wide-open sound quality of complete transistorization throughout its <u>entire line</u> . . . only Harman-Kardon has advanced to the point of going completely out of the tubed-equipment business. Not even a nuvistor tube remains to mar the 100% solidstate sound of every Harman-Kardon instrument.

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by Conrad L. Osborne

Stravinsky: as composer and as conductor, a sure hand.

The Rake's Progress—"An Opera That Insists Upon Analysis"

HAVE MET no more than a half-dozen people capable of making up their minds about *The Rake's Progress*. I once had a standee friend at the Met, an elegant and impassioned Egyptian whose gods were Donizetti and Verdi, who classified it "music of the devil," though not as hellish as *Wozzeck*: and I have literary acquaintances who love it for what seem to me vaguely irrelevant reasons.

1

The rest of us are stuck with an ambiguity. The Rake is a work of genius and integrity, head and shoulders above anything else we've been given for many years-yet we cannot quite decide on its greatness. It is twelve full ounces, but doesn't quite hit the spot. And even if we judge it a total failure (which it surely is not). we find that it challenges us to a dozen intellectual games: I know of no opera that focuses our attention more sharply on questions of form, on the matter of just what constitutes an opera. Consequently, it must be heard and studied by anyone who fancies himself a student of the lyric stage.

The first obvious thing about the *Ruke* is its neoclassicism—the conscious use by Stravinsky of a series of conventions (the ABA aria: the cantabile/cabaletta aria: *secco* recitative; the Mozart orchestra, including harpsichord) that had been ignored, disenfranchised by the ascendancy of the opera-into-music-drama school of composition, and the conscious use by Auden and Chester Kallman of a dramatic structure and a ver-

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bal coin also reminiscent of moribund usages. A second obvious thing is the eclecticism of the score. In his interesting album notes, Kallman recalls the accusation by certain Italian critics that Anne's first-act aria was a mere imitation of another composer. Each critic, alas, selected a different composer: Handel, Gluck, Mozart, Rossini, Weber, Verdi. But, of course, they are all there, they and some others—if not in the aria, then elsewhere in the score. To say this is to say nothing. The point is: why are they there, and to what use are they put?

Handel. Gluck. Mozart, Rossini, Weber, Verdi. Add Donizetti. add Monteverdi. But there is another composer whose aesthetic (unbidden, we may be sure) creeps into bar after bar: Kurt Weill, or more accurately, Weill/Brecht. Weill too was an eclectic, an intellectual, a composer concerned with form. Most importantly, he found a musical style analogous to the theatrical style of his most famous collaborator-and here we approach the very sort of ambiguity that governs our feelings towards the Ruke and its characters. I do not mean to force a parallel; Stravinsky's music sometimes sounds like Weill's, but more often not. In none of his operas is there a hint of Stravinsky as a social (ist) artist. I am concerned for the moment with the relationship of the audience to the characters.

The characters of the *Rake* are those of a fable, clothed in eighteenth-century

theatrical convention. We have two names drawn from fable (Mother Goose, Baba), and the others from Goldsmith or Fielding (Truelove, Rakewell, Nick Shadow). Then we have the Bunyonesque basis for a plot that is a fable-the three wishes, and the protagonist's almost Faustian progress, a continual descent which is also a gradual awakening, culminating in a madness which is also a profound vision (and it is engaging that the symbols of the descent/awakening proceed in this order: Whoring, Loveless Marriage, Salvation through Social Good). And behind this, implicit from the start and explicit at the end, is another fable, that of Venus and Adonis. G. Wilson Knight, that exasperating and fascinating Shakespearean critic, observed that Macbeth ascends, not descends, to tragedy. Tom ascends to his Adonis-ship. In his progress be becomes more fully human, until finally he is quintessentially human, the figure of a myth.

Since it is a fable, the characters must fulfill the demands of the fable. Tom is the one who must be acted upon, for it is the moral of his story that is being drawn. The others remain constants, embodiments of their classical positions. The entire point of a fable, of course, is its clarity, its reduction of what are in real life hopelessly complicated matters to a symbolic level for the purpose of accurate vision. In theatrical terms, this implies a certain distance from the subject, a disengagement—or, to use the term made fashionable by (here we are) Brecht, alienation.

That is the key to Brechtian method, so far as he was able consciously to control it. It is the aesthetic basis for the Brecht/Weill operas and the ballet Die sieben Todsünden-as much so for Weill's music as for Brecht's librettos -and the techniques used are similar to Auden/Kallman/Stravinsky's. In Der Jasager: a Noh play, adapted as socialist parable, to a score based on elementary compositional discipline, literally a "school opera." In Dreigroschenoper, a parody-fable based on another parodyfable, again adapted as socialist parable, to a score based on conscious use of forms such as the Bach chorale, and on Gay's original ballad-opera, which was in turn identifiable, datable, a take-off at once on the popular ballad and the Handelian opera. In *Mahagonny*: another parody-fable, "original" this time and based more closely on what might be termed the stuff of contemporary fable, to a score remindful of many other forms -Mozartean opera, cabaret song, bad barroom piano (dus ist die ewige Kunst"). And so on.

In The Rake's Progress: a fable in juxtaposition to another fable, adapted to certain datable theatrical and poetic conventions to a score composed of evocations of operatic practice of the eighteenth and nineteenth centuries (as often "neoromantic" as "neoclassical"), sometimes parodied, sometimes not. In all these cases, the form is deliberately chosen as expressive of a point being made, it does not simply well up from a central musico-dramatic theme. And in each case, the audience is asked at once to go along with the characters and to remain at a distance from them. the better to comprehend their qualities and actions. In consequence whereof: the dramatic structure of the Rake is a series of tableaux, each descriptive of a phase of the rake's descent/ascent.

It was, of course, suggested by the Hogarth *Rake's Progress* engravings, and in fact proceeds almost in a series of panels; but as Kallman points out, it is not "based on" Hogarth—it simply uses Hogarth as suggestion and, hopefully, for associative significance.

Its verbal language is an elevated poetry, not prose or stream-of-consciousness verse. It is good, sure-footed libretto writing-compact verse that does not waste time duplicating the functions of the music or the stage. Once in a while it uses literary figures that cannot be expected to hold their printed value in a theatre. But by and large, the best thing about Auden and Kallman's work is not its undeniable value as writing per se, but its recognition of its function vis-à-vis the score and the theatre, as opposed to its "word value." Its musical language is that of the twentieth century taking a look over its shoulder.

The source of our ambivalence in feeling towards the opera (I say "our" and mean "my," but apparently it's a widespread reaction, to judge from the quizzical stutterings of most critical response) lies in the fact that while the characters are placed in the perspective of fable, and the form is carefully calculated to keep our minds working, Tom emerges as a person, too. And while all the operatic hocus-pocus is being pointed at and even ribbed, it is working the old tricks on us; it uses the old forms for their own sakes, as well as for purposes of framing. This leaves us at something of a loss. Should we laugh or cry? Snicker or cheer? Remain detached, or give in?

It is not exactly a problem of categorization, as it is with Don Giovanni (the opera so clearly evoked at many points by the Rake; anyone worrying about whether Don Giovanni is a comedy or a tragedy must recognize that this is his hang-up, not the opera's). It is a problem of response, of deciding which layer of meaning in the music we choose to heed. When we hear the harpsichord, we are immediately conscious of the anachronism-that is unavoidable. Yet Stravinsky has chosen the harpsichord not merely for its status as an antique or even its functional value in accompanying secco recitative, but for its descriptive coloration as well, and in this role it creates a chilling effect in the graveyard scene. When Anne launches her cabaletta, we are aware that a fine tradition of romantic opera is being sent up, as the English say; but we also respond to the genuine impetus of the writing, and wait for this high C as impatiently as for any in Verdi. Or again, when the quintet of the Epilogue is launched, we are conscious that a device of the comedic tradition is being used to pull us back from the brink of the catharsis attained in the Bedlam Scene.

We have to accept this bothersome blur of feeling. Probably it is intended. What is not intended (I am fairly certain) is the sense we have of being manipulated, of being trifled with, of both admiring and resenting the extraordinary cleverness of it all. We know, of course, that all operas are consciously constructed to elicit some hoped-for reaction, but when the formalistic bones show so clearly, we become aware of the tampering, and resist it. Personally, I know which opera I wish had been written: I wish the Epilogue had gone uncomposed, that the tone of parody in so much of the writing (particularly for Anne, who is really too close to Polly Peachum) had been suppressed, and that the muted agony and fulfillment of the Bedlam Scene had been left to stand. As it is, the end result is in a limbo. If the Ruke is intended purely as parable, as a piece from which we are to remain disengaged, then it is betrayed by the genuinely moving and exciting scenes it contains. If it is intended ab-solutely "straight," with everything to be taken at face value, then it is betrayed by its all too calculated form. And if the intention is to present a situation in which we will be at once emotionally involved and clear-eyed, then it is simply unnecessary, because that is what any stage work does, willy-nilly.

At any rate, the opera that has been written contains reward enough. In the quality of its inspiration and execution, it leaves its contemporaries in the dust. What a pleasure to sense mature minds, serious dramatic, poetic, and musical purpose behind every bar. The old pros are at work, and the others may pack up and go home. Here is technical command that invariably nails down the effect it goes after; here are scenes that are recognizable as polished theatrical entities, not simply rough drafts with an exploitable core. Above all, here are musical ideas that strike fire and burn themselves into the consciousness right from the start, gaining power with familiarity; an atmosphere, a stage universe, belonging to this work and no other. Of what other opera since *Wozzeck* can these things be said?

There is something magnificent in every scene, and at least three scenes are successful from first note to last: the Mother Goose scene, with its swinging chorus of Whores and Roaring Boys, Tom's little catechism and his exquisite cavatina "Love, too frequently betrayed," and finally the superb "Lanterloo" chorus; the Graveyard Scene, with its black prelude, the game between Tom and Shadow for Tom's soul, and Shadow's melodramatic curse; and the Bedlam Scene, with the genuinely heartbreaking duet for Anne and Tom, the mutterings of the madmen, Tom's death, and the little choral dirge.

This is really only the beginning of the score's riches. The duet in the opening scene: Tom's aria "Vary the Song"; the enormous fun of the writing for Baba, and the subtly worked trio for Baba, Tom, and Anne; Sellem's auction song—all these are among the finest things in modern opera. There are striking theatrical ideas too, among which one must mention the terrible moment when the spring light filters into the blackout after the winter graveyard scene to disclose Tom, mad, singing his ditty.

An opera that provokes thought, that almost insists upon analysis, that refuses total satisfaction. It is an extremely important work.

Columbia's new recording is the opera's second. The first, of course, was the Metropolitan Opera version, recorded shortly after the first Met performance of the *Rake* in 1953. It was also recorded by Columbia and was also led by the composer, though Fritz Reiner had conducted the Met performances. Stravinsky has reportedly been much displeased with the first version; we may thus assume that he regards the second as something of a corrective.

It is the better production, without doubt, though in some respects I find the margin of superiority narrow, and even in hindsight it does not seem that the Met version is all that bad. Good, up-to-date stereo sound is a distinct advantage-passages that didn't sound like much of anything on the old recording emerge with a fresh lucidity and point on the new. And there is no doubt that the general flow of the music seems more natural, more musical in the new performance. This is especially true in the recitative, which is difficult stuff because it often insists on making a musical point independently of the textual one (a sure-fire device for forcing one's at-

Continued on page 90
by Denis Stevens



Songs of Life and Love in Ancient Nuremberg

WAGNER'S magnificent evocation of life. love, and Lieder in sixteenth-century Nuremberg has become so much a part of operatic experience that few who listen ever give a thought to the truth behind the fiction. The plot of Die Meistersinger was certainly fiction, but the poet-singer Hans Sachs really did exist and he composed music and lyrics well worth hearing today. Nuremberg, however, was only one of many cities in Germany where singing guilds and song contests kept alive the monophonic art of the medieval troubadours. The rules for entry into this musical club were strict in the extreme, and the almost malicious marking of mistakes by Beckmesser, as the young Walther sings his first song, is not too much of an exaggeration. Indeed, Walther may have got off lightly since it was usually the custom to have three or four "markers" busy with slate and pencil.

Hans Sachs, who lived in Nuremberg from 1494 until his death in 1576, wrote well over four thousand master-songs, the great majority of them characterized by florid melodic passages called Blumen occurring at the beginning and end of a song. or (in simpler guise) over some significant word in the body of a verse. Many of the texts were based on the Bible, but Sachs and a few of his colleagues broadened the scope in order to bring in biographical material, parables of contemporary life, and lengthy aphorisms. Five of Sachs's songs can now be heard-and studied in the original German text and an English translationthanks to an Archive release actually recorded in Nuremberg.

The songs are sensibly shared between a tenor. Friedrich Brückner-Rüggeberg, and a baritone. Rudolf Aue, who succeed in conveying the rather stiff but undeniably sincere quality of both verse and music. In *Bal und sum meiner* gedicht auf dise zeit ("Volume and Number of my Works at this Time") the sixty-year-old Sachs tells the touching story of how he decided to stop composing and spend his remaining years in peace and quiet. But the Nine Muses appeared to him in a dream, and Terpsichore told him that he could not be released from his obligations as long as he lived. Faithful to the goddesses, Sachs continued in his creative vein, and earned (as they prophesied) "fame, praise, and honor from many a noble mouth."

In Dichter und singer he compares the lot of the creative artist and the interpreter: the former is free to invent "new poems and fresh songs at all hours,' whereas the latter can only tread the paths marked out for him. This was of course very true of the mastersingers, although their less hidebound contemporaries, whether singers or instrumentalists, could and did take great liberties with what was written down. Sachs shows us his moralistic side in Der verwunt tigierter, a diatribe against slanderers borrowed from Aesop; his religious feelings in Geheimnis der Gotheit; and his sense of humor in a saucy tale about a Venetian mariner whose wife pretended she became pregnant from swallowing an icicle (Ein eiszapf).

Nuremberg, the city of Sachs and Dürer, of Krafft and Vischer the sculptors, and of Henlein the inventor of the watch, nevertheless resounded with the clamor of lesser mortals, with street songs and folk songs more venerable than the twisted streets leading down from the squares and churches to the Pegnitz. Some of these anonymous songs, written down in a manuscript book about the middle of the fifteenth century, appear on the same Archive disc in vivid performances by the Nuremberg Gambencollegium, directed by Josef Ulsamer. The Locheimer Liederbuch, or "Old Nuremberg Song-Book" as it used to be called, contains a variegated collection of pieces (only nine of them harmonized) that reflect something of the violent contrasts of late medieval Germany. Courtly love songs share pages with coarse peasant humor, dance songs mingle with moralistic ditties and borrowings from Burgundy.

These have all been scored in a lively, imaginative. yet scholarly way for an ensemble of voices, fiddle, lute. psaltery, recorder, cornet, krummhorn, hurdygurdy, bagpipes, organ, and drums. Praise is due to the singers for their clear enunciation and vivid interpretations, and to the instrumentalists for their colorful accompaniment. Yet the most powerful factor of all is the vitality of the music itself. The tender, flowing phrases of Der wallt hat sich entlawbet ("The woods are bare and leafless"), the vivacious pulse of Ich spring an disem ringe, and the wildly orgiastic Es fur ein pawr gen holcz ("A farmer went to the woods") display a more than musical gamut of emotions, and it is much to the credit of Dr. Hans Hickmann and his Archive collaborators that this music comes to life so magically and so well. This disc indeed is so fine as to rank as one of the best medieval programs I have heard in the last decade.

If it whets the appetite for Nuremberg and its musical past, a fascinating and complementary record may be found in the imported Odeon "Musik in alten Stadten und Residenzen" series: "Nürnberg, die freie Reichstadt" (STC 91 110). The program includes music by the Nuremberg composers Kindermann, Staden, Johann Krieger, J. P. Krieger, Pachelbel, and Wecker, and the performances are generally of excellent quality. Particularly attractive is the Partita in D for Harpischord by Johann Krieger (though recorded in far too resonant an acoustic and the Quodlibet on Nuremberg street cries by Kindermann. A wider appeal would be ensured if Odeon had translated the accompanying booklet into English.

MUSIC FROM NUREMBERG

Hans Sachs: Songs (5). Songs and Instrumental Works from the Locheimer Liederbuch (14).

Friedrich Brückner-Rüggeberg, tenor (in the Sachs); Rudolf Aue, baritone (in the Sachs); Nuremberg Gambencollegium. Josef Ulsamer, cond. (in the Locheimer Liederbuch).

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BACH: Concertos: for Violin, Flute, Harpsichord, and Strings, in A minor, S. 1044; for Harpsichord and Orchestra, No. 6, in F, S. 1057

Anne-Marie Beckensteiner, harpsichord; Huguette Fernandez, violin; Christiane Larde, flute; Jean-Marie Leclair Instrumental Ensemble, Jean-François Paillard, cond.

• MUSICAL HERITAGE SOCIETY MHS 535. LP. \$2.50.

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All the soloists sound like able players, but their efforts are vitiated by the conductor and the recording. In both works there is a certain brusqueness in the fast movements. The Harpsichord Concerto, which is a very interesting recasting of the Fourth Brandenburg, has always struck me as having a pastoral quality, but for the present performance one would have to imagine high-strung, neurotic shepherds. Especially in the Triple Concerto there seem to be only two levels of dynamics, mezzo-forte and forte. The bass is tubby; and in both works the harpsichord, when it is not playing alone, is fre-quently covered up. It is perfectly true that this instrument does not have much carrying power and never did, but does anyone maintain that Bach would have wrought those finely detailed harpsichord parts, thematically as important as the other solo parts, so carefully if in performance they were going to dissolve into a silvery tin-kling in the background? The microphone permits us to ignore concert hall acoustics and bring the harpsichord up to its proper level in the instrumental discourse. It is one of the few advantages of electrical recording over the real thing, and more use should be made of it. N.B.

BACH: St. John Passion, S. 245

Evelyn Lear, soprano; Hertha Töpper, contralto; Ernst Häfliger, tenor; Hermann Prey, baritone; Kieth Engen, bass; Munich Bach Choir and Bach Orchestra, Karl Richter, cond.

• ARCHIVE APM 198328/30. Three LP. \$17.94.

• • ARCHIVE SAPM 198328/30. Three SD. \$17.94.

The St. John Passion has not been as

well represented on records as the St. Matthew. Two of the better performances are now relatively old, and are available on mono only, while the more recent stereo versions have had some drawbacks to weigh against their considerable merits. The same can be said of this latest stereo recording. It is presumably intended to replace the older Archive version, one of the two mono recordings mentioned above. Richter, among the more skillful Bach conductors active in the studios nowadays, achieves a good deal of eloquence. The great opening movement has a tragic intensity, the crowd scenes are dramatic, the wonderful chorales are varied in mood according to the situation, and the final lullaby is deeply affecting in its tenderness and sorrow.

Ernst Häfliger is an excellent Evangelist. His voice reflects the moods of the narration, and it seems richer in quality than formerly. In "Ach, mein Sinn" it is vigorous and moving; seldom does it relapse into the "whiteness" of the average oratorio tenor. Of the other male soloists. Hermann Prey as Christ is steady, and the color of his voice invites sympathy; and while Kieth Engen sings the arioso "Betrachte, meine Seel"" only adequately, he handles the difficult problems of pitch in "Eilt," his big aria with chorus, quite skillfully. Though the ladies sing ably, they are not very moving. Miss Lear is more effective in "Ich folge dir" than in "Zerfliesse mein Herze," and Miss Töpper's "Es ist voll-bracht" is properly grave yet somehow misses fire.

The chorus has a good tone, but much of the time the sopranos push the other parts into the background. Choral balance is at its best in "Lasset uns den nicht zerteilen" and in "Ruhet wohl." The continuo instrument, an organ throughout, struck me as sometimes quite effective, at other times—as in the many long sustained chords in recitatives as rather tiresome. Aside from questions of choral balance, the sound is first-rate. There is still room for a St. John recording that will stand out above all the others. N.B.

BACH: Suites for Orchestra: No. 1, in C, S. 1066; No. 2, in B minor, S. 1067; No. 3, in D, S. 1068; No. 4, in D, S. 1069

Paillard Chamber Orchestra, Jean-François Paillard, cond.

• EPIC SC 6407. Two LP. \$9.96.

• • EPIC BSC 147. Two SD. \$11.96.

BACH: Suites for Orchestra: No. 2, in B minor, S. 1067; No. 3, in D, S. 1068

Stuttgart Chamber Orchestra, Karl Münchinger, cond. [from London LLP 848, c. 1950.] • RICHMOND B 19102. LP. \$1.98.

The Paillard performances are straightforward and rather literal. Groups of eighth notes are played as even eighths,

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and there is no hint of double dotting. One consequence is that the opening of Suite No. 1 is pleasantly smooth and less ponderous than it sometimes is. Otherwise there is nothing particularly outstanding about this set. The flutist in No. 2, Maxence Larrieu, is excellent, the tempos are on the lively side, but by and large the performances are not as imaginative as those in the Menuhin (Angel), Richter (Archive), or Münchinger (London) sets, to mention the best of the recordings available in both mono and stereo.

Münchinger's old recording of Nos. 2 and 3, considered among the best in its time, is now quite dated with respect to the quality of its sound. N.B.

BARLOW: Mon ami Pierrot: Overture; Cortège from Sardo; Circus Overture

+Claflin: Concerto giocoso for Piano and Orchestra

Lamoureux Orchestra. Robert Cornman, cond. (in the Barlow); Gisli Magnússon, piano, Iceland Symphony, William Strickland, cond. (in the Claflin). • COMPOSERS RECORDINGS CRI 178. LP. \$5.95.

Samuel Barlow was born seventy-two years ago, studied music at Harvard, and subsequently was a resident student in Paris and Rome. It helps to know these facts, but they could almost be inferred from this music, which is militantly characteristic of its time and place. Avery Claflin, now sixty-six, is another Harvard product who got to France, but as an ambulance driver rather than a composition student. Even so, the influence of the Gallic school is felt. Both composers are good craftsmen who-at least in these scores-lack the capacity to generate and develop big musical ideas worthy of their technical accomplishments. Their schooling and their influences have been well assimilated, but there is no sense of powerful individuality in musical thought to turn this background into a distinctive means of selfexpression.

Both. I suspect, have a well-developed flair for humor. The Claflin piece proceeds in a good-natured fashion that ought to win it a place in the proms and pops of summers to come. It would benefit, I think, from a slightly more mercurial performance than it receives here. The best of the Barlow is the score with the most wit and least pretention: *Mon ami Pierrot*, the preface to an opera written on behest of Sacha Guitry in 1934. The Lamoureux performances all seem to be quite sympathetic, but, like the Icelandic ensemble, the orchestra is given only so-so recording. R.C.M.

BARTOK: Sonata for Two Pianos and Percussion †Debussy: En blanc et noir; Six épigraphes antiques

Robert and Gaby Casadesus, pianos; Jean-Claude Casadesus and Jean-Paul Drouet, percussion (in the Bartók). • COLUMBIA ML 6041. LP. \$4.98. • COLUMBIA MS 6641. SD. \$5.98.

The present team approaches the ever absorbing Bartók work with tightly coiled rhythmic thrust and spare monochromaticism, seldom suggesting color or atmosphere and making one always conscious of a *sec* linearity. The percussion punctuates with short, sharp commentary, neither as mellow as on the recent performance by Farnadi, Antal, J. Schwartz, and O. Schwartz (Westminster) nor as vibrantly resilient as on the edition. by Votapek, Vosgerchian, Firth, and Press (Cambridge). The xylophone, in particular, has a bright ring and assertiveness as set forth here.

By virtue of its obvious interpretative intelligence and superior order of execution, Columbia's entry should have many adherents. For me, however, this reading lacks the requisite poetry and barbaric emotional strength, and I prefer the Westminster (a perverse choice, perhaps, for that edition often departs from Bartók's very specific instructions-he even included stop-watch timings). My own feeling (with which many will disagree, I am sure) is that this evocative opus is strongly emotional, making its compelling effect from acoustical textures and sonority as much as from formal logic per se. To play it with Brueghel coloration and a touch of romantic license does it no harm; to perform it graphically and impersonally (as the foursome here inclines to do) robs it of much of its potency. Furthermore, the Columbia recording is marred by an obtrusive tape hiss which precludes the illusion of live performance (so aptly conveyed by the Cambridge, in particular), and in the stereo pressing almost everything emerges from the right channel.

The overside Debussy cryptograms represent a stereo remake of excellent decade-old monophonic recordings. Robert and Gaby Casadesus are right in their element with this dry, steel-point engraver's type of music (late Debussy is not at all "impressionistic"), playing it even better today than they did ten years ago. Here the reproduction is superb in every way.

The music contained on this disc is fascinating and will well repay investigation by those unfamiliar with it. H.G. BEETHOVEN: Concerto for Piano and Orchestra, No. 5, in E flat, Op. 73 ("Emperor")

Mindru Katz, piano: Hallé Orchestra, Sir John Barbirolli, cond. • VANGUARD EVERYMAN SRV 138. LP.

\$1.98.

• • VANGUARD EVERYMAN SRV 138SD. SD. \$2.98.

BEETHOVEN: Concerto for Piano and Orchestra, No. 5, in E flat, Op. 73 ("Emperor"); Egmont Overture, Op. 84

Julius Katchen, piano (in the Concerto): London Symphony Orchestra, Pierino Gamba, cond.

• LONDON CM 9397. LP. \$4.98.

• LONDON CS 6397. SD. \$5.98.

Two more *Emperors* following hard on the heels of RCA's recent Rubinstein/ Leinsdorf issue, and both containing many salient virtues. They present an interesting comparison.

Mindru Katz is a young Rumanian pianist who has gained quite a bit of recognition on the Continent. The Vanguard disc, his first record to be released in this country, was recorded by Pye and has been available in Great Britain for several years. From both musical and pianistic standpoints, Mr. Katz gives an impressive demonstra-tion of his abilities here. The artist favors a clarion assertiveness and sharply defined attack, His tonal and dynamic range is exceptionally varied, ranging from feathery delicacy to bronzen massiveness. He adopts a courageously slow tempo for the second movement. and although he runs the risk of splintering the linear continuity with undue deliberation, he avoids that peril and Indeed, Mr. emerges triumphantly. Katz's performance of this section has an air of gravity reminiscent of what Schnabel used to evoke from the music. I also like very much the weighty energy and pounding momentum of the outer movements. Barbirolli leads a forthright, alert-sounding accompaniment and the Hallé ensemble, while not particularly luscious in sonority, does its work well. Here is an Emperor to share first place with the Rubinstein/ Leinsdorf (RCA Victor), Fleisher/ Szell (Epic), and Schnabel/Sargent (RCA Victor, deleted). In the economy category it heads the list.

Julius Katchen, for London, also turns in one of his best efforts to date. It seems to me that he is far more suited to the extrovert bravura of the Emperor than he was to the subdued bravura of No. 4, issued a few months ago. His is an essentially lightweight reading, with fast tempos and gleaming sonority. While he never plumbs the emotional depths of the score, he always avoids the tricky phrasing and unwanted flashiness which have sometimes marred his performances. There is much to be said for having the Concerto moving smartly along without fuss or bother. Furthermore, some of the technical execution is ravishing. One detail worth special mention is the long chain of trills in the second movement, which are realized with exemplary evenness and lovely tone. Anyone who has played the piano will know how difficult a passage like this can be. Pierino Gamba conducts in the same spirit as his soloist. Although the conductor does not produce a deeply burnished or subtle ensemble tone from his forces (the brass, especially, have a rather raw sound), he leads the music with taut energy and refreshing verve. A splendidly forthright reading of the Egmont Overture is an attractive bonus.

Sonically, the Vanguard disc is admirable, the London exceptional. Despite the greater quantity of music on the latter, the reproduction is uncommonly sleek and without any of the slight constriction in *forte* passages heard in most other recorded *Emperors*. H.G.

BOCCHERINI: Quintets for Guitar and String Quartet: No. 1, in D, Op. 37; No. 3, in E minor, Op. 50, No. 3

Spanish National Chamber Music Ensemble.

- MUSICAL HERITAGE SOCIETY MHS 575. \$2.50.
- • MUSICAL HERITAGE SOCIETY MHS 575. \$2.50.
- BOCCHERINI: Quintet for Guitar and String Quartet, No. 3, in E minor, Op. 50, No. 3
- +Haydn: Quartet for Guitar, Violin, Viola, and Cello, in G, Op. 2, No. 2

Karl-Heinz Böttner. guitar; Günter Kehr and Hans Kalafusz, violins; Günter Lemmen, viola; Siegfried Palm, cello. • Vox DL 1010. LP. \$4.98.

• Vox STDL 501010. SD. \$4.98.

With virtuoso guitar players heard more and more frequently these days, it is easy for us to imagine the guitar as a bright participant in the instrumental conversation of chamber music. In the present works, alas, it seldom gets a thought in edgewise (except in the finale of the Boccherini E minor), and is forced to spend most of its time providing its companions with support of the most genteel sort. Since neither composer here actually wrote for the instrument, however (Boccherini made his own transcriptions from works for standard string quintets, and Haydn wrote for the lute), it is perhaps unfair to bemoan the modesty of the guitar's role at a series of parties to which it was not really invited! The Boccherini works are quite rewarding otherwise: the Fandango finale of the D major builds to a remarkably full climax and the part-writing throughout is always alert. On the other hand, the early Haydn piece is just too early to provide much more than historical interest.

Vox's performers are a stiffish lot who are apt to give as much importance to accompaniment figures as to the

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melody; the Spanish ensemble on MHS handles things with greater flair, though the players hurry through the E minor finale so fast that some notes on the guitar scarcely have time to sound. Stereo spread is more pronounced on MHS. S.F.

BORTKIEVICH: Concerto for Piano and Orchestra, in B flat, Op. 16— See Busoni: Indian Fantasy, Op. 44.

BRAHMS: Concerto for Violin and Orchestra, in D, Op. 77

Christian Ferras, violin; Berlin Philharmonic Orchestra, Herbert von Karajan, cond.

• DEUTSCHE GRAMMOPHON LPM 18930. LP. \$5.98.

• • DEUTSCHE GRAMMOPHON SLPM 138930. SD. \$5.98.

Excellent versions of this repertory staple are available in abundance. Nevertheless, the present reading is so exceptionally distinguished in every respect that one could justifiably place it at the head of the list.

The combination of Ferras' Kreisler-ish tone and richly lyrical interpretation with Von Karajan's beautifully poised, muscular conducting is an unqualified success. The violinist's older version for London with Carl Schuricht and the Vienna Philharmonic, currently available on the inexpensive Richmond label, re-

high fidelity

The Prima Donna At Work

An Interview with Maria Callas

On the scene at a new recording of *Carmen*.

by Esther Gelatt

Die Nilsson and La Nilsson

In one short season in the studios, Birgit Nilsson moves from Götterdämmerung to Macbeth.

by William Weaver

Boadicea in Walthamstow

For Joan Sutherland, Bellini's Norma provides the latest challenge.

by Robert Kotlowitz

New Trends in Stereo Kits by Ivan 8. Berger mains a fine performance, but one has only to hear a bit of the new recording to note how much more subtle Ferras' playing has become. Karajan, though always considerate of his soloist's wishes, projects an eminently symphonic (as opposed to Schuricht's chamber music) point of view. The tuttis are large-scaled and assertive, with superlative attention given to instrumental balance and rhythmic impetus. Moreover, the recorded balance is the closest thing to concert hall realism I have yet experienced from a record. It is extraordinary to hear how much detail comes through in an unobtrusive, perfectly natural way. The solo violin can be plainly heard, but to the massive orchestral forces.

Both Szeryng editions (particularly the slower-paced Mercury one with Dorati), the Oistrakh/Klemperer (Angel), and the Francescatti/Bernstein (Columbia) all merit hearing. but for sheer elegance, warmth, and breadth combined, this DGG is in a class of its own. Kreisler's cadenza is played by Ferras, by the way; most of the others use the Joachim. H.G.

BRITTEN: Albert Herring

Sylvia Fisher (s), Lady Billows; April Cantelo (s), Miss Wordsworth: Catherine Wilson (s), Nancy: Sheila Amit (s), Emmie: Anne Pashley (s), Cis: Stephen Terry (boy s), Harry; Johanna Peters (nts), Florence Pike: Sheila Rex (c), Mrs. Herring: Peter Pears (t), Albert Herring: Edgar Evans (t), Mayor Upfold; Joseph Ward (b), Sid; John Noble (b), Mr. Gedge: Owen Brannigan (bs), Superintendent Budd; English Chamber Orchestra, Benjannin Britten, cond. • LONDON A 4378. Three LP. \$14.94.

• LONDON A 4378. Three LP. \$14.94. • LONDON OS 25883. Three SD. \$17.94.

Albert Herring follows The Rape of Lucretia in the catalogue of Britten's operas; written as the initial presentation of the English Opera Group, it received its first performance at Glyndebourne on June 20, 1947, with Britten conducting and Peter Pears in the title role. Since then, it has had a number of productions in England, on the Continent, and in the United States. and in terms of its reception by audiences and critics, it must be reckoned as one of the more successful operas of the last quarter century.

Since my first acquaintance with the opera is through this recording. I cannot presume to judge its effect in the theatre. Still. we have it here as a piece to be listened to, unseen, in one's living room, and it will no doubt remain in this context for most American collectors. On this basis, I would have to rate it something of a disappointment, despite the presence of many attractive passages and despite the all-round excellence of the performance.

The root of the problem—to get straight to it—is that for all the musical inventiveness and intermittently entertaining byplay, Britten and his librettist, Eric Crozier, have left out an essential ingredient of stage comedy, operatic or otherwise: people. By this I mean not merely recognizable stage types, but individuals in whom we are compelled to take interest, whose fortunes we feel we must follow. It is probably gratuitous to point out that in every great comic opera from Nozze di Figaro to Rosenkavalier, and in every merely good one, from La Serva padrona to L'Heure espagnole, there exists a group of people for whom we harbor concern, towards whom we feel affection; no matter how foolishly. misguidedly, or even cruelly they may behave. Even an Ochs or a Beckmesser commands a share of our compassion, to say nothing of a Sachs or a Falstaff.

But we must search hard among this crew of selfish, pinch-brained, sanctimonious types for someone whose part we can take: we do not want to return to the village of Loxford, or see any of these people again, ever. It is conceivable that a workable comedy might be built around the central situation, drawn from a De Maupassant story. The villagers, represented by their vicar, schoolteacher, police superintendent, and patroness, search for a blameless girl for the title of May Queen. In this provincial town, as in Atlantic City, the qualities looked for are primarily negative-the candidates must be innocent of partaking in most of life's pleasanter pursuits, such as smoking or making love. Since no local girls fill the bill, Albert Herring, a naïve and suppressed mama's boy, is chosen May King instead. He proceeds to fall from grace, however; after downing some spiked lemonade, he spends his prize money on an evening of pub crawling and wenching. While he is missing, the villagers presume him dead, and are furious when he returns, not only alive but relatively unabashed. But he confounds them by rejecting their judgment and picking up life as a man-his experience has strengthened him.

Clearly, Albert is intended as the worm that turns, a simple figure of ridicule who finally resists the goad and rises above his erstwhile tormentors. John Culshaw states the case in his notes: "Albert Herring is much more than (a figure of fun). . . . His outburst towards the end of Act 1 . . . immediately makes him a three-dimensional character, and his dismissal of all except Nancy, Sid, and the children at the end of the opera strikes a correctly serious note while still remaining within the bounds of comedy. He has become a man." But simply stating this does not make it believable in theatrical terms, and simply giving Albert a scene or two in

which he all but tells the audience, "You see, I may be a figure of fun but hang around, I'll turn serious in Act III for sure" does not make of him a threedimensional character. Partly because Mr. Crozier's scenes of self-revelation and character study are so unsubtle and partly because there is little in the music to make us feel anything at all towards Albert, the opera's central character fails to justify all the hubbub. Perhaps if we had actually seen Albert on his night of nights, rather than merely hearing him tell of it, colorlessly, later . . . but that's spilt milk.

The music, as I have already indicated, has its points. Each of the villagers is recognizable as a type, and there is a good deal of fine descriptive music, descriptive of everything from the bustle in Lady Billows' home to the wooziness of Albert's way home on the morning after (a lovely melody for alto flute). It is this very facility in describing gesture and atmosphere that constitutes a pitfall for the composer, for it results in music that is almost constantly busy, ingenious, continuously unrelievedly talking about things that in the long run don't matter much. And since Mr. Crozier is constantly supplying Britten with little opportunities for such contrivance, the work finally becomes tiresome.

Still, there are fine things along the way. The Act I cantabile for the Vicar ("Is Albert virtuous?") and the ensuing ensemble is a charming inspiration; so is the little duet for Sid and Nancy. Nearly all the ensemble passages are at least well worked and clever, and sometimes quite exhilarating-particularly engaging is the Threnody sung by the villagers when Albert can't be found. The interludes between scenes in the last act are quite beautiful, reminiscent of lves, of all people, and the recitative problem is respectably solved, though many of these lines (to understate the case) do not cry out for lyric treatment. In short, there is a good measure of charm and invention in the score, and while rather too much of it is "busy" music, it is by no means all description and gesture, which is very nearly the case with Midsummer Night's Dream.

As for the performance, it is almost unexceptionable. The execution of the chamber orchestra is impeccable, Britten's leadership is vivacious and affectionate, and nearly everyone in the large cast manages to sing well and create an aurally believable character. Pears does everything that could be done for the title role, playing it with an engaging naturalness and singing it with remarkable ease. His enunciation of the text is superbly clear without sounding like "diction." Of the others, I especially like April Cantelo's flibbertygibbety schoolteacher and the ripe portrayal of Superintendent Budd by the always enjoyable Owen Brannigan. John Noble and Joseph Ward both handle their high baritone roles smoothly and with a good sense of character; Noble manages to



suggest a slight unctuousness without making the Vicar repulsive on the surface. But the others are good too. The only weak piece of casting, unfortunately, is that of Sylvia Fisher in the important role of Lady Billows. Miss Fisher is a veteran of such sopranic battles as Isolde and Sieglinde, but she is evidently past singing with any measure of control, and her vocalism here is almost unpleasant. She has a good hold on the character, but it is all just too hard to listen to.

The recording is splendid, beautiful in sound and expert in the use of such stereophonic niceties as the sound of a ball bouncing across the shop floor. Perhaps more Americans will have an opportunity to see *Albert Herring*. Most comedies are better off seen than heard. C.L.O.

BRUCKNER: Symphony No. 8, in C minor

Berlin Philharmonic Orchestra, Eugen Jochum, cond.

• DEUTSCHE GRAMMOPHON LPM 18918/ 19. Two LP. \$11.96.

• • DEUTSCHE GRAMMOPHON SLPM 138918/19. Two SD. \$11.96.

The task in performing Bruckner is not merely that of interpretation but of organization as well. For this composer's extended musical designs and sometimes loosely knit structures must be given firm bonds of meter and accent so that the progression of his musical ideas can be seen as a logical development. Up to now, the conductor who had done this best in the Eighth Symphony was Eduard van Beinum, whose edition with the Amsterdam Concertgebouw has retained a loyal audience, despite aging sound and the appearance of stereo sets from such distinguished Dirigenten as Karajan and Knappertsbusch.

Not surprisingly, the stereo recording which best realizes the high standard of Beinum's achievement comes from the man who succeeded him in Amsterdam, Eugen Jochum. Here too are the soaring lines building resolutely to the grand. climactic pages which are Bruckner's hallmark. Here, as well, is the special sense that allows a theme to unfold slowly, through the miraculous convolutions of this composer's invention, and yet to retain at all times a sense of motion. This takes an old hand. The primary fault of many young conductors is that they cannot put a firm rhythmic pulse into a slow passage, and Jochum's lessons here could be taken to heart.

Excellent as the slower pages are, the key to Jochum's skill is his awareness of the need for contrast in Bruckner. Thus he is equally adept in his employment of fast tempos. You hear this in the opening movement and the scherzo that follows, but perhaps most remarkable of all is the vigor Jochum brings to the finale and the great skill with which he handles the pitfalls of the shifting themes in the coda.

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orchestra performance here, coupled with the high technical level, results in a version that will probably dominate the listings for some time to come. R.C.M.

BUSONI: Indian Fantasy, Op. 44 +Bortkievich: Concerto for Piano and Orchestra, in B flat, Op. 16

Marjorie Mitchell, piano; Vienna State Opera Orchestra, William Strickland, cond.

• DECCA 10100. LP. \$4.98.

• • DICCA DL 710100, SD, \$5.98.

Fully aware of the implications of what I am saying, I would nevertheless pronounce these the two worst pieces of music to be introduced on records in the last year, perhaps even since the beginning of phonographic history. They are both so bad, in fact, that every event becomes a discovery of sheer delight, and I would therefore recommend this record most enthusiastically.

The sophistication and complexity of his major works notwithstanding, Busoni created in his Indian Fantasy a hodgepodge of the most naïve gestures. Working with material supposedly based on authentic American Indian chants, he manages to transform every tune into something Stephen Foster might have harmonized. The working-out of this material has a certain surface virtuosity, and it sounds as if it might be fun to play, but it hardly shows the creative gifts that could also produce such a work as the Fantasia contrappuntistica. Serge Bortkievich (1877-1952) is a shadowy figure in Russian post-romanticism, and from the evidence of his First Piano Concerto (1912) the shadows are well deserved. It is a sad compendium of clichés from the Tchaikovsky era, with a certain superficial virtuoso appeal and little else. One can amuse oneself counting the specific works from which this Concerto is cribbed, but I can recommend far more enlightening party games.

Marjorie Mitchell is certainly up to the limited demands of both works; in fact, she is a better musician than the music gives her a chance to demonstrate. The same is true of William Strickland and the orchestra. The sound is sharp, well defined, and a shade harsh. A.R.

CHOPIN: Rondo for Piano and Orchestra, in F, Op. 14 ("Krakowiak"); Andante Spianato et Grande Polonaise brillante, Op. 22 †Liszt: Hungarian Fantasy, for Piano and Orchestra

Peter Frankl, piano; Innsbruck Symphony Orchestra. Robert Wagner, cond.
Vox PL 12500. LP. \$4.98.
Vox STPL 512500. SD. \$4.98.

My enthusiasm for Chopin's charming and early *Krakowiak* is evidently shared by Vox, for this is the third version of that seldom performed work to appear on the label. The piece could well have been a forerunner for the rondo of the E minor Concerto: both utilize the same sort of bouncing duple-time, and both have in common certain devices of modulation (such as the sudden, momentary, but totally unexpected transposition of the main theme near the end).

And both require the same high finesse and stylistic elegance from their interpreters-alas for the Krakowiak, which is usually treated patronizingly by the best Chopin players. Frankl, an intelligent artist who has given me considerable pleasure on other occasions, misses the point here. He has the sheer digital velocity to cope with the tricky figurations, but his general mode of execution -briskly efficient, noncommittal, tonally monochromatic, and rhythmically inflexible-causes the elusive charm and atmosphere of the slight work to vanish to the winds. The young Hungarian pianist is at a further disadvantage in being hampered by inferior orchestral support. The Innsbruck ensemble has a turgid, unfocused sound and its rhythmic pulsations are ambiguous, to say the least. Moreover, the orchestra is often a fraction behind its soloist. A similar state of affairs obtains for the other two compositions here recorded, but the Liszt warhorse can at least withstand a certain amount of battering.

Fortunately, there is a beautifully authentic and sensitive recording of the Krakowiak by Stefan Askenase and Willem van Otterloo (for DGG) and a similarly bewitching account of the Hungarian Fantasy by Shura Cherkassky and Herbert von Karajan (for the same company). For the Andante Spianato et Grande Poionaise brillante, we are offered a multitude of fine editions to choose from: Rubinstein (RCA Victor) and Vásáry (DGG) have made outstanding recordings of the orchestral version while Hofmann (Columbia, deleted), Horowitz (RCA Victor), and, again, Rubinstein (RCA Victor) excel in the solo alternative.

Every artist has an off-day now and then, and Mr. Frankl has more than proven his capabilities in other assignments. Vox's sound is unalluring. H.G.

- CLAFLIN: Concerto giocoso for Piano and Orchestra—See Barlow: Mon ami Pierrot: Overture; Cortège from Sardo; Circus Overture.
- DEBUSSY: En blanc et noir; Six épigraphes antiques—See Bartók: Sonata for Two Pianos and Percussion.

DEBUSSY: La Mer; Prélude à l'aprèsmidi d'un faune

†Ravel: Daphnis et Chloë: Orchestral Suite No. 2

Berlin Philharmonic Orchestra, Herbert von Karajan, cond.

• DEUTSCHE GRAMMOPHON LPM 18923. LP. \$5.98.

• • DEUTSCHE GRAMMOPHON SLPM 138923. SD. \$5.98.

Devotees of Karajan's earlier recording of La Mer with the Philharmonic Orchestra (Angel) will find his new one to be very similar as an interpretation. The conductor favors rather broad tempos and a low-keyed, soft-focus treatment of detail. Some might feel that his reading is a bit too subdued, not quite virile enough, but there can be no denving the exquisite poetry and masterful negotiation of tempos. Furthermore, for all its refinement, Karajan's treatment of the score is always resilient and concise: he never is guilty of the excessive languishing which to some extent mars the otherwise admirable Giulini performance. And since DGG's sound, though distant in its microphone placement. captures the vivid, glowing tones of the superb Berlin ensemble with stunning impact, this reading is conveyed with exemplary force. If you find the Szell and Toscanini La Mer recordings essentially to your liking but would prefer slightly more mist and atmosphere in the orchestral fabric than those conductors obtain, this new Karajan will probably suit your requirements per-fectly. It is one of the very best on records.

Incidentally, this conductor continues to utilize the 1913 edition of the score rather than that of 1905. One of the major differences between the two versions is the later interpolation of brass fanfares at one point in the third movement. Karajan is in company with Munch, Monteux, Ansermet, and Désormière (among others) in his use of the later score, while Szell, Toscanini, Giulini, Cantelli, and Inghelbrecht adhere to the earlier text.

The Faune is an exquisite performance in a style—precious, dainty, languishing —for which I have a certain antipathy. The more robust, detached treatments of Monteux, Cantelli, and Pedrotti (not to mention the exceptional one by Toscanini, which RCA Victor may finally make available soon) are far more to my taste. Daphnis et Chloë can better withstand Karajan's brand of sophistication, especially as the recorded sound given him has exceptional presence. Cantelli's monophonic Angel disc, though. is still very much in the running. H.G.



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Gustav Leonhardt, organ and harpsichord.

• CAMBRIDGE CRM 509. LP. \$4.98. • • CAMBRIDGE CRS 1509. SD. \$5.98.

Johann Jabok Froberger (1616-67) occupies an honorable place in music histories as one of the first of the great German composers for the keyboard, but we seldom get a chance to hear any of his music. The present disc is therefore very welcome. It offers five works played on the organ and six on the harpsichord. They are full of interest. There is a good deal of chromaticism. In the Toccatas elaborate improvisatory sections alternate with skillfully made contrapuntal sections. Fantasia I contains imaginative variations. and there are two noble Suites. The general mood is rather serious. Sometimes it deepens to an almost tragic intensity; sometimes, especially in fuguelike sections, it lightens considerably.

Gustav Leonhardt. a Dutch musician who specializes in baroque keyboard music, seems to be in complete command of the style. He plays the improvisatory sections quite freely, adds embellishments discreetly, and in general gives the impression that he not only knows what he's doing but enjoys doing it. I found the harpsichord more enjoyable than the organ here. The latter, the great Schnitger instrument at St. Michael's in Zwolle, does not come through clearly enough on this record. Either because of the registrations chosen or, more likely, because of problems of microphone placement, the sound of the organ is not as clean or transparent as it has been in other recordings. N.B.

HANDEL: Chandos Anthems: II, In the Lord put I my trust: III, Have mercy upon me, O God

Helen Boatwright, soprano; Charles Bressler, tenor: instrumentalists: Collegium Musicum of Rutgers University, Alfred Mann, cond.

• CANTATE 645202. LP. \$5.95.

• • CANTATE 655202. SD. \$6.95.

An interesting project inaugurated by the recent issuance of Chandos Anthems IV and VI is continued here. Both of the present works are of high quality. They are not Handel of the "big bowwow" but intimate, and in the case of III, even subdued. More important, they are very beautiful. Anthem II. based mostly on Psalm 11, begins with an expressive "sonata" and hits several high spots, such as the strong and lovely chorus "Behold! the wicked bend their bows" and the affecting tenor aria "But God, who hears the suff'ring poor." Anthem III, the text of which is from Psalm 51, maintains a mood of thoughtfulness and prayer except in one movement, "Thou shalt make me hear of joy and gladness." Here Handel manages to fit a broken unison line on "the bones which thou hast broken" smoothly



into the jubilation. Charles Bressler, who has most of the solo work, sings with spirit and style, and spins long phrases in "God is a constant sure defense." in Anthem II. Helen Boatwright sings the music allotted to her with skill and attractive tone, and Alfred Mann keeps his excellent forces going nicely. Very good sound. N.B.

HAYDN: Lo Speziale

Mozart-Sängerknaben; Chamber Orchestra of the Vienna Symphony, Erich Schwarzbauer, cond.

- AMADEO AVRS 6318. LP. \$5.98.
- • AMADEO AVRS 6318ST. SD. \$6.98.

Haydn's little three-act opera. based on a play by Goldoni and first given at Prince Esterházy's private theatre in 1768, is a work full of charm and ingenuity. Much of it might have been written by any competent composer of the time, but some parts, especially a very funny "Turkish" scene near the end, are clearly the work of a very special talent.

Charming music demands charming performance, but "charm" certainly does not mean the mincing, overly cute manner in which the music is set forth here. Although the all-boy cast might have been fun to watch—indeed, many touring children's choruses from Europe put on this sort of thing in costume to fine effect—on records the performance just sounds like a bunch of inventive kids at play.

There is an older recording on Epic which, while not particularly well sung, at least respects the style. The one advantage of the Amadeo disc is that it includes an overture (which Haydn may or may not have intended for this opera). The sound is clear, but the stereo separation is so vast that one gets no sense of movement at all. A.R.

- HAYDN: Quartet for Guitar, Violin, Viola, and Cello, in G, Op. 2, No. 2—See Boccherini: Quintet for Guitar and String Quartet, No. 3, in E minor, Op. 50, No. 3.
- LISZT: Hungarian Fantasy, for Piano and Orchestra—See Chopin: Rondo for Piano and Orchestra, in F, Op. 14 ("Krakowiak").

MAHLER: Symphony No. 2, in C minor ("Resurrection")

Lee Venora, soprano: Jennie Tourel. mezzo; Collegiate Chorale; New York Philharmonic. Leonard Bernstein, cond. • COLUMBIA M2L 295. Two LP. \$9.96. • COLUMBIA M2S 695. Two SD. \$11.96.

I am almost coming to regard the *Resurrection* Symphony as unrecordable. The complexity of this music is such as to preclude the success of any mono edition; and while none of the four stereo versions we have been given is so lacking as to be dismissed from serious consideration, none is so good as to be completely satisfying.

The outstanding vocal performances are Elisabeth Schwarzkopf's in the Klemperer edition (Angel) and Maureen Forrester's in the Walter (Columbia), and conductors Klemperer and Walter both have the personal authority to provide distinguished accounts of the score. Unfortunately, neither man was given the engineering he deserved. The Walter could have used a more spacious acoustical environment and a wider dynamic range, while the Klemperer has space to spare and is weakened by overly remote microphone placement.

The Bernstein is primarily notable for its sound. The sonics are slightly artificial, to be sure, but this is the closest we have yet come to the effect of the work in concert. Musically, the new edition is more open to debate. Lee Venora gets very short shrift from the engineers and is sometimes buried in the chorus. (To prove that this need not be, listen to what the EMI people did for Mme. Schwarzkopf.) The choice of Miss Tourel, I fear, was probably based more on respect for her past achievements with Mahler than on her present ability to cope with the more exacting portions of this work.

Bernstein remains one of the best of the younger generation of Mahler conductors, and he works hard to get things right. You cannot fault him for this, but the simplest comparison of his versions of the second movement with Walter's points up the fact that Bernstein offers a studied interpretation while the late maestro was doing what came naturally-and achieving a much closer likeness of what Mahler had in mind. Again, listen to the offstage band at Number 22 in the final movement (Klemperer is the conductor most successful here). Bernstein either failed to grasp the intended effect. or the engineers simply did not get it on tape. Certainly the conductor is at fault for failing to observe the warning signals in the tempo markings.

So what do you do if you want a Mahler Second? At the moment you resign yourself to the fact that the biggest climactic pages (such as the monumental coda of the final movement) are still apparently too big to manage on a record—and you buy the Walter set before some merchandising expert has it cut out of the catalogue as a needless duplication. R.C.M.



GOLDENEARS AND THE THREE SPEAKER SYSTEMS

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MOZART: Symphonies: No. 31, in D, K. 297 ("Paris"); No. 34, in C, K. 338

Philharmonia Orchestra. Otto Klemperer, cond.

• ANGEL 36216. LP. \$4.98.

• • ANGEL S 36216. SD. \$5.98.

The Paris Symphony, written to impress the French public, contains a lot of festivity and bustle but every now and then, as in the development section of the first movement, there are unexpected turns and progressions, as well as some contrapuntal writing of a surprising seriousness for such surroundings. All of this is splendidly conveyed by Klemperer and his fine orchestra. Everything is beautifully balanced, and in the opening movement the development is particularly effective in the stereo version because the first and second violins, recorded on different tracks, engage in fascinating conversations. One small puzzle: why is a little connecting tissue in the horns cut out in the Andante? With the DGG recording conducted by Leitner, there are now two excellent versions of this Symphony to choose from.

K. 338 is to my mind one of the most delightful of the uncelebrated symphonies by Mozart. Its delicate and lovely slow movement, for strings only, and its tarantellalike finale are especially enjoy-



able. Klemperer's playing of the Andante is highly refined without being fussy an object lesson in the kind of conductorial art that conceals art. The finale could be a bit faster, but the veteran director makes a good case for his view of this movement. Excellent sound throughout, in both versions. N.B.

POULENC: Mass in G; Eight Motets

Whikehart Chorale, Lewis Whikehart, cond.

• LYRICHORD LL 127. LP. \$3.98.

• • LYRICHORD LLST 7127. SD. \$4.98.

According to the jacket notes, the Whikehart Chorale is a hand-picked group of twenty-five professional singers organized in 1963 by Lewis Whikehart of Illinois Wesleyan University in Bloomington. Choral groups don't come any better, and one looks forward with enormous interest to future recordings and concert tours by this ensemble.

The Mass in G may well be Poulenc's finest choral work. This is the only recording of it currently listed, but another one will not be necessary until they invent some process of registration whereby the actual, physical presence of the singers can be brought into your living room. Even then. . . . In any case, the Mass is a completely angelic work demonstrating that brevity is not only the soul of wit but the soul of worship too. It is modern music nurtured in Gregorian chant and Renaissance polyphony. As bright and colorful as the famous illuminations in the Duc de Berry's Book of Hours, it is a rare and perfect thing-and this interpretation does full justice to it.

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The Mass occupies most of one record side. For the rest, there are four motets for the Nativity and four motets for Lent. They are also very beautiful, although listening to all eight of them in succession may be a bit too much because of their consistent blandness. The recording is excellent, but unfortunately the texts of the motets have not been provided. A.F.

PROKOFIEV: Quintet for Winds and Strings, in G minor, Op. 39

+Shostakovich: Quintet for Piano and Strings, in G minor, Op. 57

Lamar Crowson, piano (in the Shostakovich); Members of the Melos Ensemble.

OISEAU-LYRE OL 267. LP. \$5.98.
OISEAU-LYRE SOL 267. SD. \$5.98.

Both these works are early in the chronology of their respective composers and both are exceptionally fine. Prokofiev's Quintet dates from 1924, the time of *Le Pas d'acier* and *L'Ange du feu* (with which it shares a strong stylistic similarity). It is icy, sardonic music, brilliantly terse and emphatic in its statement and development of ideas. There is little in it that might be called beautiful, but it virtually never flags. The Shostakovich, written in

HIGH FIDELITY MAGAZINE

1940, also has some of this ice and wit, especially in the fantastic scherzo. In the main, however, it is a lyrical work of great intensity and, for Shostakovich, an original and well-developed one.

Performances, by a flexibly constituted London group of wide-ranging skill, are adept and imaginative, and have been recorded with a chamber music intimacy. All told, this is an exhilarating disc. A.R.

RACHMANINOFF: Concerto for Piano and Orchestra, No. 2, in C minor, Op. 18; Rhapsody on a Theme of Paganini, Op. 43

Gary Graffman, piano; New York Philharmonic, Leonard Bernstein, cond. • COLUMBIA ML 6034. LP. \$4.98.

• COLUMBIA MS 6634. SD. \$5.98.

Gary Graffman and Leonard Bernstein are a good tonic for one another. Long may they play concertos together! The conductor's inherent romanticism and extrovert personality apparently lend the pianist a greater flexibility and infuse him with added vigor. Conversely, Graffman's steely brilliance and cool-headed sense of proportion seem to serve as a check upon the well-known Bernstein excesses. It is a pleasure to realize how well the Philharmonic is capable of playing. What one hears on the present disc is the usual Bernstein ripeness of tone coupled with crystalline attacks, rhythmic control, and a sense of impelling line more commonly associated with George Szell or the late Fritz Reiner.

No finer modern performances of these standard pieces can be found on disc. The Rhapsody, in the present poised, gaunt, slightly understated interpretation, gets its best recorded statement since the Kapell/Reiner of 1951, while the reading of the Concerto in its details of tempo and accentuation strongly resembles the classic Rachmaninoff/Stokowski edition of hallowed vintage. Tonally, however, Graffman's dry-point monochromaticism is more akin to Horowitz (in the Third Concerto) than it is to the composer's own more yielding sonority.

It will be noted that Columbia's engineers have managed to encompass the entire 33 minutes and 45 seconds of the Concerto on a single stereo side with no more than a slight cut—a miracle of advanced disc cutting. The stereophony, moreover, is well used, with excellent deployment of the various sections of the orchestra. This disc deserves to become a best seller. H.G.



RAVEL: Daphnis et Chloë: Orchestral Suite No. 2-See Debussy: La Mer.

SAINT-SAENS: Concerto for Cello and Orchestra, in A minor, Op. 33 |Tchaikovsky: Variations on a Rococo Theme, Op. 33

Junos Starker. cello; London Symphony Orchestra, Antal Dorati, cond. • MERCURY MG 50409. LP. \$4.98.

• • MERCURY SR 90409. SD. \$5.98.

Starker's razor-sharp, ultrabrilliant cellism is coupled with brisk, no-nonsense conducting from Dorati, solid playing from the London orchestra, and vivid close-to engineering from Mercury. The Tchaikovsky benefits from this approach as well as it does from the more elegant, indulgent romanticism bestowed upon it by Rostropovich and Rozhdestvensky in their DGG edition. In the Saint-Saëns, however, I continue to prefer Starker's earlier Angel recording with Giulini and the Philharmonia. On that disc, his objective account is modified slightly by mellow acoustics and by the subtlety of Giulini's conducting. Be that as it may, the Mercury coupling is a good one and can be heartily recommended. H.G.

continued on next page





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SCHUBERT: Mass No. 6, in E flat

Helen Boatwright, soprano; Betty Allen, mezzo; Alva Tripp, tenor; Leo Goeke, tenor; Chester Watson, bass; Music Aeterna Chorus and Orchestra, Frederic Waldman, cond.

• DECCA DL 9422. LP. \$4.98.

• • DECCA DL 79422. SD. \$5.98.

Waldman's performance is simple, lyric, and reverent, with capable soloists and a well-trained choir and orchestra, and it has been recorded in an acoustical environment that allows detail to be heard, both in the mono and the stereo versions. Indeed, the latter is notable for its spaciousness and freedom from

two-channel tricks. All of this is to the good, but the work is late Schubert, stemming from the same furious activity that brought forth the "Great" C major Symphony and the equally great Quintet. It is not just a practical Mass; it is a musical drama, a choral symphony on the sacred text. A sense of theatre is thus as important as a sense of reverence.

The latter element is what one finds in the Leinsdorf version with the Berlin Philharmonic (for Capitol). Recorded in St. Hedwig's Cathedral, the spacious acoustics of the Leinsdorf edition can be, at times, just a bit too spacious, but its soloists are quite a bit stronger than those heard in the newer set (save only Betty Allen, who contributes strength to

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both versions) and the orchestra and chorus have reserves of power which Waldman's group cannot muster. R.C.M.

SIBELIUS: Symphony No. 2, in D, **Op.** 43

Orchestre de la Suisse Romande, Ernest Ansermet, cond.

• LONDON CM 9391. LP. \$4.98.

• • LONDON CS 6391. SD. \$5.98.

SIBELIUS: Symphony No. 4, in A minor, Op. 63; Tapiola, Op. 112

Orchestre de la Suisse Romande, Ernest Ansermet, cond

• LONDON CM 9387. LP. \$4.98.

• • LONDON CS 6387. SD. \$5,98.

The unexpected disc debut of Ansermet as a Sibelius conductor might lead one to expect special sympathies that he has been longing to demonstrate, but this does not prove to be the case. Hampered somewhat by the unresponsiveness of his orchestra (the winds are especially bothersome and the brass are somewhat lacking in body), he manages only a respectable but uneventful approach to this specialized repertory. The Fourth, a particularly difficult work to control, sounds even grayer than usual. The work of such dedicated Sibelians as Barbirolli, Collins. and (surprisingly) Karajan is not eclipsed by the present performances, despite their excellent recorded sound. A.R.

- SHOSTAKOVICH: Quintet for Piano and Strings, in G minor, Op. 57—See Prokofiev: Quintet for Winds and Strings, in G minor, Op. 39.
- STRAUSS, RICHARD: Alpensinfonie, Op. 64

Bavarian State Orchestra, Richard Strauss, cond.

• ODEON E 80824. LP. \$5.98.

STRAUSS, RICHARD: Dance Suite after Couperin; Der Rosenkavalier: Waltzes; Capriccio: Interlude

Orchestra of the Bavarian Radio (in Capriccio); Bamberg Symphony, Clemens Krauss, cond.

• AMADEO AVRS 5033. LP. \$5.98.

Both of these recordings are historic sets, the first from one of the great composer-conductors of this century, the second from one of his oldest friends and most sympathetic interpreters. Strauss collectors will want both discs: not only do they have great documentary value, but the Odeon constitutes the only available edition of the Alpine Symphony and the Amadeo includes one of the few recordings of the so-called First Waltz Sequence (1944 version) from Rosenkavalier. None of the concert extracts from the latter work are wholly satisfactory, but this performance has greater merit than most.

What you get here, then, is unfamiliar

Strauss repertory in near definitive performances. What you don't get is high fidelity sonics. The Alpine Symphony, a 1941 recording, is severely compressed in both dynamics and frequency range. This is too bad, for while the piece is not major Strauss, it is not minor either, and for anyone who climbs mountains and has a good musical imagination, it vields some remarkable evocations of high places. The best sound is in the Couperin Suite, taped in 1954 and played with more than usual felicity. Krauss was a collaborator in Capriccio, and both in this and in the 1953 studio recording of the Rosenkavalier material he displays the insight and light touch of a seasoned man of the theatre. R.C.M.

STRAVINSKY: L'Histoire du soldat

Jean Cocteau, Narrator; Peter Ustinov, Devil; Jean-Marie Fertey, Soldier; Manoug Parikian, violin; Ulysse Delecluse, clarinet; Henri Helaerts, bassoon; Maurice Andre, trumpet; Roland Schnorkh, trombone; Joachim Gut. bass; Charles Peschier, percussion; Igor Markevitch, cond.

PHILIPS PHM 500046. LP. \$4.98.
PHILIPS PHS 900046. SD. \$5.98.

Inasmuch as Stravinsky's L'Histoire du soldat is the most notable piece of music associated with the country around Switzerland's Lake Geneva, it is not surprising that Igor Markevitch chose to program it as a special gala concert he gave in Vevey in October 1962. The recording of that performance, now issued by Philips, provides us with a remarkable interpretation (which includes the presence of the late Jean Cocteau as Narrator) and the only complete one on American-released records.

Stravinsky, it will be remembered, was marooned in Morges, not far from Vevey, by World War I. He spent much time in the company of the poet C. F. Ramuz, who lived in Lausanne, and together they conceived a stage piece adapted to the grimly minimal facilities available in Switzerland in wartime-a narrator, two actors, a ballerina, seven instrumentalists, a conductor, and no special scenery required. Shortly after its premiere in Lausanne, the new work was stopped in its tracks by the great flu epidemic of 1918, which closed all the theatres in Europe. In recent years, however, L'Histoire has been given very often, partly, I suspect, because the lounging, informal, unpretentious staging it demands goes well with the atmosphere of cabaret and intellectual night club which has come back strong since World War II. The best performance of it I ever saw was at the Juilliard School some years ago, with Dimitri Mitropoulos, then conductor of the New York Philharmonic, directing Juilliard students and wearing a turtle-neck sweater and an engineer's cap.

That is the kind of piece the *Histoire* is. Its musical idiom is consistently satirical, making use of—and mocking every kind of popular style, while the text by Ramuz drawls on inexorably in its artful doggerel. The seven instruments

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are the real dramatic protagonists; you may come away unconvinced about the Soldier, the Princess, and the Devil, who are the only characters one sees on stage, but you certainly do not come away unconvinced by the clarinet, the trombone, the trumpet, drums, bassoon, and double bass. Most important of all is the violin. for whose "drasty fiddling" Stravinsky invented a new technique. Close to the frog of the bow, scratchy, scrubby, and vehement. one might call this the technique of violinistic percussion. The Histoire is its greatest embodiment, but Stravinsky made much use of it in later works, and other composers have taken it up as well.

The story is derived from Russian folk

tales of the period of Nicholas I, when forced recruitment in the army was the order of the day. But Stravinsky and Ramuz transformed their story into a burlesque morality play, with pessimistic implication. The Soldier sells his violin to the Devil. The Devil raises him up until he ultimately marries a king's daughter. But the Devil gets him in the end.

There is a great deal more text than music, and the present recording is the only one I recall to be issued with a pamplet containing it. Unfortunately, the pamphlet was carelessly edited. A headnote says "For the recording, certain speeches were altered slightly, others were divided among the several speakers



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for a more dramatic effect." This greatly minimizes what was actually done. Many lines preserved in the printed text are dropped out in the performance; conversely, some lines recited in the recording do not appear in the book. Many of the stage directions are also recited. Lines spoken by the Narrator in direct quotation of the Soldier or the Devil have been taken out of his mouth and given to those characters, which is rather literal-minded and in keeping with the totally uncanonical effects-thunder, marching sounds, and such-which have been interpolated behind the speech at various points. The text is recited in French and is printed in that language, with the excellent English version of Michael Flanders and Kitty Black alongside.

Markevitch is probably the only conductor alive to play a major work by Stravinsky faster than Stravinsky himself. The performance is remarkable for its clarity, sharpness, and razor-edged objectivity. It is an interpretation etched with acid. Not one trace of human feeling obtrudes anywhere, even in those places where a little "give" of sentiment might be desired. Everything is flawless---including the engineering. Until Stravinsky makes his own complete recording of *L'Histoire du soldat*, this one will do very nicely. A.F.

STRAVINSKY: The Rake's Progress

Judith Raskin, Regina Sarfaty, Alexander Young, John Reardon, et al.; Sadlers Wells Opera Chorus; Royal Philharmonic Orchestra, Igor Stravinsky, cond.

For a feature review of this recording, see page 69.

STRAVINSKY: "Stravinsky Conducts Favorite Short Pieces"

Greeting Prelude; Concerto for Fifteen Wind Instruments, in E flat ("Dumbarton Oaks"); Eight Instrumental Miniatures; Four Etudes for Orchestra; Circus Polka; Suites for Small Orchestra: No. 1; No. 2.

Members of the Columbia Symphony Orchestra (in the Concerto); Members of the CBC Symphony Orchestra (in the *Miniatures* and Suites); Columbia Symphony Orchestra (in *Greeting Prelude*); CBC Symphony Orchestra (in the Etudes and *Circus Polka*).

• COLUMBIA ML 6048. LP. \$4.98.

• • COLUMBIA MS 6648. SD. \$5.98.

The title of this album suggests a sort of "Sing Along with Igor," but some of these pieces are actually very little known, and while they may qualify as favorites with the composer, they can scarcely be described as such in terms of the general public.

The disc opens with the marvelously witty and ingenious Greeting Prelude. based on the melody of Happy Birthday to You and written in 1955 in tribute to the late Pierre Monteux's eightieth. Stravinsky calls it a "50-second-long primer of canonic writing for very young kiddies and critics." It is that and a good deal more; in fact, it alone is worth the price of the record.

Next is the *Dumbarton Oaks* Concerto of 1937, a piece for fifteen instruments which is modeled on the *Brandenburg* Concertos of Bach and which quotes the Third *Brandenburg* in its first movement. There is no neater, tighter, more effervescent and perfectly organized piece in the modern literature than this one, and no finer performance of it is ever likely to come your way.

Bach is also recalled in the *Eight In*strumental Miniatures, which follow. These were originally composed in 1921 as five-finger exercises for the piano, but have recently been transcribed for a group of fifteen instruments. The transcription adds weight and color, and so, I suspect, does the present interpretation. At all events these are mostly rather serious, objective studies in counterpoint, and in this respect they are quite different from the somewhat parallel Suites for Small Orchestra, Nos. I and 2.

These Suites were first conceived, composed, and published as *Eight Easy Pieces* for two pianos. They are all satires, burlesques, take-offs, using popular dance rhythms—polka, waltz, galop, and so on. Dating from 1915, they would go well with the contemporaneous comedies of Mack Sennett. Actually, they foreshadow much of what Shostakovich was to do later on—Stravinsky as one of the founding fathers of Soviet music is an exceedingly fetching idea.

The new record also includes the negligible Circus Polka and the superb Four Etudes for Orchestra. The first three of these études are based on the famous Three Pieces for String Quartet. They should perhaps be described as colossal miniatures. The phrase is not a Goldwynism; what I mean is that the pieces, although very short, contain a heavily concentrated essence of musical meaning in the same way as do the short instrumental works of Webern; indeed, Stravinsky here comes very close to Webern in his essential idiom, although the quartet pieces were composed as far back as 1914 and Stravinsky did not join the Viennese axis until many years later.

Some of these pieces are here recorded for the first time. Others have not been previously available in the composer's own interpretation, which in my opinion is always the most authoritative, liveliest, and best. The recording leaves nothing to be desired. A.F.

TCHAIKOVSKY: Symphony No. 5. in E minor, Op. 64; Marche slave, Op. 31

Hallé Orchestra, Sir John Barbirolli. cond.

• VANGUARD EVERYMAN CLASSICS SRV 139. LP. \$1.98.

• • VANGUARD EVERYMAN CLASSICS SRV 139SD. SD. \$2.98.

I continue to be delighted with the high

sonic quality of Vanguard's low-priced series of Everyman Classics. This newest release is no exception; there is naturalness throughout the tonal range, and the stereo setup is ideal. I wish as much could be said for Barbirolli's reading. His is a workmanlike account of the Fifth Symphony but little more. Tempos in the first two movements are too fast, while the finale lacks passion and excitement and becomes downright heavy-handed at the end. The stereo editions of Szell, Ormandy, Mravinsky, and Monteux all do greater justice to the music. As for the Marche slave, it too sounds pretty weighty most of the way through. picking up momentum only at the end. Worst of all, Barbirolli makes two big cuts and omits the repeat in the codaa practice 1 thought went out with 78s. P.A.

TCHAIKOVSKY: Variations on a Rococo Theme, Op. 33—See Saint-Saëns: Concerto for Cello and Orchestra, in A minor, Op. 33.

VIVALDI: The Four Seasons, Op. 8, Nos. 1-4

Ruggiero Ricci, violin; Stradivarius Chamber Orchestra, Ruggiero Ricci, cond.

• DECCA DL 9423. LP. \$4.98.

• • DECCA DL 79423. SD. \$5.98.

Fourteen Stradivari instruments were gathered together for this recording of the Seasons: for the chamber orchestra, six violins, two violas, two cellos; for the soloist, a different Strad for each season, beginning with an early product of the master's workshop (the "Spanish" Strad of 1677) and working through progressively to the "Ex Kreisler" of 1734. An interesting essay on the instruments by New York violin dealer Jacques Français equates the stages of Stradivarius' output with the seasonal implications of Vivaldi's concertos (a light, delicate-toned instrument for Spring, a fuller, more powerful one for Summer, etc.). 1 was predisposed to discount some of this as poetic fancy until I was struck in-advertently by the exceptionally rich, full, low register of the instrument used in Autumn, a product of the maker's socalled Golden Period-a time when he had achieved a maximum degree of warmth and power.

There is more to this recording, however, than a fine display of string tone. Ruggiero Ricci brings to the solo part a tremendous zest and bite; in the third movement of Autumn, for example, his opening double stops are not so smooth as Felix Ayo's in the 1 Musici version but they take on a kind of gruff power typical of Ricci's playing throughout. He digs in with impressive masculinity, and his orchestra follows suit. There's no mincing about with accents and the result is a vigor that makes the Solisti di Zagreb, among others, sound perhaps too urbane. Recorded sound is close and bright, and stereo spread is realistic. S.F.

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CANBY SINGERS: "O Great Mystery'

Victoria; Morales; Byrd: O Magnum mysterium. Guerrero: Canite tuba in Sion. E. T. Canby (arr.): Josef lieber, Josef mein. Lassus: Resonet in laudibus. Waelrant: Musiciens qui chantez. Schütz: Selig sind die Toten. Handel: O admirabile commercium; Mirabile mysterium. Schein: Mein Schifflein lief im wilden Meer. M. Franck: Ihr lieben. Monteverdi: Sfogava con le stelle.

Canby Singers, Edward Tatnall Canby, cond.

• NONESUCH H 1026 LP. \$2.50.

• • NONESUCH H 71026. SD. \$2.50.

This disc takes its title from the first three items, all settings of the text O magnum mysterium. Juxtapositions of this kind are welcome when the music is sung sensitively and well, as it is here. The only point that has been overlooked is Byrd's use of the responsory form, and the consequent necessity of singing the verse and repetenda: in this performance only the first section is heard. Josef lieber and Resonet in laudibus make use of the same tune, and once again there is a chance to compare versions-that of Mr. Canby, who stresses the folk-song element, and that of Lassus, who weaves the tune into a rich polyphonic setting. Handel's difficult O mirabile mysterium taxes the intonation of the choir severely, but they put up a brave showing and maintain their fresh, unforced tone. D.S.

CAPELLA ANTIQUA OF MUNICH: "Music of the Bavarian Court Chapel in the Sixteenth Century"

Lassus: Domine, labia mea aperies; Ave verum corpus; Exaudi Deus orationem meam; Justorum animae; Tui sunt coeli; Gloria patri; De profundis. Daser: Fratres, sobrii estote. Senfl: Carmen-Lamentatio; Asperges me; Missa ferialis; Carmen in re; Magnificat V. toni. Isaac: Rorate coeli; Ecce virgo concipiet; Christe qui lux es et dies.

Capella Antiqua of Munich, Konrad Ruhland, cond.

• TELEFUNKEN AWT 9431-C. LP. \$5,98. • • TELEFUNKEN SAWT 9431-B. SD. \$5.98.

Like the recent Archive disc devoted to the musical repertoire of Maximilian's court in the time of Isaac and Senfl, this offering from Telefunken fails partly from inadequate care in production, partly from indifferent performance. The same two great masters reappear in this selection of music from Munich, together with pieces by Lassus and Ludwig Daser. So propitious a constellation should have brought about a celestial concert of undisputed masterpieces, performed with reverence, sensitivity, and passion. The most that can be said for the amateur musicians in this Munich ensemble is that they possess great enthusiasm. Both singing and playing are rough and unsubtle, with a poor internal choral balance further emphasized by unsatisfactory microphone techniques. The sopranos in consequence stand out from the rest as if they were members of a completely different choir somewhere else in Bavaria, or perhaps even across the borders. The sound never jells, and this is fatal for polyphonic music.

In the Senfl Magnificat, the roles of plainsong and polyphonic verses are exactly reversed: the former should of course be sung by several voices, but they are here intoned by a soloist. This is put right in time for the hymn Christe aui lux, though Isaac's suave polyphony receives a thorough jolting from the male chorus. D.S.

ANTONIO CORTIS: Operatic Recital

Donizetti: La Favorita: Una vergine. Verdi: Rigoletto: Questa o quella; Parmi veder le lagrime; La donna è mobile. Ballo in maschera: Di tu se fedele. Otello: Si, pel ciel. Massenet: Werther: O natura; Ah, non mi ridestar. Manon: Ah! dispar. vision. Puccini: Fanciulla del West: Or son sei mesi. Gianni Schicchi: Avete torto-Firenze è come un albero fiorito. Turandot: Non piangere, Liù; Nessun dorma. Giordano: Andrea Chénier: Io non ho amato ancor! Cena delle beffe: Ahi che tormento; Mi svestii.

Antonio Cortis, tenor; Enrico de Franceschi, baritone (in Si, pel ciel); orchestra.

• Rococo 5212. LP. \$5.95.

Once again Rococo has done us the favor of giving us a good selection from the recordings of a major singer otherwise not well represented on LP. Cortis (1891-1952) never attained the international reputation of a Gigli or Lauri-Volpi, but he was a very exciting singer; to some vocal collectors, in fact, he is the tenor.

The voice was forward and pointed, with good metal on top, and occasional not unpleasant touches of the nasality so typical of Spanish tenors. But it was also capable of dark coloring, and the technique was founded on a firm legato line, No doubt it is true, as A. G. Ross observes in his notes, that Cortis didn't have quite the finesse for old-fashioned bel canto; still, the "Una vergine" heard here, while dragged in tempo, is very well controlled, and there is a good deal of grace to go with the exhilarating ring of the Rigoletto selections. "Di tu se fedele" is rhythmically rubbery, but vocally ravishing, and the languishing, dallying effect is not inappropriate to the character and situation. "Si, pel ciel" is well sung (De Franceschi has a dark, slightly woolly baritone) but much too slow.

The rest of the disc is almost unex-ceptionable. Both Werther arias are magnificent in an Italianate way; and when Cortis gets into the verismo style of the Puccini and Giordano selections, he is on home ground. These are fullblooded performances with interesting touches of character, as in the light, crafty sound of the Schicchi aria. The Cena delle beffe excerpts, of moderate musical interest, are lent conviction by Cortis' dramatic understanding; the first, in particular, becomes a chilling little scene. The sound is listenable throughout, despite occasional blasting on high notes; the originals are about evenly divided among acousticals and early electricals. C.L.O.

PAUL DOKTOR:"Paul Doktor Plays Solos for the Viola Player"

Paul Doktor, viola; John Wustman, piano.

• WESTMINSTER XWN 19083. LP. \$4.98. • • WESTMINSTER WST 17083. SD. \$5.98.

Paul Doktor's published edition of transcriptions for viola (G. Schirmer) forms the basis of this fine recital. I admire an instrumentalist of Doktor's caliber who is not afraid to include Were You There? and Shenandoah in a collection that also contains Bach's Chorale Prelude O Mensch, bewein dein Sünde gross from the St. Matthew Passion. And as we listen to the full, dark solidity of Doktor's viola and the gracious sweep of his melodic phrases, there seems to be no incompatibility whatever among these selections. Mozart gains when the wonderful violin melody from the Andante of the Violin-Viola Duo No. 2 is given to the bigger instrument; and the drama of Brahms's Von ewiger Liebe comes through with no loss of impact. Wolf's Verborgenheit is just as successful-in fact the disc as a whole is one of the best arguments for transcribing 1 can think of, and the seventeen selections maintain a consistently high standard. The longest piece here (and the only one not drawn from the Schirmer book) is the Sonata in G minor by Henry Eccles, a serious church-sonata known to every violist but apparently unrecorded before except in a version for double bass.

John Wustman is an excellent accompanist, and the piano is given its fair share of weight in the recorded balance. Sound is first-rate in both versions, and very faithful to Doktor's rich string S.F. tone.

Continued on page 91

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JOAN SUTHERLAND, MARILYN HORNE, RICHARD CONRAD with THE LONDON SYMPHONY ORCHESTRA, THE NEW SYMPHONY ORCHESTRA OF LONDON conducted by RICHARD BONYNGE

Arias from: Piccinni-"La Buona Figliuola"; Handel - "Atalanta"; Lampugnani - "Meraspe"; Handel -"Samson"; Handel - "Semele"; Bononcini - "Astarto"; Arne - "Artaxerxes"; Shield - "Rosina"; Mozart-"Il re pastore"; Mozart-"Die Zauber-flote"; Mozart - "Die Entführung aus dem Serail"; Boieldieu-"Angéla"; Rossini-"Semiramide"; Auber-"La Muette de Portici"; Weber-"Der Freischütz"; Bellini-"Beatrice di Tenda"; Donizetti-"Don Pasquale"; Donizetti – "Lucrezia Borgia"; Verdi-"Attila"; Bellini-"La Straniera" Rossini-"Il Barbiere di Siviglia" Stereo OSA-1257 Mono A-4257

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CIRCLE 25 ON READER-SERVICE CARD



"THE RAKE'S PROGRESS"

Continued from page 70

tention more closely on the words). "Operatic" declamation is disastrous here, and the members of the new cast are speaking these lines much more pointedly and believably than their older counterparts. The whole thing is smoother, though at times the relative crudity of the old version makes for more life.

The thing the new singers do not have much of is color. Perhaps that is fitting to characters in a fable; perhaps that is the point. Judith Raskin sings with impeccable musicianship, pretty tone, and good enunciation: Hilde Gueden, though, had more bite and character in her voice, even if the tone was less innocent and the musical values not so sharply defined. Alexander Young is infinitely sensitive and tasteful as Tom, and most moving in the last two scenes; his voice, however, has neither the firmness nor the fresh beauty of Eugene Conley's. Regina Sarfaty brings much more direction to her ridiculous chatter and to the runs of her fury aria in the breakfast scene than did Blanche Thebom. who, nonetheless, had the freer voice and the better high tones. And John Reardon sings with much greater suavity and ease than Mack Harrell; still, for all its leathery throatiness. Harrell's darker baritone had a characteristic quality.

You can see the way it goes. The new version is better executed musically, more carefully shaped, less Metropolitan Opera-ish. Yet the old one had certain individual merits of some value. I think there is no doubt that as an all-round performance, Young's Tom and Reardon's oily Nick are superior to the efforts of Conley and Harrell. About the others, I could not be sure. The auctioneers are a toss-up, as are the Mothers Goose. The roles of Truelove and the Keeper are taken to better effect on the new recording. Orchestra and chorus are also better on the new version-not overwhelmingly, but noticeably, and of course, they are handily assisted by the superior recording. Some of Stravinsky's own work is also improved: an example is the little woodwind figure that first occurs with Tom's mad ditty. The new tempo is slower, the shaping much clearer and more delicate.

For those without a Rake, the new one is the choice, and a necessity. For those with the old one, the new is worth a hearing, if not a purchase.

STRAVINSKY: The Rake's Progress

Judith Raskin (s), Anne Truelove; Regina Sarfaty (ms), Baba the Turk; Jean Manning (ms), Mother Goose; Alexander Young (t), Tom Rakewell; Kevin Miller (t), Sellem; John Reardon (b), Nick Shadow; Don Garrard (bs), Truelove; Peter Tracey (bs), The Keeper; Sadlers Wells Opera Chorus; Royal Philharmonic Orchestra, Igor Stravinsky, cond.

• COLUMBIA M3L 310. Three LP. \$14.98. • COLUMBIA M3S 710. Three SD. \$17.98.

HIGH FIDELITY MAGAZINE

RECORDS IN REVIEW

Continued from page 89

KING'S CHAPEL CHOIR: "Contemporary Choral Music"

Flanagan: Chapters from Ecclesiastes. Kay: Choral Triptych. Rorem: Two Psalms and a Proverb. Wuorinen: The Prayer of Jonah.

King's Chapel Choir (Boston); Cambridge Festival Strings, Daniel Pinkham, cond.

• CAMBRIDGE 416. LP. \$4.98.

• • CAMBRIDGE 1416. SD. \$5.98.

All four works presented here owe their existence to the conductor, Daniel Pinkham, who commissioned them for his King's Chapel Choir through a Ford Foundation grant. He chose his composers extremely shrewdly, and all of them have produced fluent. attractive, and singable works which should go far towards raising the standards of presentday church music.

The Rorem and Flanagan pieces are the most immediately attractive. Both composers are what one might call conservative, which means in this case that they know all about writing shapely and interesting melodic lines for the voice. The Rorem is especially fine in this regard, and his choral textures are varied and immensely appealing.

Ulysses Kay's piece I find a little more obvious, set for the most part in a bouncy American style with a little modality to remind one of church. Charles Wuorinen's work is at the other end of the scale, a clever, somewhat unruly piece with spoken interjections and other such up-to-date devices. It strikes modern poses without ever seeming to believe in them all the way.

Mr. Pinkham leads the music with a sure hand and an obvious feeling of dedication. His choir is far superior to most church groups, and an excellent string ensemble does its modest work well. A.R.

MUSIC AT THE COURT OF FRED-ERICK THE GREAT

Frederick the Great: Symphony in D. Quantz: Concerto for Flute, Strings, and Continuo, in G. Johann Gottlieb Graun: Trio Sonata for Flute, Violin, and Continuo, in F. Carl Philipp Emanuel Bach: Sonata for Flute, Violin, and Continuo, in D minor.

Hans-Ulrich Niggemann. flute (in the Concerto); Stuttgart Chamber Music Ensemble (in the Trio Sonata and the Sonata in D minor); Emil Seiler Chamber Orchestra, Carl Gorvin, cond. (in the Symphony and Concerto).

• ARCHIVE 3219. LP. \$5.98.

• ARCHIVE 73219. SD. \$5.98.

A cozy peek indeed into the hallowed, all-powerful, and withal somewhat suffocating court of the unconquerable Frederick. When Dr. Burney visited Berlin in 1772 he found that "a universal toler-

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ation prevails here as to the different sects of christians [sic], yet in music whoever dares to profess any other tenets than those of Graun and Quantz is sure to be persecuted." These two were the perfect courtiers (an achievement of which C.P.E. Bach could hardly be accused), and their music, though stronger and more masculine than their employer's, reveals something of their position. Yet Quantz in particular was capable of following his own deeper perceptions now and then (as here in the long, minor Arioso movement, which takes on a certain pastel poignance). Graun is described by Burney as one of the first Germans to quit fugue and other "labored contrivances," and we may wish that he had guit them a little more reluctantly, for the parallel thirds in his Trio Sonata do begin to cloy. But he rolls up his sleeves and gives us a contrapuntal passage occasionally, in addition to one unexpected modulation -both most welcome. Even from so limited a sampling of the music of Frederick's court as can be contained on a single disc, it is obvious why C.P.E. Bach felt a certain relief in at last leaving to go to Hamburg: he stands head and shoulders above his colleagues, both in the unpredictable character of his melodic lines (cf. the middle movement here) and in the strength he derived from such labored contrivances as imitation.

The performances are of the competent, nonvirtuosic sort which are apt to strike us today as merely workmanlike, yet which are, I suspect, a fair approximation of the approach in Frederick's time. The Stuttgart Ensemble is to be congratulated on the use of a viola da gamba instead of a cello in the trio sonatas, though I must confess that its voice in ensemble sounds somewhat blunted to twentieth-century ears. The recorded sound is rather distant and blended, with almost no suggestion of stereo directionality. S.F.

MUSIC FROM NUREMBERG

Hans Sachs: Songs (5). Songs and Instrumental Works from the Locheimer Liederbuch (14).

Friedrich Brückner-Rüggeberg; Rudolf Aue; Nuremberg Gambencollegium, Josef Ulsamer, cond.

For a feature review of this recording, see page 79.

JOAN SUTHERLAND, MARILYN HORNE, RICHARD CONRAD: "The Age of Bel Canto"

Piccinni: La buona figliuola: Furia di donna. Handel: Atalanta: Care selve. Semele: Iris, Hence Away. Samson: With Plaintive Note. Lampugnani: Meraspe: Superbo di me stesso. Bononcini: Astarto: Mio caro ben. Arne: Artaxerxes: O Too Lovely. Shield: Rosina: Light As Thistledown; When William at Eve. Mozart: Il re pastore: Voi che fausti. Die Zauberflöte: O zittre nicht. Die Entführung aus dem Serail: Ich baue ganz. Boieldieu: Angela: Ma Fanchette est charmante. Rossini: Semiramide: Serbami ognor. Barbiere di Siviglia: Ecco ridente. Auber: La Muette de Portici: Ferme tes yeux. Weber: Der Freischütz: Und ob die Wolke. Bellini: Beatrice di Tenda: Angiol di pace. La Straniera: Un ritratto?—Veggiam. Donizetti: Don Pasquale: Tornami a dir. Lucrezia Borgia: Il segreto (Brindisi). Verdi: Attila: Santo di patria; Allor che i forti corrono. Arditi: Bolero.

Joan Sutherland, soprano; Marilyn Horne, mezzo; Richard Conrad, tenor; London Symphony Chorus and Orchestra, New Symphony Orchestra of London, Richard Bonynge, cond.

• LONDON A 4257. Two LP. \$9.96.

• • LONDON OSA 1257. Two SD. \$11.96.

Here is another ambitious potpourri to follow up on London's previous Sutherland & Co. albums. Once again there is great variety in the selection of music; some lovely things have been unearthed, along with a few less interesting pieces, to go with the scattering of familiar challenges included. Mme. Sutherland's covocalists are both American; Marilyn Horne, of course, is well launched on a significant career of her own, while Richard Conrad has been brought to the fore by London, presumably because he can handle the graceful embroidery of this sort of music.

The drawback to such a release is obvious: few collectors will care for the whole range of material programmed, or even for all three singers-yet interest in a few selections or in one of the performers must either go frustrated or be satisfied by purchase of the whole production. To judge from the label copy, I gather that the discs may be made available separately, which is certainly desirable from the consumer's standpoint. They seem to have been recorded at different times and places, for the acoustical ambience on the second record is considerably bigger and more echo-y than that of the first, and two orchestras are employed.

The real discoveries, to my taste, are the Piccinni and Lampugnani arias, both examples of brilliant florid writing that makes a valid dramatic point and yet exploits the vocalist's resources consciously and cunningly; the extremely beautiful air from Arne's Artaxerxex superbly sung by Miss Horne; the first of the two selections from Shield's *Rosina* ("Light As Thistledown"), which has immense charm. The scena from Attila will also be unfamiliar to most listeners. and it is a fine one, with a wonderful burst of Verdian melody at "Ma noi. donne italiche" and a stirring cabaletta.

On the other hand, I was surprised by the dullness of the Samson aria and the air from Muette de Portici, though the latter can surely make a better effect when more blandishingly sung. The little trio from the Boieldieu piece is also negligible--pleasant enough, but



in the "so what?" category. And there is a long, extremely silly scene from *La Straniera* which can go right back on the shelf whence it came. How long is one expected to sit still while Bellini nurses one of his melodies, however pretty, from one preposterous point to the next?

As to performances. Sutherland is for the most part in very good form. The Piccinni and Shield selections could not be bettered, and her contribution to the Semiramide duet is splendid, glides and all. It is also wonderful to hear the Attila aria sung with such soaring freedom. Perhaps Odabella, one of Verdi's most unpleasant and unlikely heroines, should not sing so beautifully, but one can't really object. The duet from Don Pasquale, though, is ruined by the soupy, lugubrious approach of both Sutherland and Conrad, as if every phrase were Ineffable Art, and the La Straniera scene also suffers from much vocal mooning about-coals to Newcastle, without question.

Both "O zittre nicht" (Die Zauberflöte) and "Und ob die Wolke" (Der Freischütz) are somewhat better than I had anticipated; the former, in fact, is quite stylish and brilliant, topped by a good F. The latter does not have all the directness and innocence that it might, but is still an effective rendition.

Miss Horne handles everything well. The range and strength of her voice are most impressive, and she can sing runs with the best of them, though there is an awkward gulp for air in "Superbo di me stesso" (Lampugnani's Meraspe). Her voice is a little hard, and so is her temperament, at least on this record—there is no real sense of fun in either the Lucrezia song or the Arditi Bolero, which is merely a trashy display piece without a helping of real joie de vivre.

Conrad is probably more adept than any other contemporary tenor in execution of vocal ornamentation. He has a real trill, excellent stylistic sense, and an admirable legato. Regrettably, he also has a highly covered. almost gummy tone, with no brightness or brilliance at all—plenty in the head, but nothing in the masque. He also shies away from *forte* tones at the top, very artfully to be sure, but still too predictably. In passagework he is a pleasure to hear but elsewhere he is wanting, and the final effect is monotonous.

The accompaniments are first-rate throughout. I do wish Richard Bonynge would adopt a less woozy approach towards those Bellini cantabiles, but apparently this is how he sees the music. As for the sound. I like the closer, cleaner acoustics of the first disc better than the boonier sound of the second, which is sometimes disturbingly hollow. An elaborate and informative booklet accompanies the album. C.L.O.

GEORGE SZELL: "Encore"

Rimsky-Korsakov: Capriccio espagnol. Op. 34. Ravel: Pavane pour une infante défunte. Smetana: *The Bartered Bride: Three Dances.* Johann Strauss II: *Blue Danube Waltz.*

Cleveland Orchestra, George Szell, cond. • EPIC LC 3891. LP. \$4.98. • EPIC BC 1291. SD. \$5.98.

The seasoned collector who "has everything" may glance at this listing and pass it by with a shrug. If he does, he will miss a real treat. For this is not just another run-through of overworked, overrecorded repertoire. Szell doesn't operate in that way; everything he conducts must be letter-perfect. This quality alone sets these performances apart from run-of-the-mill versions, but they are far more than merely technically correct. There is spirit, sensitivity, even affection in these interpretations. The orchestral playing can only be described as gorgeous; likewise the engineering. Altogether, this disc provides an invigorating ride on four old warhorses. P.A.

JON VICKERS: Operatic Recital

Ponchielli: La Gioconda: Cielo e mar. Flotow: Martha: M'appari. Verdi: Don Carlo: Io l'ho perduta. Il Trovatore: Ah! Sì, ben mio. Otello: Dio! Mi potevi scagliar: Nium mi tema. Leoncavallo: Pagliacci: Vesti la giubba; No, Pagliaccio non son! Cilea: L'Arlesiana: E la solita storia. Giordano: Andrea Chénier: Un dì all'azzurro spazio; Come un bel dì di maggio. Puccini: Tosca: Recondita armonia.

Jon Vickers, tenor; Rome Opera House Orchestra. Tullio Serafin, cond.

- RCA VICTOR LM 2741. LP. \$4.98.
- • RCA VICTOR LSC 2741. SD. \$5.98.

Jon Vickers is an exciting singer, rapidly on his way to becoming a great one. Lovers of pure, lush vocal production, throbbing emotion, and all the other traditional paraphernalia of romantic Italian tenors may feel short-changed by the clean, no-nonsense robustness of his style. Those who cling to the revolutionary notion that this sort of music can make dramatic sense when sung with intelligent attention to phrase marks and dynamics will rejoice.

I am of the latter persuasion, and I find this a thrilling record. Vickers still has a few purely vocal faults. The long lyric line of "Ah! Si ben mio" finds him a little short of breath, and there are a few other places where he is in similar trouble. But so much of his singing radiates an aura of pure excitement, and the excitement is so brilliantly attuned to the nature of each aria, that these flaws seem trivial. To hear the Cilea aria set forth so completely shorn of the gulps and sobs which one had always assumed were built-in is like discovering a new and better piece of music.

The Otello excerpts are presumably taken from the complete recording, since the voices of Cassio, Montano, and the others are heard at the end of "Niun mi tema." A.R.



"Cole Porter Revisited." *R1C* 3002, \$4.98 (*LP*); *S* 3002, \$5.98 (*SD*). "The One and Only Lee Wiley." *R1C* 2002, \$4.98 (*LP*); *S* 2002, \$5.98 (*SD*).

THE DEATH of Cole Porter last October drew the final curtain on a career that had ended, for all practical purposes, almost ten years earlier. In fact, it is surprising that it did not come to an end twentyeight years ago, for it was in 1937 that Porter broke both his legs in a riding accident, a mishap which left him in such pain for the rest of his life that this onetime flower of international society became a virtual recluse. Despite this, he continued to write scores for Broadway, and in 1948 produced what many consider to be his masterpiece, Kiss Me, Kate.

Porter's songs form an inextricable part of the life of at least two generations of Americans. Who can imagine our dancing, singing, or listening without Let's Do It, What Is This Thing Called Love?, Night and Day, Begin the Beguine, and the lyrics which brought a totally new note of sophistication to popular music? Yet these and the other familiar Porter songs are only a fraction of his output. Porter wrote so much superior material that there is, inevitably, a vast repertory of delightful songs still all but unknown. A step toward remedying this situation is taken on "Cole Porter Revisited." It might better have been called "Cole Porter Discovered," for there is scarcely a song among its fourteen entries that is likely to be known to any but a knowledgeable Porter collector. The set has been put together by Ben Bagley, who arranged a similar collection several years



Cole Porter: who could have danced without him?

ago on Rodgers and Hart (now reissued as Ric 3001). Bagley had the active assistance of Porter, who gave him access to several unpublished songs.

The emphasis here is on Porter's comedy material. This was an area in which he had a very personal flair, and several unheralded or long forgotten gems have been turned up. But in the Morning, No! from Du Barry Was a Lady displays Porter's customarily enchanted disenchantment with the whole routine of sex. It Ain't Etiquette, from the same show, is a lineal predecessor of his celebrated Brush Up Your Shakespeare in Kiss Me, Kate, while Tale of an Oyster (from Fifty Million Frenchmen in 1929) is one of his most charmingly wry extended lyrics. Porter's fascination with burlesque à la Minsky crops up in both Come On In (another Du Barry entry), which is virtually a burlesque show in musical miniature, and I've Still Got My Health (sung by Ethel Merman in Panama Hattie)-a zestfully bouncing opus which includes a brief invocation of Minsky's.

Ronnie Graham (who sings Bert Lahr's songs as though they had been written for him), Kaye Ballard, Bibi Osterwald, and Bobby Short are the enlivening performers. Three ballads are included as a change of pace; they have the expected Porter touch, but David Allen sings them in a heavily crooning manner which does them less than justice.

Both familiar and less familiar Porter turn up on "The One and Only Lee Wiley," a reissue of a superb set of recordings of Porter and Gershwin songs made for the Liberty Music Shop in 1939 and 1940. Miss Wiley has Bunny Berigan's trumpet growling behind her on Porter's Find Me a Primitive Man (from Fifty Million Frenchmen) and is set off by Paul Weston's arrangements on Looking for You, Easy To Love, and You Do Something to Me. The Gershwin songs, recorded a year before the Porters, show Miss Wiley at her sensually provocative peak. Backed by Bud Freeman, Pee Wee Russell, Fats Waller, and Max Kaminsky, she is a swaggering perfection on Sweet and Low Down and Sam and Delilah, and the essence of soul-curling appeal on How Long Has This Been Going On, 'S Wonderful, and I've Got a Crush on You.

Together, these two discs supply—in material and in performance—a solid chunk of the very special spirit of the musical theatre of the Twenties and Thirties. J.S.W. Barbra Streisand: "People." Columbia CL 2215, \$3.98 (LP); CS 9015, \$4.98 (SD).

This is Barbra Streisand's fourth solo album. The fact is worth mentioning because a singer who makes her initial impression by being deliberately different (singing Happy Days Are Here Again and Who's Afraid of the Big Bad Wolf as torch songs, for example) inevitably loses much of her impact simply through the process of repetition. Then what? Miss Streisand has weathered the transition by her ability to invest practically anything with a strong, personal, and valid quality. Most of this collection is devoted to unusually good songs that are seldom heard or just coming into their own: the very Cole Porter-ish When in Rome by Carolyn Leigh and Cy Coleman, or Dubey and Karr's How Does the Wine Taste, Love Is a Bore, and Will He Like Me (from She Loves Me). There is one reflection of the earlier Streisand-her slow and potent rendition of Fine and Dandy. It is not in any sense a tour de force, but a magnificent example of strongly projected popular singing. She can be led astray by her emotionalism: Suppertime, for instance, loses by being overdone. But by and large, Miss Streisand has a kind of authority rare in a popular singer, including the ability to improve on a good performance (a new and excellent version of her Funny Girl hit, People, is included here). She has no need of gimmicks, oddities, or other crutches. The same skill that made her early innovations seem valid makes these straight presentations just as brilliant.

Connie Francis: "A New Kind of Connie." M-G-M 4253, \$3.98 (LP); \$ 4253, \$4.98 (SD).

This disc apparently marks the turning point in Connie Francis' career-documenting the switch from her early teenoriented style to a completely adult one. Those who may have been worried about the plight of pop singing during the rock 'n' roll years can be reassured by this collection. Miss Francis is a product of these years, but she is even more a product of show business. She has matured into a polished professional, possessing a lithe and limber voice with a provocatively warm timbre. She knows what to do with a big, open torch song like My Man or a casual and sophisticated number such as Where Did Everyone Go?, with an uptempo walloper like Will You Still Be Mine? or with the moodiness of Where Can I Go Without You?-and she has the vocal equipment to carry out her intentions. This is pop singing of a very high order: Miss Francis' clean, open singing lights up with a vocal twinkle from time to time, and excellent support is provided by the arrangements of Marty Paich.

Liza Minnelli: "Liza! Liza!" Capitol 2174, \$3.98 (LP); \$ 2174, \$4.98 (SD).

It takes only a few minutes of listening here to know that Liza Minnelli is Judy Garland's daughter. The similarities do not stem so much from conscious copying as from the natural closeness of

familial relationship. In Miss Minnelli one can hear the distinctive Garland timbre and the Garland vibrato (along with a similar difficulty in keeping the latter from wobbling too much at times). And there is the ability to belt a song right over the rainbow-although Miss Minnelli sometimes finds herself overreaching, resorting to shrieking in her effort to carry out the line on which she has embarked. This is Miss Minnelli's first album and it is a most impressive debut-not only for what she does, but for her indication that she can be herself despite the inevitable reflection of her mother. Her program is an unusually well-selected one, mixing fresh, interesting songs with less frequently heard pieces by Kern, Styne, and Arlen. It reveals too that Miss Minnelli has a wide range in both voice and style. She is aided by excellent arrangements (uncredited) and a fine orchestra conducted by Peter Matz.

Lena Martell: "Someone New, Someone Blue." London 3386. \$3.98 (LP); 386, \$4.98 (SD).

Miss Martell is an English singer with a strong, smoky voice who proves on this disc that she can handle almost anything-from the gentle, folklike quality of Jerry Bock's Jennie on the Green to the belting emotionalism of Why Was I Born? or the crisp humor of Typically English from Stop the World. Her dramatic projection can beef up any song suited to this kind of treatment, although her very sober approach occasionally leads to an exaggerated display of emotion. But we are spared, at least, the blandness characteristic of so many pop singers. Johnny Keating's orchestra contributes to the interest of this disc.

Michel Legrand: "Plays for Dancers." Philips 200155, \$3.98 (LP); 600155, \$4.98 (SD).

Behind the bland album title and the liner copy's talk about "big-band beat arrangements" for the Hully Gully, the Twist, the Frug, and so forth, lies a collection of lively and entertaining instrumental pieces. Though undoubtedly serviceable for twisting, frugging, or hullygullying, they also reveal a lively imagination that can make silk purses out of musical sow's ears. Legrand, who has previously found a variety of unusual approaches to other aspects of popular music, has created tunes and arrangements which lift the big beat from its customary lowering lumber to a blithe and gay style, sharpened by some brilliantly glittering string work, by interjections of several of those famous vocalizers who hang around the studios of Paris, and by sly and unexpected breaks by odd instruments. Not all of the twelve selections come off equally well, but when they are in high gear-as on Hi Girls with its yipping Valkyrie chorus, or Orange Blossom Special, a mad excursion into Arkansas Traveler territorythey are great fun.

Cal Tjader: "Warm Wave." Verve 8585, \$4.98 (LP); 6-8585, \$5.98 (SD). For several years Tjader, a vibraphonist, has been dividing his time between Latin-American material and a rather polite form of jazz. There are touches of both in this set of standard popular tunes, ranging from Poor Butterfly to the current People, skillfully arranged by Claus Ogerman. Ogerman's art is particularly notable in those pieces (all but two) on which Tjader plays with strings and a rhythm section: Ogerman has managed to use the strings as a rich but buoyant setting for Tjader's pearl-like notes without letting the strings become a drone. In most cases, a subtle bossá nova rhythm breathing under the vibes and strings gives the performances a delightfully easy flow. On two selections, Poor Butterfly and Just Friends, the strings are dispensed with in favor of a pair of flutes which play a rhythmic riff behind Tjader, providing a wonderfully effective combination which makes for a particularly unusual and provocative interpretation of Butterfly.

Edmundo Ros and His Orchestra: "The New Rhythms of the South." London

SP 44054, \$5.98 (SD). The buoyantly sinuous rhythms of the Ros orchestra are well applied here to Latin-American tunes in vivid arrangements by Roland Shaw. Clean, fullbodied recording makes the most of both the arrangements and the orchestra. Ros has always had a uniquely light and airy manner in this repertory (or practically anything else which he turns into mambos, sambas, and rhumbas) and even with a heavier instrumentation he manages to retain a bright, fluid quality. Add to this the impact of Shaw's widerange orchestrations, plus a multifaceted rhythm section that raps, taps, shuffles, and rattles with gay abandon, and the results are strikingly different treatments of Yours. El Rancho Grande, Amapola, The Breeze and I, and others of that ilk.

Tony Dalli: "And Now the Thrilling Voice of . . ." London 3394, \$3.98 (LP); 394, \$4.98 (SD).

Dalli is a young Italian with a big, expansive, romantic tenor voice who is quite obviously being aimed by his managers at the vacuum left by the death of Mario Lanza. He sings in Italian and English a program that draws to a great extent on Broadway (People, Falling in Love with Love, Dear Friend, Meredith Willson's Dolce far niente); he also ventures into Tosti, Borodin (via Kismet), and Weill (Mack the Knife). He has the robust voice for songs demanding a wide-open projection, and he can also close in to the more intimate, tighter style required for People or Mack the Knife or Dolce far niente. His English is strongly accented and has a decided charm, though he does not yet seem entirely at ease in it. There are suggestions of the kind of vocal charisma that Pinza projected, but this is still in the developing stage. Meanwhile, he emerges as an attractive singer, worth keeping an eye on.

Mantovani: "The Incomparable." London 3392, \$3.98 (LP); 392, \$4.98 (SD). Mantovani's strings have never swooped "...UNEXCELLED..." Audio ^{\$}30.⁰⁰ less than ^{\$}10.⁰⁰ a month.* TIRED OF THROWING MONEY AWAY? Consider this:

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so dazzlingly nor careened with more tobogganish impact. Yet no matter how often one has heard them, there is a distinctive majesty and splendor in Mantovani's handling of them that no other maestro of the popular realm has been able to match. How on earth, after seventeen years and untold numbers of LPs, he is still able to produce a program that is both staple and fresh is, I suppose, as much his own trick as are the swooping violins. But he has done it on this disc, which includes his mellow, singing treatments of As Time Goes By, Where You Are, Long Ago and Far Away, and Fll Get By as well as the more contemporary I Left My Heart in San Francisco, Fly Me to the Moon, and More. He has

also used *Catch a Falling Star* to produce an appropriate cumulative waterfall of strings that is surely the string cascade to end them all.

Riz Ortolani and His Orchestra: "Made in Kome." United Artists 3360, \$3.98 (LP): 6360, \$4.98 (SD).

These selections from Italian film scores remind one of the considerable impact which Italian composers in this genre have exerted on traditional movie music. Now that American films have followed the Italian lead in abandoning the ponderous emptiness and tough posturing that once were dominant, we are accustomed to hearing melodiousness, humor, and inventiveness in our scores too. But



CIRCLE 66 ON READER-SERVICE CARD

this collection demonstrates how consistently the Italians have been committed to a more or less unhackneyed approach. Because Ortolani's orchestra is one of those lushly stringed studio creations, the varietv inherent in this music is apt to be lost under the shimmer of strings. The themes from The Four Days of Naples. 81/2. La Dolce Vita. Divorce Italian Style, Bread Love and Dreams, and Ortolani's own Pin-up Girls, More, and The Easy Life, among others, emerge here with a veneer of sameness. But the lively tarantella from Bread, Love, and Dreams sparkles despite all, while the slightly sour and sad trumpet on La Dolce Vita suggests the offbeat character that has been typical of Italian film composers.

Pete Fountain: "Licorice Stick." Coral 57460, \$3.98 (LP); 757460, \$4.98 (SD). Fountain's wanderings between diluted jazz and jazz-edged pop performances take him well over into the popular field on this disc. His clarinet concentrates on deep, dark, mellow tones as he glides through easygoing treatments of an odd assortment of tunes—tunes from the country repertory (I Love You So Much It Hurts, Born To Lose); from the Swing Era (Tippin' In); from modern jazz (Gravy Waltz): from the Latin-American bag (Estrellita, Maria Elena), and several originals. Smack in the middle of what is generally a pleasant but bland collection occurs a treatment of Hello, Dolly! that is full of swinging bounce and grace; it owes nothing to either Louis Armstrong or Carol Channing, and it achieves a distinctive attractiveness all its own. A vocal ensemble adds a few touches of color to this piece and to several others, including a very effective tune by Rod McKuen, called Fountain Blue, which gives the clarinetist an opportunity to play with the special kind of warm lyricism he employs very effectively.

Xavier Cugat: "Plays the Music of Ernesto Lecuona." Mercury 60936, \$3.98 (LP); 20936, \$4.98 (SD).

When Cugat was one of the pioneers of Latin-American music in the United States his style was distinguished by some identifiable hallmarks. Later his atten-tion veered from lush musical sounds to providing musical background for lush young ladies. As a result, his recordings have taken on an anonymous, studiomade quality which varies from good to mediocre, depending on circumstances. Here he has produced a winner: the works of Ernesto Lecuona, one of the most brilliantly melodious composers of popular songs in the Western hemisphere, are colorfully presented in thoughtful, imaginative arrangements. Barcelona, Malagueña, La Comparsa, Say Si Si, and Siboney achieve a broad, wide-open freshness in the hands of first-rate players. The group makes the most of the unbilled arranger's use of deep woodwinds, rich trombone ensembles, glittering trumpets, and an all-purpose organ. The last-named adds body to various ensembles and occasionally contributes a well-modulated solo voice.

JOHN S. WILSON

HIGH FIDELITY MAGAZINE

Bob Dylan: "Another Side of Bob Dylan." Columbia CL 2193, \$3.98 (LP); CS 8993, \$4.98 (SD). now i been listenin like a reviewer gotta t bob dylan records for about two years n he writes his own material jus like edgar guest n uncle iosh billings used t n that's creditable some o bob's early ballads are pretty good like blowin in the wind n with god on our side but these new ones ain't much in fact most o them sound like he wrote em fast

maybe three or four per day includin bad days

still they come from the north n they come from the south from the mountains o the grand concourse n the prairies o greenwich village for t listen t bob's ballads even though bob don't carry much of a tune n joan n judy n even peter paul n mary sing em dutifully cause bob is the laureate o the cause god help it

n now

whenever you buy one o bob's releases columbia don't bother with no album notes they jus fill the sleeve with bob's leftover verse n man that's culture with a capital cull

but bob he got two problems small ones the language he writes in aint english the measures he beats out aint song

n this kind o inverted intellectuality jus bores the hell out o me

Kenneth McKellar: "Folk Songs from Scotland's Heritage." London International TW 91331, \$3.98 (LP); SW 99331, \$4.98 (SD).

The glens of Scotland have produced some of the most magnificent ballads in the Anglo-Saxon body of traditional song: ballads that recall fierce highland clans with their raids and their feuds; ballads that lament the doomed Jacobite rebellions of 1715, 1719, and 1745;

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ballads that weep for the Stuart dream that died with Bonnie Prince Charlie. Few Scottish lays can survive the prettification of the concert stage, and it is, therefore, all the more curious that they find one of their finest interpreters in Kenneth McKellar, a trained tenor who specializes in art songs and opera. But McKellar is a Scotsman, and therein lies the answer: he brings flaming pride and deep understanding to the folk songs of his native heath. This release, in some respects the most impressive of the seven he has thus far cut for London, displays his way with a ballad to fullest advantage. He is wryly witty in The Laird o' Cockpen and charges Hey Johnny Cope with a boisterous, devastating satire. But it is in The Bonnie Earl of Moray that McKellar rises to interpretative heights. To the accompaniment of muffled drums, he sings this heartbreakingly lovely dirge to a young, handsome earl wantonly slain almost four hundred years ago. Here, refined by McKellar's splendid tenor, is a distillate of all tragedy. A superlative performance, superlatively recorded.

Jean Redpath: "Laddie Lie Near Me." Elektra EKL 274, \$4.95 (LP); EKS 7274, \$5.95 (SD).

In an age when most balladeers would stand mute without a guitar to extend their vocal range, Jean Redpath dares to sing *a cappella* on many of these selections—and she does it with shimmering beauty. In the title song of this album,



Kenneth McKellar: true Scotsman, he.

for example, her voice is clear, firm, and true. To the quiet strum of strings she fashions a pure and lovely *Lassie Wi' the Yellow Coatie*. But probably the outstanding selections on this marvelous record are a melting Irish air *The Quiet Land of Erin*—also sung without accompaniment—and the eighteenthcentury English love song *Robin Adair*. The crystalline quality of Miss Redpath's soprano lends a haunting, timeless aura to the ballads she has chosen. Reproduction is excellent.

Corinne Bucey: "New Voice in Town." Decca DL 4550, \$3.98 (LP); DL 74550, \$4.98 (SD).

An unabashed citybilly with a strong, bright, appealing voice, Corinne Bucey here makes a promising disc debut. In style she is clearly an eclectic, and one hears echoes of half a dozen performers in her work; but, as exemplified in You Gotta Walk It by Yourself and East Virginia, she is striving to shape her own approach. Miss Bucey is always interesting. and her program—ranging across the broad spectrum of Anglo-Saxon folk song—reflects a luster of its own. A wordless chorus occasionally damages a ballad, but the singer redeems even those.

Sergio Bruni: "My Naples." Capitol T 10370, \$3.98 (LP).

Sergio Bruni, himself a Napolitan', spares us the lachrymose bellows most other tenors bring to the emotional melodies of Naples. His versions, sunny and airy, preserve the bright light of the Bay and the bright dispositions of those who inhabit it. Listen to the tripping lilt of *Michelemma*' (Michela Mine) and the tongue-(or tooth)-in-cheek drollery of 'O Tiramole (The Dentist). Signor Bruni's Naples is a long happy jaunt from the teary backstreets of Core 'Ngrato.

William Clauson: "Australia." Monitor MF 424, \$4.98 (LP): MFS 424, \$4.98 (SD).

Since his last recording, William Clauson's voice has darkened somewhat, and some of his characteristic exuberance seems to have been lost—although I suspect the melancholy nature of the Australian songs in this collection accounts for the change in spirit. But Clauson serves the ballads of Down Under nobly here: it is, perhaps, the best-programmed and best-sung collecHigh Fidelity Magazine on New Acoustech Solid State Kit:

"....MAGNIFICENT PERFORMANCE...



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

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

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



tion currently available. The selections— The Wild Colonial Boy, Moreton Bay, Bold Jack Donahue (in addition, of course, to the inevitable Waltzing Matilda)—remind us poignantly that Australia was first settled by convicts and the dispossessed. The echo of those lonely, brutal pioneer days rings in Clauson's voice.

Cisco Houston: "A Legacy." Disc DL 1103, \$3.98 (LP); DS 1103, \$4.98 (SD). A troubadour of the Depression Era, the late Cisco Houston brought a big heart and a mellow baritone to the traditional songs of America. In his later years Cisco devoted much of his time and talent to the songs of his old sidekick, Woody Guthrie; so much so that he has since perhaps become too identified with Guthrie for the viability of his own reputation. The dozen selections on this record, handsomely processed from original 78s, show the broad range of Cisco's abilities. Here is a fine rendition of John Jacob Niles's Venezuela, a tender Blow the Candle Out. an evocative Molly Malone. No Houston admirer-and I speak as one-should be without this record.

The DePaur Chorus: "Songs of the New Nations." Mercury 50382, \$4.98 (LP); SR 90382, \$5.98 (SD).

A spectacular record on every count. Conductor Leonard DePaur guides his male chorus through a dazzling array of African and Israeli songs to the exotic accompaniment of native drums and percussion. In Alexander, a Nigerian grasscutting song, the African instruments capture precisely the sound of a scythe swishing through grass, while the voice of soloist James Justice limns the lot of the happy, scythe-wielding prisoner. The tenor of Earl Rogers soars high and golden above the chorus in the tender Israeli Agadat Kinneret. And the voices—goaded chorus' massed by massed drums-strike a note of frenzy in the fifteenth-century Ashanti war chant Ose Yie. Yet the same singers

can weave a gossamer lullaby, Ye Ke Omo Mi. A brilliant program, executed with magnificent musicianship, and offered in the most strikingly successful stereo sound that has ever crossed my turntable.

Joan Baez: "Joan Baez/5." Vanguard VRS 9160, \$4.98 (LP); VSD 79160, \$5.98 (SD).

This corner has said it all before, and can only repeat it now. Joan Baez is the finest American folk singer of our day. Her soprano is heartbreakingly pure, and virtually every ballad she essays gains from her attentions. On eleven of the twelve bands of her latest release she is heard at her superlative best: here is the mixture as before-old English ballads (e.g., The Death of Queen Jane), a few current items (e.g., Birmingham Sunday), counterpointed by such lovely offbeat items as We'll Go No More A-Roving. But on the twelfth band Miss Baez draws a big blank: with cello accompaniment, she sings the aria from Villa Lobos' Bachianas Brasileiras No. 5 Here she competes with the likes of Elsie Houston, Bidú Sayão, and Victoria de los Angeles. She loses.

Stephen Cheng: "Flower Drum and Other Chinese Folk Songs." Monitor MF 420. \$4.98 (LP); MFS 420. \$4.98 (SD).

Perhaps Chinese song with its delicious dissonances will forever remain a closed book to most Westerners. But anyone willing to meet this exotic musical system halfway is well advised to seek out this release. Stephen Cheng, without sacrificing an iota of authenticity, manages to make this marvelous program of songs from all the disparate corners of China more than palatable to American ears. Mr. Cheng's success, I suspect, stems not only from his considerable vocal gifts but also from his years of Western influence while studying voice in New York. Probably unconsciously-but in any case effectively-he reaches out towards the Western auditor. Listen to Narcissus from Kwangtung Province, the



The DePaur Chorus: songs of new nations stunningly sung.

HIGH FIDELITY MAGAZINE

Some plain talk from Kodak about tape:

Bias transfer characteristics and dependent parameters

Ever heard the story about the pilot on his first solo flight? Unfortunately the engine failed. But fortunately he had a parachute. But unfortunately the chute failed to open. But fortunately he landed on a haystack. But unfortunately there was a pitchfork in the haystack. Except for the unhappy ending, this might be the story of how gamma ferric oxides respond to magnetic fields. Everything about it is fortunate with one exception. Linearity. The oxide needles used in the coatings have atrocious linearity characteristics. Feed in a clean, pure sine wave and out comes a nonsinusoidal complex waveform that looks something like a demented snake trying to bite its own head off. How does it sound? About as pleasant as Junior's first violin lesson.

How then is magnetic recording possible? Fret not—there's a way out. The entire problem is solved by one wonderful, mysterious phenomenon called bias. The transfer curves tell the story.



The slightly twisting curve at the upper left represents the oxide response. The lower curve is a pure, sine wave input. At the upper right we have the result of the response curve on the input... a mess.

The reason it looks the way it

does is because the sine wave input is affected by the non-linear characteristics of the gamma ferric oxides. But look closely. Note that while the oxide performance is non-linear when taken over its entire length, we can find linearity over selected sections. In other words, we can get rid of our distortion if we can put the signal on the linear section of the oxide's characteristic curve. And that is exactly what bias does. It "lifts" the signal away from the convoluted central area on the graph and moves it out to linear areas.



The amount of bias (that is the current in milliamperes) applied to the head is highly critical if top performance is to be achieved. Bias affects output, high and low frequency sensitivity, signal-to-noise ratio and distortion. This curve explains it.



The steep curve represents low frequency sensitivity (measured in db,) at varying bias levels for many tapes. Note that you get good performance

providing you have a bias setting of about 4 milliamperes. (Curves for the other magnetic parameters are similar in shape and all peak at about the same bias level.) Vary one milliampere and you "fall off the curve" and suffer severe losses in sensitivity. Now look at the broader curve. You can vary a milliampere with hardly any change in performance at all. Here's the point. Kodak tape has that broad curve. It gives you top performance even though your bias settings aren't perfect. And if your tape recorder is more than a year old, then chances are enough shift has taken place to push you off the cliff. That's why we designed a broad bias curve. And that's why you need it. It's just one more way that Kodak tape gives you an extra bit of assurance of top performance.

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CIRCLE 36 ON READER-SERVICE CARD

Mongolian Shepherd's Song, and the very lovely Meng-Chiang's Sorrow from Kiangsu.

Odetta: "Odetta Sings of Many Things." RCA Victor LP 2923, \$3.98 (LP); LSP 2923, \$4.98 (SD).

One of Odetta's happier faculties is the ability to adapt her marvelous voice to the demands of wildly varied material. She can belt out a creditable blues, and does here in *Looky Yonder*; can impart a sense of gathering doom to an old Scottish ballad such as *Four Marys*; and she can even modulate for falsetto effects, as in the comic *Froggy Went A-Courtin'*. But in the end the most affecting band on this nicely balanced dise is Odetta's softly lyric version of Woody Guthrie's *Deportees*. Transparent stereo sound.

"Songs and Dances of Greece." Philips PCC 213, \$4.98 (LP); PCC 613, \$5.98 (SD).

A winsome and completely authentic anthology of Greek folk dances and ballads taped-more or less-in the field. Here is a cross section of a musical tradition rooted in the Classical Age of 2,500 years ago. Some of the airs on this record-for example, Anastasia-still embody the ancient meters. Present-day tavern songs and popular bouzouki music receive due attention, as do the lighter, more sprightly songs of the Greek isles. Excellent informative notes and handsome packaging round out another worthy entry in Philips' Connoisseur Collection. The stereo sound, reprocessed from monophonic originals, offers no great degree of separation.

Rafael Mendez: "Mendez in Madrid." Rafael Mendez, trumpet; orchestra. Decca DL 4497, \$3.98 (LP); DL 74497, \$4.98 (SD).

Rather syrupy arrangements of Spanish bullfight music cannot quite choke the big, golden tone of the Mendez trumpet. The Mexican soloist blazes through La Virgen de la Macarena, España cañi, and El Gato Montes with the style of a matador executing a classical faena. The orchestra, large and overblown, doesn't help, but these pasodobles were written with the blare of trumpets in mind and nobody can cross horns with Mendez in this arena. Broad, deep stereo sound with the trumpet brightly delineated in the foreground,

Byzantine Choral and Instrumental Ensemble: "A Choral Festival of Greek Folk Songs." Frank Desby, cond. Byzantine Society Records 10003, \$4.98 (SD). (Available from Greek Sacred and Secular Music Society, Inc., 1324 South Normandie Avenue, Los Angeles 6, Calif.)

This collection of Greek songs ranks as one of the most captivating records of the year. The Byzantine Ensemble, a Los Angeles group, has blended orchestral instruments such as flute, oboe, and English horn with the traditional bouzouki, kymvallon, and santouri to obtain a sinuous, intoxicating sound quite unlike anything I have ever heard. Embedded in this magnificent music are echoes of harsh Hellene mountains and endless Eastern plains, of the stately towers of Byzantium and the tents of Islam; even the new colorations provided by the Western instruments hark back to a past that spans millenniums and that has drawn equally from East and West. The songs themselves represent a neat anthology of Greek popular and traditional forms, ranging from Pedia Tou Pirea (the theme of the film Never on Sunday), through modern cabaret songs like Anapse To Tsigaro (Light My Cigarette) to such older folk ballads as Voskopoula (The Shepherd Girl). The thirty-voice chorus sings with insight and *élan*, but the sensual, haunting instrumental background is the most striking aspect of this release. Conductor Frank Desby, a lecturer in Byzantine music at the University of Southern California, is responsible both for the brilliant performance and the brilliant orchestration. Superlative stereo sound rounds out an exotic, vivacious offering.

Kurt Englehof and Orchestra: "Hofbrau." Time 52133 \$4.98 (LP); S 2133, \$5.98 (SD).

An unpretentious but beguiling disc out of the beery retreats of New York City's German-flavored Yorkville section. Oompah abounds as Maestro Englehof and his men tootle through melodies beloved wherever German is spoken-Du, du liegst mir im Herzen . . . Doktor Eisenbart . . . Gaudeamus Igitur . . . Muss i denn. My own favorite is an old German Army song, Der gute Kamerad, which receives a swinging, zestful treatment at Englehof's hands: it is, I think, one of the finest German band arrangements I have ever heard. The liner notes end with the sentence: "I do hope that you know the lyrics to these sixteen great songs." If you don't, you're out of luck because Time doesn't bother to provide them. The review disc suffered from a mild preëcho, but sparkles in every other sonic respect.

Red Army Ensemble, Vol. 30. Col. Boris Alexandrov, cond. Angel 36206, \$4.98

(LP); S 36206, \$5.98 (SD). This formidable battery of singers and instrumentalists-surely the finest military musical assemblage ever recorded -opens its program with a blazing La Marseillaise which epitomizes the group's many excellences. With massed brass sounding Rouget de Lisle's magnificent call to battle, the chorale rises strong and true and full above the band. The Russians sing a flawless French, perfectly enunciated, and the hushed pianissimo of their "marchons, marchons" following the vivid alarum of "Aux armes, citoyens" is a stunning tour de force of choral dynamics. Nor does the program flag thereafter. Soloist Konstantin Gerasimov shines in a stirring sailor's song, The Variag, and Alexei Sergeyev-a basso in the robust Russian tradition-also provides two memorable solos. We are unlikely ever to hear these military and patriotic songs better sung.

O, B. BRUMMELL

HIGH FIDELITY MAGAZINE



Kenny Ball: "Plays for the Jet Set." Kapp 1392, \$3.98 (LP); S 1392, \$4.98 (SD).

This six-piece English band is capable of a wonderful slam-bang attack when it has the opportunity to cut loose. Ball is a trumpeter who plays with tremendous exuberance, both open and muted, and backed by the solid momentum of his banjoist, he drives his group to some very exciting ensemble work. On this disc, the band is somewhat limited by gimmickry-all the tunes have geographical titles (The Road to Mandalay, Slow Boat to China, From Russia with Love, White Cliffs of Dover). But even though some of these pieces possess an inherent placidity which Ball and his colleagues cannot transform, they manage to catch fire gloriously on Brazil, Alabama Jubilee, The Road to Mandalay, and Hawaiian War Chant (spurred in the last by a brilliant stop-time solo by Ball, who also manages to work King Oliver's famous Dippermouth riff into the ride-out ensemble). Such rollicking excursions are considerably livelier than the normal undertakings of traditional jazz groups: they contribute towards making this set of more than passing interest.

Duke Ellington and His Orchestra: "Mary Poppins." Reprise 6141, \$3.98 (LP); 9-6141, \$4.98 (SD).

Nothing, it appears, is beyond Duke Ellington. One of the last scores one might expect him to choose as material for his band is that of Walt Disney's film Mary Poppins. It is scarcely suitable Ellington fodder, but that makes very little difference: once the Ellington men put their distinctive stamp on a piece, it becomes their property no matter what its source. Tune after tune on this disc (and a pretty routine lot they seem to be) is transformed by the vital Ellington personalities-Cootie Williams growling belligerently on his trumpet, Russell Procope strolling through the warm chalumeau register of his clarinet, Harry Carney building a line of rugged solidity with his imposing baritone saxophone and, in particular, Lawrence Brown, who produces some of the broadest, juiciest wah-wah trombone passages to come out of any Ellington session. Of Duke's major soloists, only Johnny Hodges seems unable to take a strong attitude towards the material. The piano player himself is content to stay in the background. Taken as a whole, the disc suffers from the fact that the tempos are relatively unvarying and the general design of the arrangements quite similar throughout. Several of these performances would stand out in a program of differing selections, but taken all at once even the good ones tend to diminish in significance.

Bob Florence: "Here and Now!" Liberty

3380, \$3.98 (LP); 7380, \$4.98 (SD). Florence has been writing strongly swinging arrangements for Harry James, for Si Zentner, and for his own West Coast studio band for several years. He has shown himself to be one of the least cliché-ridden of contemporary big-band arrangers. The eight pieces he has recorded in this set not only confirm this reputation, but indicate further that he is a fresh and imaginative writer. These arrangements result in some driving bigband performances (spiced with stirring tenor saxophone solos by Bob Hardaway and Bill Perkins), as well as several pieces which are unusually reflective for a band of this type. Florence makes an interesting use of long, sustained lines in his arrangement of Dream, and he ventures into fugue construction in Fughetta. Here and Now is a relatively long piece involving some exotic ensemble voicings and tempo changes; it provides interesting settings for a strong tenor saxophone solo as well as for Florence's own dark-toned piano. Florence proves that there really is such a thing as contemporary big-band swing. a genre not dependent on third-stream ideas or modern small-group styles but stemming directly from the big bands of other years.

Chico Hamilton: "Man from Two Worlds." Impulse 59, \$4.98 (LP); S 59, \$5.98 (SD).

This is the quartet in which Charles Lloyd (now with Cannonball Adderley) played tenor saxophone and flute, with Gabor Szabo on guitar and Albert Stinson, bass. It works quite close to the "new thing" idiom and, in fact, is at its best on the title tune, using passages which are almost direct copies of Ornette Coleman. When Lloyd and Szabo are playing ensemble passages on this tune and on Mallet Dance, the quartet creates a very valid and distinctive sound. Stinson is of the guitar-strumming school of bassists, and brings a great deal of sinuous rhythmic strength to the ensemble. Hamilton, however, is the dominant rhythm man-a bit too dominant at times for, although he builds tremendous velocity with his persistently slambang attack, it eventually becomes wearing. Particularly on Child's Play and Love Song to a Baby, the two relatively gentle selections in this gut-driven program, a little lowering of the drum dynamics would have been welcome.

Ted Heath and His Music: "The New Palladium Performances." London 44046, \$4.98 (SD).

The mixture of musical showmanship and solid big-band swing that was characteristic of the Ted Heath band during its heyday at London's Palladium in the Fifties is caught in heightened form on this new stereo recording using London's Phase-4 technique. Playing before an invited and properly enthusiastic audience. Heath has revived some of those favorites of his Palladium days which lend themselves to wide-range reproduction. Most of them are specialties for individual musicians in the band -bassist Johnny Hawksworth on Bass in the Hole and on a wild and magnificently disorderly treatment of Holiday for Strings; clarinetist Henry Mackenzie, who plays with precision and neatness on Send for Henry: an unbilled trumpeter on Memories of You; and a similarly situated pianist on Lulluby of Birdland. The full band gets its chances to cut loose on The Man I Love, Flying Home, and Ol' Man River. Heath's band always had a magnificent ensemble sound, even under "old" recording conditions, and it glitters more brightly than ever in the Phase-4 setting.

Gershon Kingsley: "Mozart After Hours." Vanguard 9175, \$4.98 (LP); 79165, \$5.95 (SD).

Now that Bach's music has been extensively probed as a jazz source, it apSAVE MONEY on NATIONALLY ADVERTISED BRANDS HI-FI COMPONENTS TAPE RECORDERS

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pears that Mozart is next up (the Swingle Singers, who started the Bach fad, will deal with Mozart in their next album). The opening gun is a lighthearted but extremely skillful bit of playfulness organized in Vienna by Gershon Kingsley, who has written arrangements of Mozart themes for a jazz rhythm section, a woodwind quintet drawn from the Vienna State Opera Orchestra, and his own harpsichord. Drawing upon excerpts from The Magic Flute, Don Giovanni, The Marriage of Figaro, the Piano Sonata in A, and the Symphony No. 40 in G minor, this prankish group has produced a lively set of performances which, aside from their innate gaiety, are noteworthy for their evidence that these players are real swingers. Not as much can be said for Maureen Forrester, who contributes some rather formal vocalizing on two pieces. The Vienna Akademie Choir tries its hand at some "dooby-dooby-do" singing in the Swingle manner on a pastiche called A Little Night Jazz, but it too shows where its roots are. Those woodwinds, though-they're something else!

Ramsey Lewis Trio: "At the Bohemian Caverns." Argo 741, \$4.98 (LP).

Lewis' trio has developed its stylized attack to what would seem to be a peak. It is polished, suave, showmanly, imaginative, and poised at that delicate point at which it could be reduced to caricature by carrying things one step farther. This disc shows the group going through its paces with the assurance and brilliance that come from years of working together. They do a West Side Story medley which glistens with lush romanticism and sparkles with swinging excitement. A pizzicato cello contribution by Eldee Young proves to be a real rouser, and Lewis polishes Fly Me to the Moon to the highest luster. It is all very calculated and very precisely conceived-an approach viewed with horror in some jazz circles. But it is a pleasure to hear a plan executed with so great a degree of skill and aplomb.

Gunnar Lidberg: "A String of Scan-dinavian Pearls." London 91354, \$3.98 (LP): 99354, \$4.98 (SD).

These Scandinavian pieces are, ostensibly, folk tunes, played by a group of young Swedes (Lidberg is a violinist, the other members of the group play vibraphone or organ, guitar, bass, and drums). But to these modern musicians, jazz is as basic a part of their musical outlook as the folk idiom: and so, though they approach the graceful melodies with fondness and obvious feeling, they also bring to the performances something of their contentporary viewpoint. As a result, these are often brilliantly swinging renditions in the jazz sense-brilliant not only because of the quality of the improvisation, but because of the degree of subtlety with which it is accomplished. Only the slightest little nudge prods the group out of strict tempo into the purest kind of jazz groove. Although all the musicians quite obviously move very naturally in this milieu, Lidberg stands out consistently. He is a superb jazz violinist who can be ranked with Eddie South, Joe Venuti, or

Stuff Smith. To discover him in this context. unheralded, is an exhilarating experience.

The Modern Jazz Quartet with Laurindo Almeida: "Collaboration." Atlantic 1429. \$4.98 (LP): SD 1429, \$5.98 (SD).

The Modern Jazz Quartet and guitarist Laurindo Almeida unite points of view that are quite similar. John Lewis has led the MJQ into jazz areas in which he could use such formal devices as the fugue, while Almeida, basically a classical musician, has achieved some of his major successes in jazz settings. In his experimentation with jazz sambas a decade ago, Almeida became inadvertently a pre-bossa-nova bossa novan. Plaving with the Quartet, he adds an enlivening touch to three of John Lewis' compositions-Silver, Trieste, and Valeria-and the Quartet in turn seems to find a rejuvenating effect in joining Almeida on a pair of bossa novas. The disc includes two classical works, Bach's Fugue in A minor and the slow movement of Joaquin Rodrigo's Concierto de Araniuez, Both are pieces that lend themselves here to interpretations which swing persuasively even though the approach is essentially "straight."

Jelly Roll Morton: "Stomps and Joys." RCA Victor LPV 508, \$4.98 (LP).

Victor, which has previously reissued early records by Jelly Roll Morton's Red Hot Peppers. has finally come forth with the band's later works (1928-30) on microgroove. Morton was recording with some oddly assorted groups at this time-Wilbur De Paris, Bubber Miley, and Cozy Cole turn up on some sessionsbut the distinctive Morton stamp shines through all these performances. Besides the band recordings, there is a piano solo (Seattle Hunch), a trio performance (Shreveport Stomp with Omer Simeon and Tommy Benford), a quartet (the same group with trombonist Geechy Fields added on Mournful Serenade). and two selections on which Morton accompanies singer Lizzie Miles. In these varied settings. Morton's unusual abilities as a pianist are made strikingly apparent. Not only does his very individual playing style form the cement that holds the band selections together, but he is a superb accompanist for Miss Miles (on I Hate a Man Like You, in fact, the delightful things he composes behind her attract more attention than her singing). His solos are, with amazing consistency, real events. This disc provides convincing evidence that Morton's stomps and joys are among the happiest treasures of jazz.

Orchestra U.S.A.: "Jazz Journey." Columbia CL 2247, \$3.98 (LP); CS 9047, \$4.98 (SD).

Orchestra U.S.A. is the thirty-piece group organized in the fall of 1962 by John Lewis to play a repertory ranging from early classical music to freshly minted jazz, with considerable emphasis on a middle-ground fusing of forms. This disc leans strongly to the jazz side of the repertory-and fairly unalloyed jazz at that. Four selections conducted by Harold

Farberman, which make up one side of the disc, emphasize a jazz orientation not only through the composers-Lewis, Benny Golson, Arif Mardin, and Miljenko Prohaska (bassist in the Zagreb Jazz Quartet)-but through the presence as soloists of Coleman Hawkins and Lewis. Surprisingly, it is the latter who provides the jazz strength in these performances. although Hawkins' tenor saxophone brings a great sense of authority to the two pieces on which it is heard. The other side of the disc is given over entirely to Journey Into Jazz, a long, ponderous, Peter-and-the-Wolf-ish narrative with music about a small boy's attempts to learn to play jazz.

Sahib Shihab: "Summer Dawn." Argo 742, \$4.98 (LP).

Like several interesting LPs by groups under the leadership of Francey Boland and Kenny Clarke, this set was produced in Cologne by Gigi Campi. Boland and Clarke are both present, but the main emphasis is on Swedish trombonist Ake Persson and on Shihab, who plays both flute and alto and baritone saxophones. Previous Campi-Boland-Clarke sessions have been notable for their inventiveness. and the same characteristic holds true for the present disc. Even when Shihab and Persson engage in long solos, they are backed by provocative rhythm figures and surrounded by changing tempos. Four of these five relatively long selections are better than average performances, thanks to the individual skills of the players mustered. But the gem of the set is a charming and catchily rhythmic piece on which Shihab (on flute) and Persson play a series of solos and duets that, cumulatively, create a mood piece which is delightfully light and airy.

Roosevelt Sykes: "Hard Drivin' Blues." Delmark 607, \$4.98 (LP).

Sykes is a veteran blues singer and pianist who is, happily, still in his prime as a performer. He is not consistent and he has very uncertain taste in choosing his material. But when he is in good form, as he is about half the time on this disc, he displays the kind of vigor and authority that have not been heard from a blues singer since Big Bill Broonzy's death. He has the resources to produce a richly glowing blues tone when he wants to, his phrasing and inflection are beautifully executed, and he accompanies himself with a simple but propulsively effective piano style. His performances of Red-Eyed Jesse Bull, Living the Right Life, and New Fire Detective Blues are splendid examples of the blues singer's art, while his Ho! Ho! Ho! has a good-time feeling that reveals another aspect of his skill as an enter-JOHN S. WILSON tainer.



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The following reviews are of 4-track 7.5-ips stereo tapes in normal reel form.

BACH: Organ Works

Prelude and Fugue in D, S. 532: Trio Sonata, No. 6, in G, S. 530; Fantasia and Fugue in C minor. S. 537; Chorale-Prelude, "Alle Menschen müssen sterben," S. 643; Toccata and Fugue in F, S. 540.

Virgil Fox, organ. • COMMAND 11022. 40 min. \$7.95.

It doesn't seem to matter much what instrument Virgil Fox chooses for recording-as long as it's a big one. Whether it's the new Aeolian-Skinner organ in Philharmonic Hall, Lincoln Center; the rebuilt monster in the Palais de Chaillot, Paris: or his "home" Aeolian-Skinner organ in New York City's Riverside Church (which he plays here, as he often has before in lighter programs for Capitol)-he makes the most of pedal profundities and over-all sonic massiveness and power. Such grandiloquent "symphonic" organ playing, which employs very little of the instrument's potentials for varied timbres, leaves me lukewarm at best; in the Bach repertory it seems intolerable. For other tastes, of course, Fox's performances here, as elsewhere, will be tremendously exciting. Technically, the reel is outstanding for panoramic breadth, dynamic impact, and the robust solidity of its low-frequency sonic substratum.

BEETHOVEN: Fantasia for Piano, Chorus, and Orchestra, in C, Op. 80; Concerto for Piano and Orchestra, No. 3, in C minor, Op. 37

Rudolf Serkin, piano: Westminster Choir (in the Fantasia); New York Philharmonic, Leonard Bernstein, cond. • COLUMBIA MQ 638. 55 min. \$7.95.

For most tape collectors this initial reel

JANUARY 1965

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edition of the Op. 80 Fantasia proffers what is likely to be their first encounter with one of the most peculiar works in the Beethoven repertory. Fascinating in every detail, if scarcely satisfactory as a somewhat amorphous whole, it is particularly illuminating for its revelatory hints (in the opening section for solo piano) of Beethoven's own improvisatory style; it gives indications, too, of his preliminary approaches to the notion of a chorale finale for the Ninth Symphony.

Needless to say, Serkin plays his vital part with characteristic authority and declamatory eloquence, but the Westminster Choir sings somewhat tentatively and Bernstein conducts with more enthusiasm than care. The performance achieves considerable dramatic effectiveness, but sadly lacks the necessary contrasts of more restrained expressiveness and any true *pianissimos*.

Much the same overemphases, allied with Bernstein's tendency to drag, mars the effectiveness of Serkin's muscular, sometimes too vehement playing in the great C minor Concerto. There is, too, a somewhat excessive reverberation in the expansive stereo recording which adds to the effect of heaviness. There is no serious challenge here to the preëminence of the Fleisher/Szell Epic taping of July 1963; yet the present reel will interest Beethovenians because of its inclusion of the too seldom heard Fantasia.

BIZET: Carmen

Leontyne Price (s), Carmen; Mirella Freni (s). Micaëla: Franco Corelli (t), Don José; et al.: Vienna Boys Choir; Vienna State Opera Chorus; Vienna Philharmonic Orchestra, Herbert von Karajan, cond.

• RCA VICTOR FTC 8009 (two reels): approx. 87 and 74 min. \$21.95.

It you insist on essentially Gallic insights into Bizet's music as he originally conceived it, you will, I'm afraid, find the present cast never idiomatically

French-sounding and the conductor's approach seldom suggesting the authentic Gallic grace and piquancy which Sir Thomas Beecham so successfully captured in his 1960 Capitol recording (later issued as an Angel tape). If, on the other hand, you don't demand a "French' Carmen, you will find substantial rewards here. While Leontyne Price's enactment of the title role is uncertainly integrated, her vocalism is virtuoso throughout and at its best magnificent; Franco Corelli's Don José is also vocally impressive in its Italianate style: Mirella Freni's Micaëla is wholly charming: and the choral and orchestral performance under Von Karajan is polished in every detail.

When we turn from interpretative to technical considerations, there is no ambivalence whatever: this is a superbly expansive and plastic recording (non-Dynagroove, by the way) of extremely wide dynamic range, with some exceptionally fine *planissimos* and consistently effective stereoism. Apart from a very few and slight preëchoes, the tape processing is first-rate too, although there are problems of reel-side distribution, including a particularly disconcerting break between Sides I and 2. Over-all, this must rank high among impressive opera recordings, especially in terms of executant and sonic excitement.

COPLAND: Rodeo: Four Dance Episodes; El Salón México; Danzon Cubano

Minneapolis Symphony Orchestra, Antal Dorati, cond.

• • MERCURY STC 90172. 36 min. \$7.95.

If I remember rightly, it was Dorati (with the Dallas Symphony) who was the first to record the *Rodeo* episodes towards the end of the 78-rpm era. Unquestionably, his Minneapolis versions of

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THE TAPE DECK

Continued from preceding page

both this ballet and the no less rowdily dashing and wryly nostalgic evocation of a Mexican dance hall have ranked as leading Copland discs ever since their first appearance in 1958. It's remarkable how well both readings and recordings stand up in this belated tape transfer: Dorati's coolly controlled muscular verve is still impressive despite some obvious overemphasis, and so too is the rawhide quality of the sound, for all its occasionally coarse stereoism. Even so, these versions must yield first place now to Bernstein and Columbia: Rodeo (coupled with Billy the Kid) in MQ 397 of December 1961; El Salón México and Danzon Cubano (with Appalachian Spring) in MQ 559 of October 1963.

MAHLER: Symphony No. 1, in D ("Titan")

London Symphony Orchestra, Georg Solti, cond.

• LONDON LCL 80150, 54 min, \$7.95.

MAHLER: Symphony No. 5, in C sharp minor †Berg: Wozzeck (excerpts)

Phyllis Curtin, soprano (in the Berg); Sacred Heart Boychoir (in the Berg); Boston Symphony Orchestra, Erich Leinsdorf, cond. • RCA VICTOR FTC 7007 (doubleplay). 84 min. \$14.95.

Since Columbia has not seen fit to provide a reel edition of Bruno Walter's Mahler First, and the 1959 Boult/Everest taping now seems to be out of print, Mahlerians dissatisfied with the hightensioned Leinsdorf RCA Victor taping of June 1963 have had to wait until now for a really satisfactory version of the so-called Titan Symphony. Solti's reading is more relaxed and plastically contoured, far more compassionate than Leinsdorf's, yet it is never lacking in muscular strength either. Sonically, it is superior by an even wider margin; vivid and lucid as was the Dynagroove technology, what may be heard here is far more atmospherically radiant. And, like the earlier release, the tape processing itself is admirably quiet-surfaced and preëchofree.

Leinsdorf is better served by his engineers in the hitherto untaped Fifth Symphony. The robust recording makes the best of the now familiar spectroscopic qualities of Dynagroove and impressively enhances the dramatic effectiveness of the uniquely Mahlerian scoring. Here too the conductor seems both more personally involved in the music making and less tempted to italicize details. And if the many vigorous passages still come off better than the introspective ones (the romantically songful Adagietto falls somewhat short of its maximum poignance), there is a genuine gusto and humor in the exhilarating finale.

Leinsdorf's and Miss Curtin's Wozzeck excerpts also are ably. if less excitingly done, but to my mind these are tantalizing snippets from an opera that should be heard in its entirety or not at all.

MOZART: Divertimento for Strings and Two Horns, No. 10, in F, K. 247; Quintet for Clarinet and Strings, in A, K. 581

Members of the Vienna Octet. • • LONDON LCL 80145. 59 min. \$7.95.

Only the second of Mozart's divertimentos to reach tape, the present K. 247 contrasts usefully with the Szell/Epic K. 131 of last September. It is given a strictly chamber music performance (with a single instrument to a part) rather than one of orchestral proportions. Dating from Mozart's twentieth vear, the six-movement work is engagingly characteristic of his "occasional" music-the particular occasion in this case being a birthday of the Countess Lodron, sister of the Archbishop of Salzburg. The two horns have some delectable passages: the string quartet sings alone in the gravely expressive Adagio; and the prominent-sometimes almost concertolike-first violin part is exquisitely played by Anton Fietz.

The decisive appeal of the present reel, of course, rests in its major workthe incomparable Clarinet Quintet, which we have had on tape before only in the early stereo Concertape version by Reginald Kell and the Fine Arts Quartet. The new Viennese version is, interpretatively at least, more complementary than directly competitive: soloist Alfred Boskovsky and his colleagues play with less romantic fervor, but with more restraint, lyrical delicacy, and purer if less richly nuanced tonal coloring. Clarinet and strings are more equably balanced and integrated too, with less suggestion of a soloist-with-accompaniment approach. The older recording still stands up remarkably well, but it can scarcely match the superb translucency of this one.

ROSSINI: La Cenerentola

Giulietta Simionato (ms), Cenerentola; Ugo Benelli (t), Ramiro; Sesto Bruscantini (bs), Dandini; et al.; Chorus and Orchestra of Maggio Musicale Fiorentino, Oliviero de Fabritiis, cond. • LONDON LOR 90084. Two reels: approx. 71 and 74 min. \$21.95.

I am not quite as disturbed as Conrad L. Osborne was (in his disc review of last September) by the recording idiosyncrasies here, although I must agree that the technological approach differs markedly from previous Decca/London operatic practice in its closer auditory perspective strangely combined with rather too much reverberation. But while this is indeed a "noisy" Cenerentola, its title role is sung so beautifully by Giulietta Simionato, Ugo Benelli proves to be so happy a lyric tenor discovery, De Fabritiis conducts with such

relish, and the music itself is so consistently entrancing that I'm bewitched into forgiving what are perhaps less technical flaws than lapses in technological tastefulness.

SOLER: Six Concertos for Two Keyboards

Anton Heiller, organ and harpsichord; Erna Heiller, harpsichord. • VANGUARD VTC 1689. 47 min. \$7.95.

Sonically, this is so singularly intriguing a release that its circulation should not be limited to specialists in the baroque. While these so-called organ concertos (actually they are two-keyboard sonatas) by Padre Antonio Soler (1729-83), a younger contemporary and possibly pupil of Domenico Scarlatti, are charming rather than particularly substantial, the highly stereogenic performances on two harpsichords, or one harpsichord and a flutey little positive baroque organ, are a sheer aural delight throughout. And one's sense of precision is equally well pleased by the exceptional unanimity, to say nothing of the exquisite balancing of antiphonal passages, of the husbandand-wife team's performances.

TCHAIKOVSKY: Symphonies: No. 4, in F minor, Op. 36; No. 6, in B minor, Op. 74 ("Pathétique")

London Symphony Orchestra, Antal Dorati. cond.

• • MERCURY STP 90312 (double-play). 85 min. \$11.95.

There's excellent value for one's money in this convenient coupling, and although these recordings aren't the only four-track versions that avoid mid-work side breaks, they are the only ones of recent, thoroughly satisfactory sonic qualities. Interpretatively, however, this Fourth doesn't come close to achieving the momentum and dramatic impact of the Steinberg/Command version (reviewed here in December). Dorati's reading of the Pathétique has more distinction: it is consistently songful and restrained, and often highly graceful, if seldom as somberly passionate as many listeners demand in the first and last movements-and as they can find on tape probably only in the Ormandy version for Columbia.

LES TROUBADOURS DU ROI BAUDOUIN: Missa Luba; Congolese Folk Songs (7)

Les Troubadours du Roi Baudouin, Guido Haazen, cond.

• • PHILIPS PTC 606. 29 min. \$7.95.

Except in a few essentially pop programs by Olatunji and Makeba, there has been little in the tape repertory to match

Continued on next page

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THE TAPE DECK

Continued from preceding page

the novel impact of the ostinato-rhythmed chanting and jungle percussion playing in the seven folk songs here. And probably there is nothing anywhere to compare with the almost preposterous combination of primitivism and sophistication in this improvisatory folk Mass. It is a genuine musical curio that perhaps few listeners will want to repeat often, but the tape should certainly not be missed by anyone at all interested either in folk music as such or in the relationship between freely improvised and formally planned tonal creativeness. Father Haazen's chorus consists of forty-five boys and fifteen native teachers from the Congolese Kamina Central School, and the accompanying ensemble (drummers and raspers) plays with infectious relish. But I am not as impressed by the recording itself as most of the disc reviewers have been. The electronic reprocessing of a monophonic original has been achieved effectively enough (if with no marked stereogenics) and there is no loss of clarity, but to my ears the over-all sonic qualities seem rather dry and hollow with a suggestion of some echo-chambering.

"America on the March." Robert Sharpless and His Band. London LPL 74033, 30 min., \$7.95.

First prepared some years ago for the Phase-4 spectaculars "Pass in Review," "Victory in Review," and possibly others, these Sharpless arrangements of several Sousa, service, and other favorite American marches (Stars and Stripes Forever, The Caissons Go Rolling Along, National Emblem, etc.) are this time played here straight-without crowd noises, motional effects, and other stereo razz-matazz. And while some of the overfancy touches are a bit more obvious now (Sharpless' predilection for piccolo obbligatos to practically every trio tune, for instance) the performances for the most part are surprisingly idiomatic as well as rousing, with special honors going to a Brobdingnagian-lunged tuba player. The lusty, open, expansively stereoistic recording (made in Walthamstow Town Hall) enhances the weight and vigor of the fine seventy-five-man ensemble and valuably reminds audiophiles that Phase-4 technology doesn't need special trickery to achieve truly impressive sonic effects.

"Concertos for Twin Pianos." Willi Stech and Borislav Rokovic, pianos; Kurt Edelhagen and His Orchestra.

M-G-M STC 4230, 50 min., \$7.95. Gershwin's *Rhapsody in Blue* and Addinsells' *Warsaw* Concerto are so often subjected to tasteless pops disarrangements nowadays that it's a pleasure to praise the straightforwardness of the present treatments. They are perhaps more deliberate than usual, but effective nonetheless, and the Gershwin provides an additional surprise in its lack of the foreign accent normally expected in any European reading. Curiously, though, neither of these involves true two-piano idioms: for the most part the two pianists simply alternate in playing (now from the left, now from the right) the original solo-piano passages. There is somewhat more antiphonal and combined pianism in the overside *Canadian* and *Brownstone* Concertos by Claus Ogerman and Larry Coleman respectively; but while the clean performances and recordings are just as good here, the musical materials (Coleman's in particular) lack any marked distinctions.

"Fade Out, Fade In." Original Cast Recording, Colin Romoff, cond. ABC Paramount ATA 840, 46 min., \$8.95. If you're a Carol Burnett fan and especially if you've seen her latest starring vehicle on the stage, you probably won't be bothered much here by the general lukewarmness of the Comden-Green lyrics and Jule Styne music-or, for that matter, by somewhat thin and not particularly stereogenic recording. At least there's Miss Burnett, and she is well supported in several duos by Jack Cassidy. Even better is her collaboration with Tiger Haynes in the most distinctive number in the score: a mannered vet nonetheless amusing take-off on the onetime famous song-and-dance duos of Shirley Temple and "Bojangles" Robinson. If only there were a few more such moments to redeem this deftly contrived but unexciting show!

"Getz/Gilberto." Stan Getz, saxophone; João Gilberto, guitar and vocals; Antonio Carlos Jobim, piano. Verve VSTC 317, 34 min., \$7.95.

While the performers in this bossa nova program are indeed superb, with first honors going to the extraordinarily subtle contributions of pianist Jobim, what makes this reel especially treasurable is its delectable music. Here composer Jobim stars, not only for his familiar Desafinado and Girl from Ipanema but also for his jaunty So Danco Samba and the poignant O Grande Amor. As in the earlier Getz/Verve "Jazz Samba" and "Jazz Samba Encore" releases, the recording is magically luminous, further enhancing the poetic charms of the music.

"Hello, Dolly!" Louis Armstrong and the All Stars. Kapp KTL 41078, 36 min., \$7.95.

The fabulous Satchmo endows this program of current pop hits with an entirely fresh and pungent flavor. Not only the title song but It's Been a Long Long Time, Someday, Moon River, Blueberry Hill, and Hey Look Me Over all profit immensely from the incomparably hoarse Armstrong vocalizing, and the protean personality is scarcely less strikingly revealed in his trumpet playing, even though that is less extravagantly bravura than it once was. From the evidence of the present tape (a disc best seller by the way) one might guess that as a singing actor Louis is only now reaching his prime.

HIGH FIDELITY MAGAZINE

"The Newport Folk Festival 1963: The Evening Concerts, Vol. 1." Various artists. Vanguard VTC 1688, 47 min., \$7.95.

This is a tape transfer of No. 5 in the recent six-disc series of 1963 Newport Folk Festival documentations. It represents a curiously fascinating variety of familiar and unfamiliar artists and materials, with-for me, at least-wholly unexpected successes and failures. The "name" stars fail to impress me here with strictly routine reprises of such hits as the Rooftop Singers' Walk Right In and Bob Dylan's Blowin' in the Wind; Joan Baez is handicapped by excessive vibrato in several somewhat overemotional performances, and the Freedom Singers are apparently more intent on stirring the crowd than demonstrating any musical values in Woke Up This Morning and We Shall Overcome. But for compensation there is the lovely Canadien errant by Ian and Sylvia; Sam Hinton's genuinely humorous entertainments; and the low-pressure, almost *sotto voce* blues singing of the festival's "discovery," the seventy-year-old Mississippi John Hurt. The recording is admirably clean, natural, and not too closely miked; its inclusion of some extraneous wind and crowd noises only heightens the effective realism. In general, though, this is a tape most likely to interest folk specialists.

"Oklahoma!" John Raitt, Florence Henderson, Ara Berberian, et al.; Chorus and Orchestra, Franz Allers, cond. Columbia OQ 653, 47 min., \$9.95.

The prime merit of this revival performance undoubtedly is its straightforwardness. Unlike so many other recordings of excerpts from this Broadway classic, the singers here refuse either to imitate slavishly or to differ violently from the original or most famous exponents of the same leading roles. Similarly, Philip J. Lang's new orchestrations are skillfully updated without introducing jarring modernizations. And of course no earlier version could boast such big, bright, and vibrant stereoism as the present recording (even though it makes relatively little use of stereogenic staging effects). Despite all these merits, however, the performance as a whole falls somewhat short of outstanding success-largely because only Ara Berberian's Jud achieves notable vocal and dramatic distinction, partly because the very close-up miking produces an aural perspective which is decidedly incongruous for so out-of-doors a drama as this one.

"Rural Rythm." Norman Whistler, violin; Ted Nash, fife; The Rural Rythm Masters. Repeat ST 300-4, 30 min., \$9.98. The dropped "h" may be taken as a symbol of the abbreviated technique used in recording: this is one of several Repeat releases (discussed by Norman Eisenberg in the "Newsfronts" of last September and October) which features the Barcus-Berry direct-recording process. No microphones are used: the vibrations of each instrument are picked up electronically via a transducer attached to the instrument, and its actual acoustic output (as well as the acoustic ambience of the studios itself) is bypassed entirely. The present tape version is remarkable, too, as a product of slow- rather than the usual high-speed dubbing. Whether or not that justifies its premium price, the reel is indeed outstanding for its wide frequency and dynamic ranges as well as its freedom from surface noise and preëchoes. The recording itself is sensationally clean-yet the abandonment of normal acoustic characteristics seems to result (to my ears, at least) in singularly bland sonic qualities. They are fascinating, all right, but I have yet to be convinced that they will be satisfactory for serious program materials. Even the present barn-dance selections seem somewhat lacking in sonic body and impact. The music itself is delightful, however, in these performances starring a true country fiddler and rhapsodically lilting fife player.

"The Sheriff." Modern Jazz Quartet. Atlantic ALC 1929, 30 min., \$7.95. Inasmuch as all the MJQ's releases appeal to somewhat specialized tastes, listeners had better try this out for themselves. For my part I enjoyed the buoyant Donnie's Theme, the even more sprightly title piece, and the markedly contrasted pathos of Natural Affection -and I wonder what other purportedly "jazz" ensemble could capture as well the magic of Villa Lobos' Bachianas Brasileiras No. 5 (with Milt Jackson's vibraharp taking the wordless vocalsoliloquy part). Most of all, as always with the MJQ in my own experience, I relished the sheerly aural appeal of the limpidly recorded, kaleidoscopic, stereo sonics.

THE 3-3/4-ips trend assumes further strength in both its older spoken word and newer mood music repertories with the current enlistment of two leading manufacturers under the slow-speed banner. Columbia's 3-3/4-ips debut is with a blockbuster trio of its latest dramatic hits: Hamlet with Richard Burton (DOQ 665), the original Broadway cast Who's Afraid of Virginia Woolf? (DOQ 667), and the Broadway production, starring Sir Alec Guinness, of Dylan (DOQ 666). The three are so-called 4-play single reels (containing the equivalent of a 4-disc album) and are list-priced at \$17.

Capitol's first musical slow-speed entries are all (like those earlier, from Ampex Stereo Tapes) double-play singlereel couplings (list-priced at \$9.98 each) of programs available hitherto in separate disc releases. The pop artists represented are the George Shearing Quintet (Y2T 2143). Norrie Paramour Orchestra (Y2T 2196), Waring Pennsylvanians (Y2T 2178), and organist Eddie Dunstedter (Y2T 2177)—the last two in Christmas programs. There is also an anthology of light symphonic warhorses, "This is the Hollywood Bowl!," featuring various conductors (Y2P 8496).



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Continued from page 45

which I love and demand, but you don't have to force it upon them. They work for it themselves and they listen to each other and really play with each other.

LANG: I notice also that the horns, the brass in general, by nature laggards, come in with as much precision as your wood-winds.

SZELL: That is a matter of training simply relentless admonition and intolerance of any imprecision. My horn section. in particular, is now as homogeneous as one could wish for. They all have the same schooling, they play the same type instrument, they use the same type mouthpiece.

LANG: In your recent recording of a Mozart Divertimento, there is some absolutely prodigious horn playing.

SZELL: I agree with you. I must say that when I heard the record, I said to myself: I knew it was pretty good, but I had no idea it was that good.

LANG: In our modern orchestra, nine bass fiddles seem to be the rule—which to my own mind is too many—but yours never grumble and

SZELL: I would disagree with you slightly in saying that nine are too many. There are times when you really need that number. in the works having full orchestra and much brass, when you want the string bass to help carry the weight of the total structure. The important thing is that they play in the appropriate style and with the appropriate dynamic range.

LANG: Now a bit about your general musical attitudes. We are still under the influence of so-called "content aesthetics," as you can see from our program notes—everything always has a story or some particular feeling attached to it. But a Mozart symphony or a work like Beethoven's Fourth doesn't have any other purpose but music. How do you keep your mind free from conceptual diversions?

SZELL: I wouldn't know how to permit entry of those conceptual diversions into my mind. It wouldn't occur to me to invent a program or to try to inspire an orchestra by extramusical hints and suggestions. Very, very rarely does it happen that I go very far out in making metaphoric suggestions. I might, for instance. ask for a velvety or silky sheen in the sound, or a breathless silence, but I would be much more likely to tell my players something along these lines: "Now, look, if we are to come in together with the piano at the beginning of the second movement of the Beethoven C major Concerto, there is only one way to do it. We must do it without the conductor. The problem is that you must come in together with the piano. the piano speaks in a completely different way-from the way the strings speak, so we have to use a trick. Have your bow soundlessly, silently on the string and the moment you hear the pratio sound, start pulling very slowly and you'll be there without the conductor." Thus you achieve the desired result by knowing what trick will result in what effect—by purely musical means.

LANG: The difficulties that arise when one courageously refuses to be a conformist must have caused misunderstanding on the part of some of your critics. Yet you refuse to slow down for subsidiary themes, to indulge in noticeable tempo variations, to use *luftpausen* before last chords, and to play an allegro as a presto. All this is now being recognized as virtue in a conductor, but you must have had some discouraging experiences in the past.

SZELL: The most discouraging experience is not if one gets a poor review, but if one is dissatisfied with oneself—and that does happen pretty often. But at the same time one learns from those experiences.

LANG: Occasionally. I play an old recording—for instance, something by Mengelberg.

SZELL: Well, he was the great distorter.

LANG: And yet for a long time that kind of conducting was considered an ideal. and anyone who didn't follow suit was called "cold."

SZELL: Of course, Mengelberg aimed at a plasticity and a clarity of a very special sort, which is obtainable only by wild exaggeration and by destroying the natural pulse of a piece of music. The difficult thing is to obtain plasticity without destroying the natural pulse of the music.

LANG: Like practically all great conductors, you grew up in the opera pit. I know that you have trained some talented young men, but will many of them be able to acquire the ultimate in technical finish without that hard but priceless schooling of the opera house?

SZELL: I really don't think that the same technical finish and the same readiness for any emergency in fractions of seconds is possible without operatic training. I really don't think so.

LANG: That is the one shortcoming we have in this country—we have talented young people but there is no place for them to operate.

SZELL: Exactly, except that in certain conducting courses—as, for instance, in the Ford Foundation program at Baltimore—training is offered in some operatic scenes and excerpts. This is, however, very different from an actual opera house situation, where you may have to



CIRCLE 36 ON READER-SERVICE CARD JANUARY 1965 save the performance by jumping wildly over the bars in order to catch up.

LANG: Nowadays we have even that once unimaginable specimen—and right in the Metropolitan Opera House—the conductor who cannot accompany his singers.

SZELL: In the old days all the opera houses had some conductors who were not really high-class musicians and who perhaps couldn't even read a score awfully well. Yet they had the skill to go with an unnusical and unrhythmical singer through thick and thin and keep fairly well together with him, And of course, the orchestra also profited. While it was not the cleanest type of orchestral performance, it was very flexible, it was very competent, and singers and musicians were almost always abreast.

LANG: I've noticed time and again, for instance, how that excellent little orchestra in New York's City Center can get out of difficult spots where even a firstclass symphony orchestra would drown.

SZELL: This is par for the course, because every concert orchestra, every symphony orchestra, is by definition less yielding. Why? because they are the protagonists, whereas every pit orchestra knows that they are basically subordinate. They have to go with what is happening on stage.

LANG: We shall leave out the living conductors, but I should like to ask you your opinion of some of the great of the past whom you have observed.

SZELL: Well, there was one who was my god at the time, and I am not sure what kind of a figure he would cut in our day. That was Artur Nikisch. He was the great wizard of the orchestra, but those were times when cleanliness and precision did not count for as much as they do now. Whether we would tolerate the wild, gypsylike improvisational way of treating music that was characteristic of Nikisch, whether we would tolerate it now after having gone through the Toscanini epoch is a little doubtful in my mind. Still, I think we would be enchanted with the spontaneity and with the wonderful sound and freedom of the orchestra. What Nikisch did was very, very rhapsodic and unpremeditated, and in the best sense hypnotic and magnetic. You could not extricate yourself from his spell. I once sat on the platform behind the orchestra facing him in the old Berlin Philharmonic Hall and when I saw his eyes-his heavy eyelids and then the lightning of his eyes-I was fascinated. I felt: I don't know what he wants, but I am sure that as a player I would do exactly as he wants.

LANG: Can you think of some others? SZELL: In his own way Richard Strauss

Continued on next page



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"INSTINCT AND INTELLECT"

Continued from preceding page

was a very great conductor when he really felt like exerting himself. He could be extremely dull if he wasn't interested. And he had the great advantage of being the great Richard Strauss, which made the attitude of the orchestra different right from the start.

LANG: But he was interested in precision.

SZELL: Yes, very much, and he had a very small clickety, precise beat with always another little upbeat inside his wrist. My conducting technique was originally fashioned after his, because he was the nearest to a commanding influence in my formative years. I worked for two years under him as his assistant at the Berlin State Opera, then the Royal Opera. There are many others whom I could mention, of course. No one could leave a man like Toscanini unmentioned. Whatever you may think about his interpretation of a specific work, that he changed the whole concept of conducting and that he rectified many, many arbitrary procedures of a generation of conductors before him is now already authentic history. That at the same time he has served as a not too useful model for a generation of conductors who were so fascinated that they were unable to follow him with some sense of discrimination is equally true, I believe.

LANG: Now, to conclude, how do you feel when, after so many years of conducting that Mozart, or Schumann, or Brahms symphony, you have to dust it off once again?

SZELL: Unless one has the hope of making progress until one's last day, one has the wrong attitude. Never work from routine, never repeat a performance you have given. One must retain the feeling —the wonderful feeling—that every time you pick up that Mozart or Schumann or Brahms symphony it is a brandnew adventure.

STEREO CARTRIDGES

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has very high vertical modulation (extreme channel separation).

Whatever the audible results of vertical tracking angle distortion, it now perforce becomes important to eliminate it—because we are certain to be more and more bothered by it as tracing and other forms of distortion are reduced. There is now fairly wide acceptance—though no official ratification of 15 degrees as the angle for both cutter and pickup, and practically every leading manufacturer now offers a 15-degree pickup.

The frequency response of a pickup, as suggested before, is established approximately at the high end by its high resonance—above the resonance, or peak,



CIRCLE 64 ON READER-SERVICE CARD HIGH FIDELITY MAGAZINE response falls off. At the bass end another resonance is the marker, a resonance depending on the compliance of the stylus and the mass of the tone arm. The higher the compliance and the heavier the arm, the lower this resonance. With current high compliance pickups, bass resonance is almost certain to be below the audio spectrum below 20 cps, say—even with a light arm, and the arm should be as light as possible to make the assembly responsive to the rise and fall of a warped record, among other things.

A bass resonance below about 20 cps is desirable not only for full bass response, but also because groove jumping or distortion can result when the resonance is in the reproduced range of frequencies. Too low a resonance, however, around 3 cps to 5 cps, is not desirable because the resonance of the turntable suspension may lie in this range, in which case the two resonances can reinforce each other to cause groove jumping when there is vibration in the room, as from heavy footfalls. Inasmuch as the frequency of the resonance depends on the combined mass of both pickup and arm, a very heavy pickup (say, one weighing over 10 grams) ought not to be used in a very heavy arm-unless special care is taken to isolate the turntable from all external sources of shock or jarring.

Good transient response (as in any component of a system) depends on an absence of severe peaks and on extended high frequencies—another reason for getting the high resonance up out of the way. Pickups with a resonance at least as high as 12 kc or 15 kc can be depended on to have good transient response; those in which the resonance is at 30 kc or beyond ought to have excellent transient response.

All told, the continued reduction of distortion in the stylus-groove relation is under active attack as never before in high fidelity history. But what about the distortion in the electrical generator action of the pickup? Although always less of a problem, it is by no means negligible. In the best designs it may be very low, perhaps less than 2%. Of course, as tracing distortion, tracking angle distortion, and the other slippages in the transfer of groove pattern to stylus are reduced, more attention will be centered on generator distortion. Generally speaking, current design trends point to higher compliance, lower stylus mass, and lighter arms. In the meantime, we have already at hand a whole class of pickups that follow the groove with a truly remarkable fidelity.

THE CHEERFUL GHOST OF EISENSTADT

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broken stained glass windows, we uncover the original organ console. With a little investigation we learn that Haydn had not only helped Georg Mallon, Organ Builder to the Viennese Court, with the instrument's design and specification, but had played the dedicatory recital at its completion in 1770. Schuke, who restored the instrument in 1942, had been meticulous in leaving the sound unaltered while replacing the console and adding an electric blower.

In the interval, spring has caught up with us and we have taken advantage of the time to open the small church and warm it up. None too soon, as the musicians are arriving from Vienna. With the tangible presence of Haydn's bones only 1,500 feet away and the tracks and traces of his life we have been uncovering, we become aware of a growing historical involvement with him. I convince the skeptical timpanist to use the old instruments, which he manages to prop up on a table. The contrabass, alas, has an unfortunate buzz and cannot be used. There seem to be many more musicians than we have space for, and on the first day a half hour goes just to seating. When the larger groups play, we not only must fill an unused side gallery separate from the choir loft, but must persuade reluctant trumpet players to inch themselves out on a dangerous ledge, where they sit hypnotized by the church floor twenty-five feet below.

Since Haydn had made a practice of holding public dress rehearsals of his Masses in this same spot, several hours before performing them at the Bergkirche or the Schloss, I can visualize him standing just where I am, on the same little

podium, listening with a bemused smile to the musicians' eternal complaints about lack of room and helping them work out the seating compromises that are ritual before performances (and recordings). When our conductor Zoltan Rozsnyai raises his baton and music fills the church again after so long, I close my eyes and am quickly swept back two hundred years. The buzz of soft Viennese German floating down from above perfects the illusion. I find it almost impossible to tear myself away and resume my contemporary preoccupations in the control room. The Pfarrer beams: "Unglaublich, nicht wahr? Genau wie in den alten Zeiten."

The sessions themselves go so smoothly they are an anticlimax to the odyssey that preceded them. Bach's "Music of Jubilee" and Mozart's Church Sonatas seem to benefit as much from Haydn's ambience as do his own offspring, the three organ concertos in C major. Of these three, coming roughly from 1765-60, one has been available for some time; another, supposed lost, was discovered and published in 1959; the third, only recently published, is receiving its first recording under composerapproved conditions.

The days blur together in a haze of enchanting music, superb seventy-fivecent lunches, and memorable bottles of Sierfandler, Gumpoldskirchner, and Stierblut. We begin to understand why Haydn always came home to Eisenstadt after summers in Esterház, visits to Vienna, or triumphs in England. Though drenched in history, the city keeps its homelike attraction. Haydn could not resist it even after death.

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The basic design for E-V Deluxe components was laid down over a decade ago, and, despite numerous detail improvements, this approach is just as valid today. It begins on a firm foundation: the rigid die-cast frame that provides a stable basis on which this precision instrument can be assembled. It is this frame that assures that each E-V Deluxe speaker will forever maintain its high standard of performance by maintaining perfect alignment of all moving parts.

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