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What we learned from the public at the high fidelity shows

Before we unveiled the new synchronous Garrards at the New York and Los Angeles High Fidelity Shows, there were certain considerations in our own minds. One was whether people would grasp the special importance of synchronous speed in automatic turntables...the improvement it can make in performance. Then, we wondered whether even the knowledgeable men and women who come to high fidelity shows would understand the new Synchro-Lab Motor, which is not only synchronous, but has certain desirable features of the induction type, in addition. We also asked ourselves whether, in the big news about the motor, people might not overlook many other significant advancements incorporated in the new Synchro-Lab Series. We knew that the Garrard models represented a major forward step in automatic turntable performance. Would visitors to the shows realize it?

We are happy to report that they did. We found they were quick to appreciate the advantages of a synchronous turntable motor that delivers a guaranteed constant speed, regardless of changes in voltage, record load, stylus pressure or temperature. Many of them were surprised, and expressed their pleasure, at learning that the new motor is available not only in our top model, but in a complete range of prices.

And their questions showed that they understood the admittedly technical features of the Synchro-Lab Motor, with its two rotor sections that combine true synchronous speed with high torque, instant power and freedom from rumble.

What about the other new features? Some were apparent at a glance—the highly refined, ultra-low mass tonearm on the SL 95, for example, with its Afrotomosia wood inset, its gyroscopically gimbaled needle pivots for minimal friction, its new anti-skating control with patented sliding weight design, its calibrated stylus pressure gauge with precision 1/2 gram click settings.

Other features needed demonstration, which, we are pleased to say, drew favorable response from most. For instance, the new automatic spindle (based upon Garrard's traditional "pusher" principle) on the SL 95 and SL 75 which does what the inverted umbrella spindle was supposed to do, but does it better and far more safely. This new spindle works in combination with a record safety platform, and we showed how, for manual play, the platform disappears into the unit, leaving the turntable surface free and uncluttered, but ready to be released with the touch of a button. It holds the records absolutely steady and safe at two points, each record falling straight down on a micro-cushion of air. They liked the new highly simplified controls, and we learned that interest in cueing is still very high.

Incidentally, it seems worthwhile to mention that Garrard's cueing controls, on all its new models, can be used whether records are being played manually or automatically.

Were you at one of the Shows? If so, thank you for visiting us, and for your appreciation of the new units. For those who could not attend, we have the same 20-page full color Comparator Guide we gave visitors, illustrating the entire Garrard line from $37.50 to $129.50. For complimentary copy, write: Garrard, Dept. AA-5, Westbury, N.Y. 11590.
THE COUNTRY POINT OF VIEW

Regular followers of this journal of opinion will be aware of the running dialog we have been encouraging between our readers and contributors on the subject of music criticism. The most recent (and still continuing) skirmish, touched off by the tandem articles "Critics' Loves" and "Critics' Hates" in the September and October issues, resulted in a spate of letters that were, frankly, disappointing. The burdens of far too many of them were the old saws that dissenters have long fondly believed to be the ultimate in last words: "It's unfair to criticize," "Nobody ever erected a statue to a critic," and "Those who can, do; those who can't, criticize." Old saws though these sentiments (and others like them) may be, that does not make them any the less untrue. They spring from a fundamental misapprehension of the nature and purpose of criticism, which is, in composer-critic Virgil Thomson's words, "the only antidote we have to paid publicity." Central to all of them is the pernicious and altogether erroneous notion that criticism should be "objective"—presumably because art is.

We are pleased, in this issue, to offer such a window to our readers with an examination, in some depth, of country-and-western music. It is not a new notion that criticism should be "objective-presumably because art is. Professional critics, of course, are paid not to be silent, to speak of themselves as much as their courage and private sensibilities will permit. And since they are also paid to know what they are talking about, it has always seemed to me that we should listen to them as much as our own courage and private sensibilities will let us. This is not to say that we need always agree with them, but the challenge of another point of view, another set of prejudices, is useful in clarifying our own and, if we are fair-minded, permitting us to see—even if a little stubbornly—through someone else's window.

There is no such thing as objective criticism any more than there is objective art, and all who flatter themselves that they put aught but themselves into their work are dupes of the most fallacious illusion. . . . The best we can do, it seems to me, is gracefully to recognize this terrible situation and to admit that we speak of ourselves every time we have not the strength to be silent.

Professional critics, of course, are paid not to be silent, to speak of themselves as much as their courage and private sensibilities will permit. And since they are also paid to know what they are talking about, it has always seemed to me that we should listen to them as much as our own courage and private sensibilities will let us. This is not to say that we need always agree with them, but the challenge of another point of view, another set of prejudices, is useful in clarifying our own and, if we are fair-minded, permitting us to see—even if a little stubbornly—through someone else's window.
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Hi-Fi Hearing

- Robert Offergeld's grand defense of Ignace Jan Paderewski (October) was a wonderful birthday present (I was seventy October 4). My father took me to hear Paderewski in 1910, and I always made it my business to hear him whenever I could. I have almost all his records from his first in 1911 until the last, and I hear him every day!

The October HiFi/Stereo Review is one that I will keep! Thanks again for saying and writing what I would have liked to have said and written.

LOUIS J. COBEY
Nutley, N. J.

Paderewski

- I would like to supplement Robert Offergeld's statement in his article "The Forgotten Wars of Ignace Jan Paderewski" (October) that, "as late as the 1930's, . . . [Paderewski] was apt to include more big works on a single program than anyone else around." In April, 1931, I heard him play, at two-day intervals, three programs which included Beethoven's Sonatas Op. 22 No. 2, Op. 57, and Op. 111; Chopin's B Minor Sonata; Schumann's F-sharp Minor Sonata; and the Brahms Handel Variations; the Bach-Liszt A Minor and G Minor Preludes and Fugues; two Ballades, a Scherzo, and two of the larger Polonaises of Chopin; Liszt's thirteenth Hungarian Rhapsody and his Liebestod and Flying Dutchman Spinning Song transcription; the Wagner-Schellings Tristan Prelude and the Strauss-Tasig "One Lives but Once" paraphrases; and twenty-six other pieces by Chopin, Schubert, Brahms, Rubinstein, Rachmaninoff, Debussy, and others. Of these forty-five works, only five were repeated in this series of three concerts. Several of the more considerable pieces were tossed in as encores.

While the repertoire covered by Paderewski in his concerts was exceeded by that of some other pianists, it was (contrary to some of the stingy comments made about him) comparable to that of most of his noted contemporaries. It was indeed time for Mr. Offergeld's fine article on this great man and incomparable artist.

HARRY L. ANDERSON
San Diego, Cal.

(Continued on page 12)
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Music on TV

Stephen Andriaska
Maple Heights, Ohio

I wish to take William Anderson to task because, in his editorial entitled "Music on Television" in the November issue, he completely ignored the abundant source of actual television music—namely, the shows themselves. Such prominent Hollywood composers as Elmer Bernstein, Jerome Moross, Maurice Jarre, George Dunning, and Richard Rodgers have contributed music to such shows as The Great Adventure, River Boat, The Big Valley, Wagon Train, and Cinemation Strip. There seems to be a trend among music critics today to ignore motion-picture and television music, praising it with faint damns at best. Music is an intrinsic and indispensable part of motion-picture and television productions. Producers, directors, and critics learn that, the sooner such productions will improve. And the next time you go to the liquor store to buy some Olympia beer, it won't be the commercials that are about to buy some Olympia beer, it won't be the commercials but the inane puerilities of the shows Mr. Grosscup mentions in order to hear it. And I think it will be an even colder day for both of us when the music has any effect whatsoever on the tired pop-pap it is serenading.
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2-piece orchestra

FRITZ A. KUTTNER
New York, N.Y.

"Loves" and "latest" can hardly be anything but subjective and self-revelatory. We rejoice that one critic has the courage to be candid. As for Reger and Scriabin, is it not reasonable to believe that what little we hear of them today is the best of a bad lot,胜now withdrawn Rudolf Serkin-Alexander Schneider disc. And he has praised Bernstein's recording of Bach's Magnificat. To my taste the Bernstein Magnificat is hysterical—and heavy-handed as well—while the Serkin-Schneider Mozart D Minor is even more moving in its spontaneity than the later Serkin-Szell.

JOHN MARBERRY
Greeley, Col.

Mr. Bookspan replies: "Mr. Marberry has jumped to a false conclusion. My reference to an earlier Serkin recording of the Mozart D Minor was not to the now withdrawn Serkin-Schneider version but to the even earlier Serkin-Ormandy recording. I quite agree with Mr. Marberry that the Serkin-Schneider performance was a splendid one, but since it too is no longer available, I felt there was no point in discussing it."

After having followed your magazine for close to a year now, and dissecting Martin Bookspan's "Basic Repertoire" choices, I feel there is one glaring discrepancy in Mr. Bookspan's selection: to include two Gershwin works strikes me as entirely wrong. The "Basic Repertoire" supposedly comprises classical music only. If it did not, I would be writing a scathing letter demanding that Duke Ellington and Miles Davis be given preference over Gershwin. But seeing that the first premise holds, I must demand that other classical composers be given priority over the pop-symphonic jazz of Gershwin. Certainly, Mr. Bookspan doesn't consider... (Continued on page 16)
THESE 10 FACTS ADD UP TO 10 REASONS TO JOIN uniCLUB NOW!

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uniCLUB has all the labels. All of them. No exceptions. Choose any LP or tape on over 350 different labels. Capitol • Columbia • RCA • Angel • DGG • Folkways • Mercury • London — to name just a few. Your selection is absolutely unlimited. Every LP and tape available in the U.S.A.

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Random House • Doubleday • Little, Brown • McGraw-Hill • Simon & Schuster • MacMillan — to name just a few. uniCLUB furnishes every book except texts and "technical books at 25% discount. And, you get only original publishers' editions — not book-club editions. All paperbacks are available too at the same 25% discount. *Texts and technical books — 10% off.

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Send gift memberships at $2.50 each to names and addresses listed on attached sheet.

I am also interested in pre-recorded tapes.
Now... another new and very special JansZen* electrostatic speaker system!

Special, because buyers have asked JansZen dealers time and again for a specific combination of our electrostatic speakers and woofer, for the famous JansZen fidelity and for a show-off cabinet... all at an in-between price. Here it is... the one model that has been missing from the superb JansZen line!

THE Z-960
Oilied walnut cabinet
26¾"h x 27¾"w x 14½"d.
Only $294.95
(Suggested retail price)

If one of your big ambitions has been to step up to JansZen performance and quality and you've been hamstrung by a not-so-big budget, you can start stepping up now. The Z-960 has been custom-designed for you.

It features three of our superlative JansZen electrostatic speakers mated to our Model 350D dynamic woofer. Repeat: three electrostats! The Model 350D, of course, is the only dynamic woofer specifically designed to match the JansZen electrostatic and is hermetically sealed into a fiberglass-filled enclosure.

The Z-960 is a fully integrated system... the sole function of which is pure reproduction of the original sound from 30 to over 30,000 Hz. It is a rich extension of the acoustical authority of smaller JansZen systems and its definitive performance can hardly be differentiated from our costliest system. It holds its own in any size room and with the finest associated equipment money can buy.

Ask to hear the Z-960 at your dealer's. Its performance and price will speak for themselves. If you wish, write us direct for descriptive literature.

*JansZen speakers incorporate designs by Arthur A. Janszen and are made exclusively in the United States by

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CIRCLE NO. 40 ON READER SERVICE CARD

Gershwin a better composer than Hindemith, Vaughan Williams, or Schoenberg—or, for that matter, Liszt, Satie, Webern, Ives—the list is much longer. If we are to respect Mr. Bookspan's selections, let him adhere to basic truth and forget glazy entertainment values. Gershwin may have written some great songs, but the Concerto in F and An American in Paris cannot compare with Mathis der Maler or Vaughan Williams' Fifth Symphony.

RALPH I. VOERTH
Maple Shade, N. J.

Mr. Voerth misunderstands the fundamental concept of "The Basic Repertoire," as he says, that the choices are not predicated upon the ultimate value of works, but rather upon the frequency with which they are heard in concert halls and in recordings. Few musical scholars believe that Gershwin wrote "jazz" (neither did he), and many consider him a classical composer (see Edward Japhet's article in HIFI/Stereo Review, May, 1967).

Dangerously Curious

Mark me as one of the "dangerously curious" who find Stravinsky's youthful Symphony in E-flat thoroughly enjoyable—William Flanagan's review of the Columbia recording (September) notwithstanding.

One has the impression that the critic is so thoroughly disappointed that Stravinsky didn't write a Firebird at the age of twenty-five that he is unable to tolerate Stravinsky's early exercise, which contains for me very pleasant echoes of Balakirev, Glazounov, and Tchaikovsky (as well as Stravinsky, despite what Mr. Flanagan may think).

I would point out that Bartók's First Rhapsody, written when he was two years younger, demonstrates scarcely a hint of Bartók's later voice; it is decisively influenced by Liszt and Richard Strauss. Debussy's L'Enfant Prodigie, written when he was twenty-two, is mostly Massenet. The Bartók of Richard Strauss (twenty-one years old) is pseudo-Brahms. But that doesn't mean that we can't enjoy them. And when Flanagan makes statements like "mostly painful and boring" or "the tunes are alarmingly third-rate" of the Stravinsky symphony, I answer—baloney! Reminiscences of Tchaikovsky do not mean automatic inferiority. My wife has taught me a few occasions humming along with some of the symphony's "non-existent melodies." But perhaps my tastes are not as cultivated as the critic's.

BERNARD A. DUPOUT
Providence, R.I.

Mr. Flanagan replies: It seems to me that I have mentioned the influence of Strauss on the early Bartók so frequently in this magazine that it has become a trifle annoying. And I concede it humbly—if my constant reader hasn't no more evidence of Debussy's oncoming radicalism in L'Enfant Prodigie than he does of Stravinsky's in the Symphony in E-flat, then his training in musical analysis is either more or less sophisticated, his ear either far more or far less "cultivated" than mine.

In fact never even thought—much less written—that "reminiscences of Tchaikovsky" or any other composer, in themselves constitute 'automatic inferiority.' And while I did write, and believe, that the tunes in

(Continued on page 18)
POPULAR SCIENCE Magazine Says:

"The EICO Cortina Series are low-cost audio components that look and sound like high cost components."

HIRSCH-HOUCK LABS Says:

"We can't think of a better value in High Fidelity Amplifiers."

HIGH FIDELITY Magazine Says:

"EICO has come up with a real winner."

THE VERDICT IS IN.
High Fidelity authorities agree: Cortina's engineering excellence, 100% capability, and compact dramatic aesthetics all add up to TOTAL STEREO PERFORMANCE at lowest cost.

Take a lesson from your own personal shopping experience: Top Buys have a way of quickly becoming scarce. Be sure you get your Cortina. Get over to your local EICO dealer real soon.

**Cortina 3070** A full capability 70-watt All-Silicon Solid-State Stereo Amplifier for $89.95 kit, $129.95 wired, including cabinet.

Total Music Power: 70W into 4 ohms, 50W into 8 ohms. Harmonic Distortion: less than 0.8%. IM Distortion: less than 2% at full power.
Hum & Noise: 72db below rated output. Frequency Response: ±1.5db 5Hz to 100kHz; ±0.5db 8Hz to 60kHz. Channel Separation: 40db. Size (HWD): 3¼" x 12½" x 7¾".

**Cortina 3200** Solid-State Automatic FM Stereo Tuner for $89.95 kit, $129.95 wired, including cabinet.


**Cortina 3570** 70-Watt All Solid-State FM Stereo Receiver for $159.95 kit, $239.95 wired, including cabinet.

Same specifications as Cortina Tuner and Amplifier. Size (HWD): 4½" x 10" x 9¾".

SIMPLIFIED KIT ASSEMBLY — New EICO exclusive circuitry techniques make kit building easier, faster, more enjoyable. RF, IF and Multiplex circuitry of tuner and receiver are all supplied completely pre-assembled and pre-aligned. Each channel of the amplifier and receiver uses 3 etched printed-circuit module boards.
the perfect amplifier

One property of a perfect amplifier is its ability to reproduce musical tones of any pitch without changing their relative loudness, so that the sound of each musical instrument retains its identity. An amplifier with this capability would produce the straight line shown on the screen of the test instrument in the photograph below. The amplifier should be able to do this at the highest power levels needed for home music reproduction, without measurable distortion.

Both channels of this AR amplifier are simultaneously operating at just below clipping level, delivering more than 60 watts each to 4-ohm loads continuously. As the frequency of the input signal is gradually changed from 20 to 20,000 Hz, a bright spot moves across the calibrated screen of the test instrument. Any decrease in power output in this frequency range would have caused a downward deflection of the spot and a deviation from a straight-line trace on the screen. The small undulations at each end are produced by the test equipment.

Tests performed on every AR amplifier insure that harmonic distortion is less than 0.5% from 20 to 20,000 Hz at full power, and intermodulation less than 0.25% at full power, which is 60 watts per channel rms, 4 ohms; 50 watts per channel rms, 8 ohms; both channels running.
Only a few of the amplifiers available to the public are capable of the performance demonstrated on the opposite page, which satisfies the requirements of music, the limits of hearing, and the size and acoustics of homes and apartments. Until now, such amplifiers have cost $310 to $720, and have been massive and cumbersome even when made with transistors. Now, one is available at $225 which occupies less space than some preamplifiers alone: the new AR amplifier.

1. High-fidelity amplifiers should be compared on the basis of the realism with which they reproduce music for home listeners. Test equipment can also be used to compare amplifiers, taking known data on hearing and music into account. By either comparison method, we know of no amplifier which could provide more realistic sound for critical listeners.*

2. The AR amplifier is complete. Its control section includes everything needed for home listening and recording, with new types of tone and balance controls. A metal case comes with it, as do the accessories needed for custom mounting (an optional walnut case is available for $15).

The AR amplifier also comes with an unprecedented 2-year guarantee of its performance and workmanship, covering all parts, labor, reimbursement of freight charges to and from the factory or authorized service station, and new packaging, if required, also free of charge.

*Non-technical readers, as well as those with some knowledge of electronics, will find helpful information in AR's new guide to amplifiers, "You Don't Have To Be An Engineer". Full specifications of the AR amplifier (33 graphs) are also available. Both items are free on request.
NEW PRODUCTS
A ROUNDPUP OF THE LATEST HIGH-FIDELITY EQUIPMENT

- **3M Company** has introduced the Wollensak Model 3500, a two-speed (5½/7½ ips), dual-power mono portable tape recorder. The 3500 has a 3-inch reel capacity, an automatic recording level with manual override, separate volume and tone controls, and an electrically controlled speed change. The specifications at 3½ ips include a record/playback response of 100 to 8,000 Hz ± 3 db, and wow and flutter of less than 0.4 per cent. The Model 3500 measures 11⅞ x 10⅜ x 4 inches and is powered by six 1½-volt "D" cells or 120-volt a.c. line current. Weight is 8½ pounds. Price: $89.95.

Circle 173 on reader service card

- **Lafayette** has introduced the Criterion IV, a high-fidelity solid-state FM radio. The radio has a 5-inch full-range, high-compliance speaker with a massive magnet assembly mounted in a completely sealed, damped enclosure utilizing the acoustic-suspension principle. The radio has a built-in FM antenna system (plus external antenna terminals), an input for a tape recorder or record player with a ceramic or crystal cartridge, a tape-output jack, and a jack for connection of an external 8-ohm speaker. The audio section has a 6-watt music-power rating (at 8 ohms), and the tuner section has an IHF sensitivity of 2.5 microvolts. Front-panel controls are: tuning, volume, bass, treble, input-selector switch, and main-remote speaker-selector switch. The oiled-walnut cabinet measures 11⅞ x 9 x 8⅜ inches. Price: $69.95.

Circle 174 on reader service card

- **Shure** has expanded its series of Unisphere "ball-type" microphones to include three new models with special problem-solving design features. Included in the series is the Model 585-SAV Unisphere A (shown) which has a gain control mounted on the microphone case. This control enables the user of the microphone to change the loudness of the public-address system to which the microphone is connected. It gives a speaker or singer, for example, the ability to control his own voice volume for dramatic effects. It is ideal for use when the amplifier is inaccessible or out of easy reach.

The second new Unisphere is the Model 565S, which has the added advantage of an on-off switch included as part of the swivel connector assembly. The third new unit is the Model 566, which offers special shock mounting to prevent pickup of mechanical vibrations and handling noise. It also has a Cannon-type connector and a combination impedance-changing (30 or 150 ohms) and on-off switch.

Like all Unisphere microphones, these new models are designed to minimize feedback as well as provide effective control of explosive breath sounds and wind noise. All are unidirectional dynamic microphones with uniform cardiod pickup patterns and a frequency response of 50 to 15,000 Hz. Price of the Model 566 is $84, the Model 565SS is $60, and the Model 585SAV is $43.50.

Circle 175 on reader service card

- **University**'s first electronic component is the Studio Pro 120 stereo-FM receiver. Among the receiver's features are the use of front-panel rocker switches for selection of loudness compensation, selection of either of two pairs of stereo speakers, tape monitoring, high- and low-frequency filters, and so forth. The unit has automatic stereo FM switching, interstation-noise muting, an illuminated tuning meter, and tape-head inputs. Specifications include a music power of 60 watts per channel at 4 ohms and 0.8 per cent distortion. The continuous power output rating is 30 watts per channel at 0.3 per cent distortion. Frequency response is 10 to 100,000 Hz within 3 db. Hum and noise at the magnetic phono input is less than 0.5 per cent. The individual bass and treble controls for each channel have a range of ± 18 db at 20 and 20,000 Hz, respectively. The FM sensitivity is 2.5 microvolts (IHF), distortion is less than 0.3 per cent at 100 per cent modulation, capture ratio is better than 1 db, and stereo separation is 40 db at 1 kHz. Dimensions are 4⅝ x 12 x 10⅝ inches. Price: $379.50.

Circle 176 on reader service card

- **Crown-Corder**'s new automatic telephone-answering accessory, the Telephone Valet Model CTA4000, is designed to operate either independently or in conjunction with an external transistor tape recorder. This unit automatically answers the telephone, relays a 30-second previously recorded message (from its built-in recorder), and then feeds a 30-second caller's message into an external tape recorder. When the caller finishes, the telephone Valet automatically hangs up the phone.

The number of incoming calls recorded is limited only by the tape-reel size and speed of the recorder used. When used with a 3⅛-inch reel recorder, up to one hundred and twenty messages may be recorded. A cassette recorder, using a 4-90 cartridge, will record forty-five calls on each side of the tape. Power consumption when on standby is 4 watts. This unit may also be used without an external tape recorder simply to answer the telephone with prerecorded information messages. Connection to the telephone requires no wiring and takes less than 10 minutes. The (Continued on page 26)
If you're still listening to 1963 stereo,

update with Scott

(THERE'S A SOUND REASON)

How long have you had your present amplifier or tuner...five years? Maybe eight or ten? A lot has happened since you bought it...new developments like Field Effect Transistors, Integrated Circuitry, direct coupled all-silicon output. And the performance you are getting just isn't the performance you could be getting. Don't miss out...check out these two new Scott advanced components:

Scott 260B 120-Watt Stereo Amplifier — This solid-state powerhouse includes a tone-control by-pass switch for laboratory-flat response, plus dual microphone inputs and headphone jack conveniently mounted on the front panel. Professional control complement includes dual speaker selector switches, rumble and noise filter controls, loudness compensation, and tape monitoring facilities. This is truly the audiophile's dream amplifier!

260B Specifications: Music power rating at 0.8% harmonic distortion, 120 W @ 4 ohms, 100 W @ 8 ohms; Frequency response, 15-30 kHz ± 1 dB; Power bandwidth, 20-20 kHz; Hum and noise, −55 dB; Price $294.95.

Scott 312D FM Stereo Broadcast Monitor Tuner — 3-Field Effect Transistor front end and Integrated Circuit IF bring the 312D's performance close to the theoretical limits of sensitivity, selectivity, and interference rejection. 3-way meter provides for signal strength, center tuning, and multipath correction. Levels of both phone and amplifier outputs may be independently varied by special front panel controls.

312D Specifications: Usable sensitivity, 1.7 μV; Capture ratio, 1.9 dB; Cross modulation rejection, 90 dB; Stereo separation, 40 dB; Selectivity, 46 dB; Signal/noise ratio, 65 dB; Price $319.95.

Write for complete information and specifications on Scott stereo components.

Scott...where innovation is a tradition

© 1967, H.H. Scott, Inc.
A ROUNDUP OF THE LATEST HIGH-FIDELITY EQUIPMENT

NEW PRODUCTS

unit has a walnut-grain finish and its dimensions are approximately 2 x 8 1/4 x 10 1/2 inches. Price: $99.95.

Circle 177 on reader service card

**Bogen** is producing a mixer-preamplifier, the MX6A-T, that greatly extends the performance capability of public-address systems and tape recorders. The MX6A-T is an a.c.-powered solid-state unit that can be used to add four more microphones or other signal sources to an existing system. Up to three MX6A-T units may also be paralleled to provide twelve individual inputs. Each of the four inputs has an individual volume control and can handle either high- or low-impedance microphones or electric guitars. In addition, two of the four channels will accept high-level sources such as an FM tuner or a crystal-cartridge phonograph. The output signal of the MX6A-T is fully capable of driving any integrated amplifier or separate power amplifier. The MX6A-T uses standard phone jacks for high-impedance microphones and guitars, screw terminals for low-impedance microphones and RCA-type phone jacks for output to the auxiliary input of a public-address amplifier or tape recorder. List price: $74.85.

Circle 178 on reader service card

**RCA** has announced the introduction of a new low-cost eight-track stereo cartridge tape player for the home. The JIC-26 Mark 8 player, a compact unit with built-in playback preamplifiers, plugs into the tape-input or auxiliary jacks of stereo consoles, receivers, and amplifiers. The unit plays the Stereo 8 tape cartridges that offer up to eighty minutes of playing time. Available in a walnut-finished wood cabinet, the MJC-26's dimensions are 3 5/8 inches high, 6 3/4 inches wide, and 9 3/4 inches deep. The unit operates on standard a.c.-line voltage. Price: $69.95.

Circle 182 on reader service card

**Muntz Stereo-Pak** is producing the M-45, a fully automatic four-track stereo-cartridge playback unit. The M-45 model has controls for volume, tone, reject, track selection, and channel separation. Power output is 6 watts per channel, frequency response is 50 to 12,000 Hz, and the unit operates on 12 volts d.c. The M-45 measures 7 inches wide, 3 inches high, 7 inches deep, and weighs 3 1/2 pounds. Price: $59.95.

Circle 183 on reader service card

**Altec Lansing** has published a twenty-one-page illustrated brochure (AL1568) covering the 1968 Altec Lansing line of high-fidelity components and speaker systems. Among the additions made to the Altec line are a variety of high-style furniture equipment cabinets and speaker systems. The units are fully described, and technical specifications are given.

Circle 184 on reader service card

**Allied** has announced the introduction of its Model 399 solid-state AM/FM stereo receiver. The 122-watt unit uses nuvistors in the FM front-end tuning sections and double-tuned i.f. transformers. Other features include inter-station-noise muting on FM, separate clutch-type bass and treble controls for each channel, scratch and rumble filters, a speaker-off switch for use with a front-panel stereo headphone jack, a tape-monitor switch, and tape-head inputs with separate equalization for 7 1/2- and 3 3/4 ips tapes. The FM-tuner section of the 399 has a 1.5-microvolt sensitivity (IHF), automatic stereo switching, stereo separation better than 35 db, and a signal-to-noise ratio of 65 db. The AM section has a 5-microvolt sensitivity. The amplifier stages are capable of delivering 43 watts per channel (continuous) into 4-ohm loads at 0.3 per cent distortion. Harmonic distortion at 1-watt output is 0.13 per cent; IM distortion is 0.7 per cent. Hum and noise at the high-level inputs are —80 db; at the low-level inputs (magnetic-phono and tape-head), —65 db. The Model 399 measures 5 x 12 x 16 inches and comes in a metal case. Price: $299.50. The optional walnut case shown is $19.95.

Circle 185 on reader service card

**JansZen**'s new Z-960 console loudspeaker system employs three JansZen electrostatic radiators matched within 1 db for treble reproduction. Low frequencies in the Z-960 are handled by the Model 350D cone woofer, designed specifically to be the low-frequency counterpart of the JansZen electrostatic in terms of minimum distortion and good transient response. The heavily weighted, high-compliance cone of the woofer is capable of 3 1/2-inch excursions without breakup or frequency doubling. The woofer is in a sealed fiber-glass-filled enclosure and, together with the three JansZen electrostatic radiators, provides a linear frequency response from 30 to beyond 30,000 Hz. Amplifier power required is 20 watts or higher. The oiled-walnut cabinet of the Z-960 measures 26 1/2 inches high, 27 1/2 inches wide, and 14 1/2 inches deep, and is meant to be floor-standing. Price: $299.95.

Circle 186 on reader service card

**Altec Lansing** has recently announced the introduction of a new line of high-fidelity components and speaker systems known as the "Altec Lansing" series. The line includes a variety of high-style furniture equipment cabinets and speaker systems. The units are fully described, and technical specifications are given.

Circle 184 on reader service card

HIFI/STEREO REVIEW
A wise investment in stereo equipment will open up a whole new way of life for you. An ever-changing background of symphonies, operas, band concerts...recreated in three-dimensional stereo...makes a home more than just a collection of furniture. And even if you have less than $300 to spend, you don't have to settle for less than the best in stereo...Scott.

The Scott 342B 65-watt stereo receiver offers you razor-sharp reception and luxury features that competitive receivers can't match. Stereo broadcasts turn the 342B on to stereo automatically...you don't have to leave your chair. You can listen to speakers in one or several rooms of your home, or turn all speakers off and listen in privacy through stereo earphones. Professional controls let you vary the music to your own tastes and room acoustics...you can even set Bass, Treble, and Volume individually for each channel! Technically speaking, the 342B has Integrated Circuit IF, Field Effect Transistor front end, and all-silicon direct coupled output, just like Scott receivers costing hundreds of dollars more.

For a few dollars more, you can enjoy a new insight on AM programming. Scott's 382B is the 65-Watt AM/FM counterpart of the 342B. Both of these best-selling Scott receivers offer you top performance value at the lowest possible price.

Life begins at your Scott dealer's showroom.

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**Price:** (342B) $299.95, (382B) $339.95.
Stereo Separation Specification

Q. I have noticed that in the specifications of many stereo amplifiers and amplifier sections of stereo receivers there is a specification for "separation." If a stereo amplifier is, in effect, made up of two separate mono amplifiers, how can there be varying degrees of stereo separation?

KENNY SAX
Clifton, N.J.

A. Loss of separation in an amplifier occurs when the signal going through one channel impinges on the signal going through the other channel. Separation is tested by feeding an audio test tone to one channel and measuring how much of the test tone appears in the other channel. The test-tone signal level in channel A, for example, would be referred to as 0 dB and the signal measured in the other channel would be so many dB less than 0 dB—a minus figure such as −50, −60, etc.

Loss of separation in an amplifier comes about because of undesired coupling between the channels. This coupling is almost always capacitive and results when wires or components such as resistors or capacitors are in close proximity to each other. A minute capacitance is set up between the parts that "leaks" the signal into the opposite channel. In effect, very small coupling capacitors are connected between all components in the chassis and between all components and the metal chassis itself. How important this "distributed" capacitance is, in terms of amplifier performance, is determined both by the impedances of the stages or circuits involved and the level and frequency of the signals going through them. A high-frequency, high-level signal in a high-impedance circuit stands the best chance of producing unwanted coupling to an adjacent circuit. In any case, unless the design of an amplifier is really poor, its stereo separation should far exceed that which is available on tapes and discs.

Incidentally, loss of stereo separation in FM tuners and phono cartridges occurs for entirely different reasons, and no parallels can be drawn between the three types of components.

Tape Twitter

Q. When my tape recorder is in the fast-forward mode or rewinding a tape, I hear through my speakers a rapid high-pitched twittering that is clearly the recorded "message" on the tape. The sound is faint but quite audible. Does this mean that my tape recorder's heads are misaligned or that the tape is rubbing across—and wearing down—the heads?

FRANK RIVERA
San Juan, Puerto Rico

A. First of all, the sound you are hearing has nothing to do with alignment. Your second guess may be more accurate, but almost all recent recorders have some provision for preventing tape-to-head contact when the recorder is in a fast-forward or rewind mode. The twittering may result simply from the proximity of the tape's rapidly shifting magnetic field to the playback-head gap without there being any actual physical contact between the tape and head. With the machine set to rewind, but switched off, tighten the tape by hand over the guides and check to see if there is any tape-to-head contact. If there is any clearance at all, then you have nothing to worry about.

Tuning Bass-Reflex Cabinets

Several years ago, while browsing through an acoustical engineering book, I came across some formulas for designing ducted-port bass-reflex speaker enclosures. I have designed and constructed several different enclosures using the formulas and obtained very satisfactory results. Please comment on the application and validity of the formulas.

TERRY K. SCHANDEL
Oregon City, Ore.

A. The difficulty with cabinet-tuning formulas—which applied to ducted ports, tubes, or simple square cutouts—is that many designers seem to think that all that has to be known about the speaker mechanism is its free-air resonant frequency (the resonance of the speaker-cone assembly before the speaker is installed in a cabinet). The numbers related to the free-air resonant frequency, plus the enclosure's internal cubic volume, are inserted into the particular formula. The dimensions of the tuning port can then be derived. I must admit that until I became involved in designing the large bass-reflex cabinet that appeared in the August, 1964 issue of HiFi/Stereo Review, this was my impression also. But in attempting to determine how many ½-inch tubes
Several interesting facts about the design of the new Dual 1015: after you read them, you may wonder why other automatic turntables aren't made this way.

You've probably noticed that many of the new automatic turntables, in several price ranges, offer features like anti-skating, cueing, special motors of one kind or another, plus some pretty fancy designs for overall appearance.

But our features are different because we don't offer them just for the sake of offering them. They are there to perform a real function. With precision and accuracy.

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Its there because, quite simply, our low-mass tonearm skates. That isn't something to be ashamed of. It indicates bearing friction so low (less than 40 milligrams) that there's no internal resistance to skating. Even at 1/2-gram. And that's not all.

Our anti-skating control is continuously variable and dead-accurate. It doesn't under-compensate or over-compensate. This means the stylus will track with equal force on both walls of the stereo groove.

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The purpose of cueing is to lower or lift a stylus at a predetermined spot on a record. Accurately and gently. If it does neither, or just one of these things, it's not cueing.

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**Wearing Diamonds**

Q. Assuming that the diamond is the hardest substance known to man and that vinyl is not, why does a diamond phonograph stylus ever wear out?

JARED HOKE
West Hartford, Conn.

A. The "hardest substance known to man" is not an infinitely hard substance; hence, why should it not be worn down by traveling over literally miles of groove walls? Under those conditions, for any substance not to be worn down, it would have to be infinitely hard—or the groove walls would have to be frictionless. Also, the many abrasive particles that find their way into the grooves act as a "grinding compound" that tends to wear the diamond more than the elastic, deformable vinyl.

Because the number of questions we receive each month is greater than we can reply to individually, only those questions selected for this column can be answered. Sorry!
We believe that the Nocturne Five-Thirty delivers a degree of excellence never before attainable at such a modest price. That's what we said when we introduced the Five-Thirty stereo receiver.

We said other things too. Like it's the best receiver we have ever made. And that its sound will please the most critical ear; its styling the most critical eye.

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The AM section of the Five-Thirty employs a MOSFET front-end and separate AM board with its own I.F. strip. The result is a radically new sound in AM—an AM radio that serious music listeners can take seriously.

If AM radio isn't your cup of tea, we make an FM/FM stereo receiver called the Five-Twenty. It's identical to the Five-Thirty in every way, minus the AM section.

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HIFI/STEREO REVIEW

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Audio Basics
by HANS H. FANTEL

SPECIFICATIONS XVII: TRANSIENT DISTORTION

HAVING dwelled at length last year on the subject of distortion, I now
propose to start the new year and end the old topic with a bang. In
acoustic parlance, a “bang” is a *transient*, and its meaning is the same as it is
in the hotel trade—something that comes and goes quickly. Transients are
sounds bursting forth suddenly at high loudness levels and breaking off just
as fast.

Music is full of transients, such as the crash of the stick on the drumhead,
the clangorous moment of contact between a pair of cymbals, or the hard
impact of piano hammers against the strings where the score says *fortissis-
simo*. Yet, in the sum total of orchestral sound, these dramatic collisions,
however spectacular, are less pervasive than their subtler relatives—the
plucking of strings or the tiny explosions of compressed air produced by the
tongue against the reeds of woodwinds. These, too, are transient sounds,
lasting in their critical phase only a small fraction of a second. In the orchest-
ral aggregate, these unobtrusive transients contribute vitally to the texture
of sound.

The trouble is that transients are difficult for amplifiers and speakers to
reproduce. They fall victim to *transient distortion*, a deplorable process that
can turn a sharp, hard click or snap into a fuzzy “thunk.” The reason is that
electronic circuits and speaker cones are afflicted with inertia. They have
trouble starting—or stopping—swiftly enough to reproduce the transient’s
wave shape accurately.

When the sudden bang comes along, it causes a fast-rising electric pulse.
Engineers, describing the visual pattern presented by such a pulse on the
oscilloscope, say that it has a steep wavefront or a fast rise time. This means
that the amplifier (or speaker) must jump to the signal’s peak correspond-
ingly with virtually no inertial delay. And when the bang is gone, the ampli-
fier must go back into neutral as promptly as it left.

Only very good components can do this. Others tend to round off the
steep wavefronts and/or persist in jiggling away in spurious oscillation long
after the transient signal has ceased. The ear perceives such transient dis-
tortion as a sonic pall cast over the whole texture of the sound, clouding the
musical detail. The sound gets soggy, and its washed-out quality drains the
music of its tension and excitement.

Unfortunately, there is no altogether satisfactory way of measuring tran-
sient distortion. Some manufacturers specify the “rise time” of their ampli-
fiers—that is, the amount of time it takes to reach a specified output level.
Measured in microseconds (millions of a second), this is a pretty good
index to the amplifier’s reaction speed, and it correlates with the amplifier’s
frequency-response range. Sometimes specifications will show scope traces of
an amplifier’s (or phono cartridge’s) reproduction of square-wave patterns.
Similar patterns (tone bursts) are sometimes shown to characterize the tran-
sient response of loudspeakers.

Such square waves and tone bursts, like all test tones, are simplifications of
the more complex waveforms generated by musical instruments. Consequently,
these tests provide only presumptive evidence of an amplifier’s transient
characteristics. In my opinion, the human ear, listening for sharpness of
tonal definition and clarity of texture, still remains the most reliable test
instrument for transient distortion.
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STEREO-MONO REVISITED: I have received the following very interesting communication in response to my recent column dealing with stereo-disc reproduction. Its author, Dr. Duane Cooper of the University of Illinois' Coordinated Science Laboratory, is one of the leading investigators in the area of disc reproduction problems, and his comments deserve to be brought to the attention of the readers of this column.

In his Technical Talk column for October, 1967, Julian Hirsch discussed the technical quality of stereo vs. mono discs and explained the advisability of replacing the mono cartridge with a modern stereo one for the playing of mono discs. Mr. Hirsch and I agree on the cartridge question, but we differ on the inherent quality of the stereo disc. It seems to me that in an all-other-things-equal comparison, the technical facts indicate that the mono disc offers less distortion.

Of the four major distortion mechanisms (tracking-failure error, vertical tracking-angle error, tracing error, and groove-deformation error) that record playing is heir to, Mr. Hirsch nominates only one as inherently worse for stereo. That one, “pinch effect,” is but one aspect of tracing error. Mr. Hirsch also casts doubt on the reality of the effect for stereo reproduction. Actually, all four phenomena degrade stereo-disc playback far more than mono, but Mr. Hirsch could be allowed to dispose of tracking-failure error by the use of adequate tracking force, and tracking-angle error by standardization (15 degrees) of the vertical tracking angle. However, there still remain the latter two problems, and they are not nearly so easily taken care of.

Though still present, tracing error and groove-deformation error are of lesser consequence for mono, because the push-pull symmetrical “movement” of the mono groove walls cancels a large part of the distortion effects in the lateral direction. They are left largely uncancelled in the vertical direction—to which motion the mono-mode connection renders the pickup insensitive. (For an eerie experience, try listening to distortion in the near-absence of program simply by mis-phasing the mono-mode connection for playback of a mono record.) However, tracing and deformation errors are serious for the stereo record because each of the two groove walls carries its own signal, and hence the stylus is not moved in a systematic push-pull fashion. This means that there is no systematic error cancellation in any direction—which accounts for Mr. Hirsch’s inability to discover any improvement in the performance of a stereo disc upon switching to the mono mode.

As a demonstration of the sonic difficulties encountered by a record attempting to produce a low-distortion signal from each groove wall separately, the reader can play the following “dirty trick” on one of his high-quality, but loud, mono records: listen in the stereo mode with but one of the channels operating. The owner of a mono system can do this too if he has a stereo cartridge. Compare the sound with that of the same record played in the mono mode. The observed difference in quality is exactly the all-other-things-equal quality difference between mono and stereo recordings.

Reliable distortion measurements have been reported on in the professional literature. For example, at a moderate recording level near 3 centimeters per second, figures ranging from some 10 to 50 per cent have been measured for the distortion generated by combined tracing and deformation error in normal stereo discs. The amount depends upon the distance of the groove from the record center, upon the recording level, and (because of the deformation factor) upon tracking force. The measurement was of the 500-Hz intermodulation beat tone generated from a test disc with recorded tones at 4,000 and 4,500 Hz.

Though it is one of the few valid ways of measuring record distortion, this beat-tone IM test is not widely used in other applications. Of course, these record-distortion mechanisms do produce harmonic distortion, but only rather weakly (contrary to Mr. Hirsch’s categorizing pinch as largely second-harmonic in nature), and in such a manner that the effects of tracing and deformation error tend partly to cancel one another. In beat-tone IM testing, however, the distortions seem to augment one another. With the conventional IM test discs, such as used by Mr. Hirsch, the spurious tones largely cancel one another when the distortion reading depends on the distortion analyzer’s detecting only amplitude modulation. Record distortion is radically different from, say, amplifier distortion, and for records, the usual distortion measurements are largely meaningless except for detecting tracking failure. Of the old test standbys, only the little-used beat-tone IM seems to have retained its value.

I am sure Mr. Hirsch would agree that those measured 10 to 50 per cent distortion figures are wildly in excess of any that could be considered reasonable for a high-fidelity amplifier. The question might be whether we should revise our distortion standards generally, or whether we could agree that there might be something peculiar to record distortion that makes it more tolerable. There seems to be little question about the audibility of the distortion, in principle. Audibility in this case is determined by the phenomenon of auditory masking, in which low-frequency tones impair the audibility of high-frequency ones, especially those
high-frequency tones near the harmonics of the low-frequency ones. Beat-tone IM should therefore be as audible as harmonic distortion or conventional IM, if not more so, and the standards for it should be at least as critical.

Tolerance of distortion is a different question. It appears to be a learned accommodation in which the ear is "brain-washed" into dismissing persistent, or possibly gradually increasing, distortion. Distortion that changes abruptly (as in an A/B test) or that increases suddenly with an increase in signal (as in an amplifier near overload or in record tracking failure) is the more acutely noted, though still sometimes tolerated. It happens, however, that tracing and deformation error do increase gradually and in proportion to the signal level, so that there could be a stealthily induced, tolerance-producing brainwashing. I have even noticed something of the sort in myself. I took a vacation during which I was isolated from TV, radio, and hi-fi for several weeks, but did get to some concerts. Upon returning home, my stereo system sounded incredibly bad, but no fault could be found. In a day or so it sounded as usual. If tolerance is an answer, it is a pretty unreliable one upon which to pin one's hopes.

The only real answer is to cure the distortion. Tracing and groove-deformation errors appear to be of roughly equal significance in today's art, and are stubbornly resistant to simple solutions. In the past ten years, however, deformation has been reduced through reductions in the mechanical impedance of the phono-cartridge stylus assembly. Efforts at reducing tracing error by switching to the elliptical stylus have been less successful, because the improvement is nearly overpowered by the greater groove-deformation potential of the elliptical. The residual uncanceled distortion on the mono disc is the more sensitive to any improvement, so that the value of the elliptical—what there is of it—is the more often noted on mono discs.

The only cure that is capable of removing tracing error altogether seems also to offer, through gentling the transient groove-wall shock, substantial reductions in deformation error at the same time. I refer to specially designed waveform-shaping machinery, such as RCA's tracing correlator and Telefunken's tracing simulator. So remarkable is this unplanned side benefit that the performance with wrong-sized playback styli, such as the elliptical, seems also to be greatly improved. The improvement may be largely expended, as seems to be the choice of RCA Victor, in making possible higher recording levels, so that substantial gains may be made against surface noise, while still obtaining some reduction in distortion. The other choice, which seems to be Telefunken's, is to maintain a roughly unchanged position relative to noise, but to try to bring the distortion down as much as the tape masters will permit.

While these efforts provide some grounds for optimism, it is still the case that the other recording companies have no evident plans to follow the anti-distortion lead of RCA and Telefunken. Since the distortion situation is not satisfactory, and since the mono record is the one offering the lower distortion, the cynic will not be surprised to learn that among these other companies there may be numbered the world's leaders in the movement to abandon the manufacture of mono records. The lover of mono records, prizing their clarity above the blandishments of the stereo illusion, could have hoped for better. D. H. C.

Mr. Hirsch replies:

I will concede at the outset that my knowledge of phono-cartridge tracking problems is quite superficial when compared with Dr. Cooper's. However, certain portions of his communication require comment.

In reference to the "dirty trick" Dr. Cooper describes in his fourth paragraph: I tried this on many records of every caliber of quality, with the best equipment I could muster. At no point could I hear the slightest difference between stereo and mono connections, other than a slight reduction of rumble in the mono mode. If the difference referred to by Dr. Cooper really exists, it must be of exceedingly small magnitude—at least in relation to the other distortions of the recording/reproducing process.

In the following paragraph, he writes of the distortion measurements reported on in the professional literature. Surely this can't be the same kind of distortion we are used to hearing from amplifiers, tuners, and speakers! Most of us find distortion levels of a few per cent intolerable in these portions of our systems. I can't see how anyone could listen to records if distortions in the tens of per cents were present at ordinary levels. Could it be that the numerical scale of offensiveness is radically different in record distortion compared with amplifier distortion? Otherwise, how is it that we can hear one or two per cent of amplifier distortion in the presence of 50 per cent record distortion? This reminds me of the "Doppler-distortion" problem in loudspeakers.

It is analytically provable, measurable in the laboratory, and yet, as far as I know, it cannot be heard except in the most artificially extreme case (when it approaches 50 to 100 per cent). It seems to me that to speak of 50 per cent (or even 10 per cent) IM distortion in records is misleading if it is not stated that this amount may be equal in auditory offensiveness to, say, 0.5 per cent of "ordinary" or amplifier distortion. These numbers are for example only—I have no idea what the actual relationship may be.

I agree about the matter of tolerance for distortion in sound. However, I think that there is a great difference between the acceptance of the nearly 100 per cent distortion from a transistor radio by a teenager and the "nit-picking" criticism of many audio enthusiasts. I don't believe that I could ever develop a tolerance for most types of distortion, yet I am aware that I can accept "less-than-perfect" sound under a variety of conditions and enjoy it, while remaining fully aware of its deficiencies.

Regardless of the theoretical and practical evidence of the advantages of the pre-distortion disc-recording technique, many listeners consider that the commercial discs so produced reaching the market are frequently sonically inferior to other conventionally made records. I would rather not get into a record-criticism session, but to me it is obvious that other factors in making and playing records far outweigh the matters dealt with by Dr. Cooper.

J. D. H.
The highly-rated Sherwood S-8800 now features Field Effect Transistors (FET's) in the RF and Mixer stages to prevent multiple responses when used with strong FM signals.

Among the Model S-8800's many useful features are two front-panel switches for independent or simultaneous operation of main and remote stereo speaker systems.

Visit your Sherwood dealer now for a demonstration of those features which make Sherwood's new Model S-8800-FET receiver so outstanding.

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DYNACO PAT-4 STEREO PREAMPLIFIER KIT

- Having achieved an extremely high level of performance with vacuum-tube circuits, Dynaco engineers were understandably cautious about leaping into the solid-state arena. As we see it, they felt that any new solid-state component must offer a tangible advantage over its vacuum-tube counterpart. We have seen this philosophy embodied successfully in their Stereo 120 power amplifier (HiFi/Stereo Review, June 1967). Now, the popular PAS-3X preamplifier has a potential successor in the new PAT-4 transistorized stereo preamplifier.

The PAT-4, which presently coexists with the PAS-3X, has many features in common with it, plus some interesting refinements. Like the PAS-3X, it is simple. Only four transistors are used in each channel, corresponding in function to the two dual-triode tubes of the PAS-3X. One pair serves as a feedback-equalized low-level preamplifier for magnetic phono cartridge, tape head, or microphone. The first two functions are equalized for the RIAA and NAB (7½-ips) playback curves, respectively, and the last is normally flat (but can easily be converted to another magnetic-phono or other high-gain equalized input).

The second pair of transistors provides some gain, plus tone control and frequency-filter functions. The feedback-type tone controls are similar to those in the PAS-3X, with a definite "flat" response at their center settings. In addition, the tone controls, when centered, are removed completely from the circuit, without the necessity for added switching.

Each channel has its own bass and treble tone control, mounted concentrically with the corresponding control for the other channel. The four-position high-frequency filter is one of the best we have seen, with 18-db-per-octave slopes and nominal cut-off frequencies of 7,000, 10,000, and 15,000 Hz, plus an Off or flat setting. This is one filter that really works, cleaning up distortion and hiss with minimum effect on the program content.

Aside from the six-position input selector, volume, balance, and tone controls, and high-filter switch, the Dynaco PAT-4 has six rocker-type switches. One controls A.c. power (there are two switched and two unscheduled a.c. convenience outlets in the rear of the unit) and is illuminated when turned on. Another rocker switches in a low-frequency filter, and a third adds loudness compensation at low volume-control settings. A pair of switches is used for mono/stereo mode selection. With both down, normal stereo operation is obtained. Pressing the top of either the A or the B switch connects the signal from that channel through both outputs. Pressing both switches up (Mono) provides a partially blended (quasi-mono) signal with about 6-db separation between the outputs. (This setup is suggested for use with Dyna's derived center-channel setup, for reducing the excessive separation of stereo earphones, and for all other times when a mono signal is desired.) The last switch is for tape monitoring. Unlike any other preamplifier we have seen, the PAT-4 has a spring-return switch for this function. The assumption is that one will only wish to monitor from the tape as a brief check on recording conditions. (A standard switch available from Dyna may be substituted if desired.) For normal tape playback, the tape position of the input selector is used.

A front-panel input jack (for a regular three-contact stereo phone plug) overrides the input selector and disconnects all other signal sources when a signal source is plugged into it. This is a high-level input, but we found that a high-impedance dynamic microphone or electric guitar worked well through it.

The front-panel output jack is intended for stereo headphones of 600-ohm or higher impedance. It is in parallel with one pair of the two output jacks in the rear of the PAT-4. The second pair of outputs is switched off when phones are plugged into the front-panel jack. Another obvious use of the front-panel input and output jacks is to connect to an external tape recorder when the rear of the PAT-4 is inaccessible.

In addition to the normal inputs and outputs in the rear, the Dynaco PAT-4 has three sets of phono inputs. The LO magnetic-cartridge inputs can handle up to about 80 millivolts before overloading. The HI inputs are designed to accommodate cartridges with unusually high outputs—up to 700 millivolts—if and when they become available. (A simple modification of the circuit boards will be necessary for use of the HI inputs.) The BER inputs are for ceramic cartridges, converting their outputs to a velocity basis and reducing the level to that of a magnetic cartridge. The construction manual for the kit is up to Dyna's usual high standard and construction time runs about 7 or 8 hours.

In our laboratory tests, we loaded the PAT-4 outputs with about 100,000 ohms, simulating the input impedance of many transistor power amplifiers. Harmonic distortion was less than the residual distortion of our test instruments (0.06 per cent) up to 5 volts output. It rose to 0.1 per cent at 7 volts and 0.25 per cent at 10 volts. Clipping occurred at about 11 volts. Since no power amplifier requires more than a couple of volts to develop its full output, one may reasonably describe the Dynaco PAT-4 as essentially distortionless.

The PAT-4 has a truly flat frequency response with its tone controls centered. Our General Radio response-curve plotter drew a straight line, ±0.25 db, from 20 to 20,000 Hz when measuring the PAT-4. We commented earlier on the excellent high-frequency filter characteristics of the PAT-4; the low-frequency filter had a more gradual slope of 6 db per octave beginning at about 150 Hz. The loudness compensation affects only the frequencies below about 1,000 Hz and is sufficiently moderate that it does not impart any "boom" or tubby quality to the program.

The LO-input phono equalization was within +2, −0.5 (Continued on page 42)
We made the Fisher 110 as good as we knew how.

But what it will sound like is up to you.

The Fisher 110 is a 35-watt AM-FM stereo receiver with built-in automatic turntable. It comes to you without speakers because we know that the selection of speakers is a matter of personal taste. We know that by leaving it up to you, you'll choose the speakers that will make the 110 sound best.

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The 110 has an amplifier section with a power bandwidth from 30 to 20,000 Hz. Harmonic distortion is under 0.8%. The turntable is a BSR and it has a low-mass magnetic cartridge. With these specifications it has to be good.

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If you ask us our opinion; we'll recommend the S-10 speaker systems, designed especially for the Fisher 110. The S-10 has a 10-inch woofer and a 3-inch tweeter, with crossover at 2500 Hz. Frequency response is from 20 to 20,000 Hz. We think a pair of S-10's sounds great with the 110. But don't take our word for it. Hear it yourself and make up your own mind.

(When you buy the Fisher 110 with a pair of S-10's, it's called the Fisher 110-S and costs $449.95.*) For more information, plus a free copy of The Fisher Handbook 1968, an authoritative 80-page reference guide to hi-fi and stereo, use coupon on magazine's front cover flap.

The Fisher.

* ALSO AVAILABLE, THE FISHER 10S, IDENTICAL TO ABOVE BUT WITHOUT THE AM SECTION. WITHOUT SPEAKERS, IT COSTS $359.95; WITH A PAIR OF S-10 SPEAKERS, IT COSTS $429.95.

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JANUARY 1968
Tape head, and better than 80 db on the high-level inputs. The tone controls rotate through about 180 degrees, instead of the usual 300 degrees, and are designed so that the treble control has little effect until near its full rotation, while the bass control has almost all its effect in the first half of its rotation. The low phono input requires 2.2 millivolts for 1-volt output at minimum volume-control setting, and the hi input requires 13.2 millivolts for the same output. The high-level inputs require a 0.12-volt input signal for 1-volt output. The signal-to-noise ratio is 66 db on lo phono, 53 db on tape head, and better than 80 db on the high-level inputs.

Like a good power amplifier, the PAT-1 has no sonic character of its own—when the tone controls are centered and the filters switched out. We have seen some of the better power amplifiers described as a "piece of wire with gain" as a tribute to their insignificant distortion. The Dynaco PAT-1 most definitely is in the same category. The "piece of wire" can be twisted very effectively with the controls of the PAT-1. The loudness compensation is truly usable, the filters work as filters should, there are no clicks or thumps when any of the switches or controls are operated, there's no hum or loss (except with the volume set for full gain on a low-level input, a most unlikely operating condition), and it is free of microphonics and internal heating. Add to this an extraordinary degree of operating flexibility achieved with a total semiconductor complement of eight silicon transistors and two power-supply rectifier diodes, and you have an excellent example of what can be achieved by competent engineering and design integrity. In sonic quality, we would unhesitatingly say that the Dynaco PAT-1 is unsurpassed by any preamplifier we have seen. It is a remarkable unit and unmatched at anywhere near its low price of $89.95 in kit form or $129.50 factory-wired.

**EMPIRE 4000M CAVALIER SPEAKER SYSTEM**

- Empire's 4000M Cavalier speaker system is a scaled-down version of the Model 9000 Royal Grenadier reviewed in the December, 1966, issue. Like its predecessors, the Model 4000M is constructed in the form of a cylindrical column, with the woofer at the bottom; however, the woofer faces forward rather than downward and radiates through a louvered opening. The 4000M stands 25 inches high, is 18 inches in diameter, and weighs 75 pounds with its marble top in place. It is finished in satin walnut and is also available with a walnut top.

- The Model 4000M has a 10-inch woofer with a 2-inch voice coil, rated to handle up to 60 watts of music power or 10 watts of sine-wave power. The crossover is at 1,500 Hz, at which frequency a single small direct-radiator cone tweeter takes over. A three-position switch under the base of the column adjusts the high-frequency level relative to the lower frequencies.

- We tested the Empire 4000M in a normally "live" room, with the speaker a couple of feet from one of the walls. Our three microphones were distributed throughout the room and their outputs electrically summed to produce a single frequency-response plot. Repeating the test with three different microphone positions enabled us to develop a composite curve representative of the total output of the speaker in a typical listening room.

- With the tweeter-level control set in the middle, or "normal" position, the response of the Empire 4000M was quite smooth and free of peaks and holes between 60 and 15,000 Hz. The output level above 700 Hz averaged about 5 db less than below that frequency. Below 70 Hz, the output fell off rapidly, although there was a slight rise in output level at 10 Hz.

- Harmonic distortion at a 1-watt drive level was under 5 per cent down to 50 Hz, increasing fairly rapidly below that frequency. Allowing for variations in low-frequency response in different listening rooms, we would consider the effective lower limit of the Empire 4000M to be between 30 and 60 Hz. The dispersion of frequencies up to 1,500 Hz was excellent. The small cone tweeter complements this characteristic very well at high frequencies, although the tweeter should be faced toward the listening area for best results.

- The tone-burst response of the Empire 4000M was excellent at all frequencies. In the mid-range, in particular, the 4000M was definitely superior to the larger Model 9000 in its transient response. This is doubtless because of the smaller, lighter cone and voice coil in the Model 4000 woofer.

- The sound of the Empire 4000M was full and warm, with a trace of the bass-heavy characteristic of the Model 9000. Although it obviously has a smooth and uniform response to beyond the limits of audibility, the Model 4000M is in no sense a bright-sounding speaker. We found that a bit of bass cut from amplifier tone controls, as well as using the maximum treble setting of the tweeter-control switch, enabled us to balance the sound of the system to suit our taste.

- The Empire 4000M speaker system brings the basic properties of the larger and costlier Empire models to a lower price bracket. Undeniably handsome, it is not as formidable in size as the Model 9000, and its sound quality is similar to that of its larger relative, though not its equal in the lowest bass registers. While the Model 4000 may not appeal to those who like their highs "sizzling," by the same token it can be a good choice for those listeners who favor the lower and middle frequencies. The Empire 4900M, with a marble top, sells for $159.95. The Model 4000, with a walnut top, is $149.95.

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The Fisher
Ortofon SL-15T Cartridge and RS-212 Tone Arm

Hirsch-Houck Labs reported on the Ortofon S-15T phono cartridge in the July 1967 issue of Hi-Fi Stereo Review. This premium-priced moving-coil cartridge was noteworthy for its extremely low intermodulation distortion and smooth, extended frequency response. The S-15T was also the heaviest and bulkiest stereo cartridge we have ever tested (owing to its built-in step-up transformers), which makes it difficult to use in some tone arms. Ortofon has now released the SL-15T, which is similar to the S-15T but has a size and weight comparable to most other stereo cartridges. The transformers are now encapsulated in a small separate assembly (with phono plugs and sockets) that is meant to be located near the amplifier. The SL-15T cannot be used without the transformer (or an equivalent preamplifier) since the output from its 2-ohm coils is less than 0.2 millivolt at normal recorded levels.

The stylus is an elliptical diamond, with radii of 0.3 and 0.7 mils, and rated static compliance of 20 × 10⁻⁶ cm/dyne. Ortofon recommends a tracking force of 1 to 2 grams. Stylus replacement requires return of the cartridge to its importer, Elpa Marketing Industries. Like its predecessor, the SL-15T has a powerful external magnetic field, which makes it difficult to use with steel or iron turntables. This, however, should present no problem in most installations, since modern turntable platters are usually of non-ferrous construction.

We measured the frequency response of the Ortofon SL-15T as within ±1.5 db from 40 to 11,500 Hz, rising to a broad peak of 4 to 5 db in the 13,000 to 15,000-Hz region. The output at 20,000 Hz was slightly greater than at middle frequencies. Channel separation averaged about 20 db up to 9,000 Hz and was typically 10 to 15 db in the 10,000 to 20,000-Hz range. Sweep measurements down to 10 Hz revealed no sign of a resonance with the cartridge installed in the new Ortofon RS-212 arm.

The output of the SL-15T (through the external step-up transformer assembly) was 7.6 millivolts at 3.51 cm/sec velocity. The hum shielding of the cartridge was good, and the transformer assembly required only moderate care in its orientation to reduce hum pickup to inaudible levels.

Like the S-15T, the new SL-15T cartridge had, in our tests, outstandingly low intermodulation distortion. At the recommended 2-gram tracking force, it was less than 1 per cent up to 23 cm/sec peak velocity, climbing to a still low 2.3 per cent at 27.1 cm/sec. Increasing the force to 3 grams resulted in less than 1 per cent IM even at 27.1 cm/sec. We see no advantage in the higher force, however, and would suggest operation at 2 grams. At 1 gram, the distortion was low up to 15 cm/sec, but rose rapidly at higher velocities. The test-record square-wave response revealed several cycles of low-amplitude, damped ringing at the stylus resonance of about 13,000 Hz.

In listening to the SL-15T cartridge, we were immediately impressed by its distortionless, neutral quality. It imparts no detectable emphasis or coloration to any part of the frequency spectrum, and it is easy to forget that one is listening to a phonograph record when one is using the SL-15T cartridge. By our own grading system, we would rate the Ortofon SL-15T on a par with the other two highest ranking cartridges we have tested (see report on eleven stereo cartridges in the July 1967 issue.) Ortofon's years of experience in designing and manufacturing high-quality cartridges and arms are clearly evidenced in the SL-15T, about which we are unreservedly enthusiastic.

The Ortofon RS-212 tone arm is a new design, incorporating an anti-skating feature, a cueing arm lift with hydraulic damping, and the ability to accommodate cartridges weighing from 7 to 19 grams. Installation of the arm is simplified by a complete set of positioning jigs. After the arm has been balanced with the adjustable counterweight, the desired tracking force (from 0 to 4.5 grams) is dialed in with a calibrated, knurled knob on the counterweight. Spring tension is used to supply the downward tracking force. We found the dial indication to be accurate within 0.1 gram.

The anti-skating correction is applied by offsetting the attachment point of the tracking-force spring. The anti-skating force thus automatically compensates for changes in the dialed-in tracking force. The degree of anti-skating correction can be adjusted over wide limits by a knurled thumbscrew that moves the attachment point of the spring. The installation manual suggests the optimum setting for the elliptical stylus used on Ortofon cartridges.

As with some of the earlier Ortofon arms, the out-cable assembly furnished with the RS-212 arm is termi-

The upper curve represents the averaged frequency response of the cartridge's right and left channels. The lower curve, which starts at 500 Hz, represents the averaged separation between channels. The amount of separation at any frequency is indicated by the vertical distance between the upper and lower curves, and is expressed in decibels. Inset at the lower left of the graph is an oscilloscope photograph of the cartridge's response to a 1,000 Hz square wave on a test record. The shape of the reproduced wave is an indication of a cartridge's overall frequency response and resonances.
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ACCORDING to a recent report published by the American Music Conference, one out of every four point eight Americans (over the age of four) plays or is learning to play a musical instrument. This is a statistic worth pondering. It represents, according to the report, a substantial increase over the 1930 figure, which declares the ratio of amateur musicians to population to have been one out of every seven point two. An amateur musician, as defined by the AMC, is "someone who plays a musical instrument six or more times per year, without pay, or who is receiving instrumental instruction on a specific instrument."

The report says nothing about the thoughts or attitudes of these people, whether or not they are "receiving instrumental instruction" under duress, whether they approach their musical instruments six or more times per year with a feeling of eagerness and excitement, or whether "pay" (cash or some other reward) is anticipated even if not received. But surveys are notoriously poor at finding out what it is that is really on people's minds. One ought not to blame a particular survey for something that seems to be indigenous to the form.

The AMC report contains, among other things, a breakdown by instrument or type of instrument of what all these amateurs are playing, together with a comparison of the figures with those of ten years ago. If, for example, has had a small (17 per cent) and presumably gradual increase in the number of its adherents since 1956. There has been a slightly sharper rise in the host of string players (violin, viola, cello, bass), and a considerably sharper rise (approaching 80 per cent) in the number of brass and woodwind blowers. The accordion has taken a turn for the worse, and the ukulele, as one might expect, has fallen off by fully 18 per cent. Players of the "harmonica (excluding toys)" have more than doubled, of the guitar almost quadrupled, and of the organ somewhat more than quadrupled. The greatest increases, though, have occurred among those who favor the drums, the recorder, and something called the "C" melody flute (educational), which have more than doubled, of the guitar almost quadrupled, and of the organ somewhat more than quadrupled. The greatest increases, though, have occurred among those who favor the drums, the recorder, and something called the "C" melody flute (educational), which have earned, respectively and approximately, increases of 300, 700, and 650 per cent.

Some of the absolute figures are startling in themselves. Over twenty-three million people play, or are learning to play, the piano, and an even ten million the guitar. There are better than two million string players in this country, and almost four million each of woodwind and brass players. The recorder (once of historical interest only) has fully eight hundred thousand amateurs, and the "C" melody flute three million. Even the "other" category, which includes (banjo, mandolin, zither, bongo drums, etc.), and which may therefore be presumed to have fluctuated wildly since 1956, claims over a million members.

Furthermore, these people bought last year an estimated retail value of $193,200,000 worth of pianos, $196,600,000 worth of console organs (most of the organ market for home use, we are told, has been among adults between thirty and fifty years of age), $140,000,000 worth of fretted instruments (more "straight" guitars than electric), $120,000,000 worth of band instruments, and $18,000,000 worth of violins, violas, cellos, and basses. They also purchased sheet music to the tune (pardon of $66,000,000, bought $10,000,000 worth of self-instruction aids, and spent $78,000,000 on accessories.

ALTHOUGH, as the report warns us, some people account for more than one performer listing or more than one instrument sale, since some people do play more than one instrument, these are still astonishing figures: a total (excluding duplications) of better than forty-one million music-loving souls spending more money than a poor salaried employee like myself can even begin to conceive of. Why is it, then, one wonders, that the general American attitude toward music is so unknowing and condescending, rather like that of a wealthy and socially connected young lady toward a relative who is both poor and slightly strange? Why is it that concert halls are so often half-filled, and the ultimate in fine cartridges, matching tone arms for getting the most out of any recording.

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(Continued on next page)
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During the 1790's, Franz Josef Haydn twice went to London for extended stays. The visits were undertaken at the invitation of the shrewd Bonn-born impresario Johann Peter Salomon, and for each of the visits Haydn composed a set of six symphonies. Together, the twelve symphonies of the "Salomon" series mark the culmination of Haydn's output for orchestra. Never again did he return to the symphony as a form during the remaining fourteen years of his life—perhaps because he felt that the twelve "Salomon" Symphonies represented the utmost contribution he could make to the medium.

During Haydn's first visit Salomon kept him constantly busy with social engagements and musical responsibilities. Early in 1792, after Haydn had been in the British capital for about a year, he wrote:

In order to keep my word and support poor Salomon, I must be the victim, and work incessantly. I really feel it. My eyes suffer the most. My mind is very weary, and it is only the help of God that will supply what is wanting in my power. I daily pray to Him, for without his assistance I am but a poor creature.

But the six symphonies of the first "Salomon" set (Numbers 93 through 98) betray no sign of strain; on the contrary, they are among the most spontaneous and vital works in all of orchestral music.

Haydn left London at the end of June, 1792, after spending about a year and a half there. Salomon assured him that a return visit would be welcome at any time, and in January, 1794, Haydn bowed to the impresario's repeated requests and once more traveled to London. The first experience had taught him well, however; this time he arrived in London with some new symphonies already composed and ready for performance. The second visit lasted even longer than the first—until the end of August, 1795.

On top of the enormous social and artistic successes he enjoyed in London, Haydn also took substantial sums of money with him each time he departed. It is estimated that he grossed approximately 24,000 gulden in London—the equivalent of about $12,000 in contemporary currency. And from Haydn's point of view there was still another benefit to be derived from his long sojourns in London: relief from his shrewish wife in Vienna. An indication of the lady's character is contained in a letter she sent him during his first London visit, in which she asked for money to buy a house in which to spend her "widowhood." When he returned to Vienna, Haydn duly inspected and purchased the house. As fate would have it, he lived in it himself as a widower, for he survived his wife by nine years.

Six of the twelve "Salomon" Symphonies bear identifying nicknames, most of which have to do with their musical characteristics: the loud and unexpected chord in the slow movement of the Symphony No. 94, for example, earned the symphony the nickname "Surprise,"...
and the martial qualities in the second and fourth movements of the Symphony No. 100 resulted in its being dubbed the "Military." The last of the twelve is known as the "London" Symphony, for no apparent reason. As a matter of fact, of all the symphonies this one has perhaps the least justification for being so called, for the principal theme of the last movement is an undisguised Austrian peasant dance, linked to a song—Oh, Selena—that Haydn may have heard at Eisenstadt.

This last bit of information sparked a lively controversy some years ago, W. H. Hadow, in an interesting study titled A Croatian Composer—Notes Toward the Study of Joseph Haydn, stated that "variants of this melody are found in Croatia proper, Servia and Carniola." A counter-theory was advanced in 1926 by Michel Bre-net, who wrote:

During the time Haydn lived at Eisenstadt or Esterháza, when his music resounded day and night in the castle and gardens of his prince, why should not his own airs or scraps have found their way into the open windows, and remained in the memories first of the people whose duty it was to interpret them, or who were obliged to hear them, and then of the scattered population of the surrounding country?

To this question Hadow replied:

Which is more likely—that these [tunes] were orally transmitted like all early folk songs and that Haydn found them and used them, or that the peasants "heard them through the windows," memorized them at a single hearing, fitted them to secular words, and carried them through the taverns and merrymakings of their native villages? Three of the melodies, for example, appear in the Symphony No. 101 which was written for London after the Esterházy Kapelle had been disbanded. Where and how could the villagers have come across them? Logic would certainly seem to reside with Hadow, but in any case—whether the themes in Haydn's last symphony are folk-derived or are truly original—the symphony is a masterpiece, full of the master's unique invention and sparkle.

Nine recordings of the "London" Symphony are currently available, of which seven exist in stereo/mono versions. Since both the mono-only entries (by Scherchen and Szell) are outstripped musically and technically by several of the more recent performances, we need concern ourselves only with these seven. Four of them, it seems to me, fall into the "not quite" category: Bernstein's (Columbia MS 6050, ML 5349) stems from the period about a decade ago when the conductor was more concerned with manner than matter; Karajan's (RCA Victor LSC/LM 2535) lush-sounding evocation would be fine for Rachmaninoff, but it is not for Haydn; and the Horenstein (Vox 59330, 9330) and Münchinger (London CS 6080, CM 9216) performances are prim, proper—and uneventful.

The remaining three are all quite good in their different ways: those by Beecham (Angel S 36256, 36256), Klemperer (Angel S 36346, 36346) and Wöldike (Vanguard Everyman S 166, 166), the last a budget-price disc. Beecham's performance is full of the pointed rhythms, vital phrasing, and interpretive charm that characterized this conductor at his best. Klemperer's is a little more stolid, but quite effective on its own terms. Both performances are well played by the respective orchestras, but Klemperer has the benefit of airier, more sharply defined recorded sound. And so to the performance recorded in Vienna more than a decade ago under the direction of the Danish conductor Mogens Wöldike. Quite simply, I find this one of the finest of all Haydn symphony recordings. Utilizing a corrected score, Wöldike gives us a robust, invigorating account of the work that is positively bracing in effect. Especially clearly etched are the all-important timpani and trumpet parts. And although the recording sessions date from the mid-1950's, the sound is easily the equal of today's best. If, as has been intimated, Columbia intends to complete the Haydn symphony series begun by the late Max Goberman, I hereby nominate Wöldike as my candidate to conduct them.

The fortunate tape collector also has the Wöldike performance available to him, in a well-recorded 33 1/2 ips reel (Vanguard Everyman F 1916) that contains similarly fine readings of the other five of the second set of "Salomon" symphonies.

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Marantz
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Perhaps no other type of music is so condescended to by sophisticated taste in this country as one of our bedrock popular forms, country-and-western—and unjustly so, for although much of the music that goes under this banner is banal and ephemeral, there is at least as much that has charm, durability, and depth. The selections that follow, seventeen discs out of the thousands available, have been deliberately chosen as a basic introduction for those who have never seriously listened to country-and-western music, and for those who cannot even credit that it is a native American art form. For these, and for others who may have been exposed only to the worst of the genre in some uncongenial service barracks, this list is offered for another try at hurdling the taste barrier.

Country-and-western music does not need converts, of course: its dedicated audience is enormous. It is estimated that there are 35,000,000 fans in the United States alone, widely scattered in nearly every corner of the nation (even, perhaps, Manhattan). More than two thousand radio stations program country music daily, and an enormous number of recordings, personal appearances, and TV shows keep the "Nashville sound" abroad in the land. This commercial behemoth has grown to its present size in only a little more than forty years, beginning with a 1923 recording by Fiddlin' John Carson and 1927 recordings by Jimmie Rodgers and the Carter Family. It has gone through vast stylistic changes in that time. Meanwhile, its influence has spread. The white creators of rock-'n'-roll in the mid-1950's—Elvis Presley, Buddy Holly, Carl Perkins, et al.—were country singers who departed from tradition, and today's "modern" country music is located stylistically just a block or two away from Tin Pan Alley.

As any fan of country-and-western music will tell you, it is not so simple a genre as it may first appear to be. And its strengths are many: its lambent melodies, its natural lyric style that is close to conversational speech, the realistic contents of its verses, the tangy rhythms, and—particularly in such subcategories as Bluegrass or western swing—its instrumental virtuosity. In this discography I have tried to include a generous sampling of these strengths and at the same time to provide a capsule view of "the great tradition." (Continued overleaf)
FAMOUS ORIGINAL HITS BY TWENTY-FIVE GREAT COUNTRY MUSIC ARTISTS. CMA © 712 (available from Country Hall of Fame, Box 1700, Beverly Hills, California).

Since there are so many able stylists in country music, the anthology or sampler seems a good way for the novice to take the plunge. "Famous Original Hits" is a rare compendium, organized by the Country Music Association with the participation of most of the major commercial record labels, and a highly listenable overview of contemporary country-and-western. From the crooning of Eddy Arnold to Kitty Wells' bathetic It Wasn't God Who Made Honky-Tonk Angels, from Bobby Bare's displaced-rural-person blues Detroit City to Tex Ritter's raw folk-like Rye Whiskey, this album is nearly encyclopedic in its coverage of country vocal styles. Among the lesser-known singers represented are the puckish Lefty Frizzell and the creditable balladeers Ray Price, George Morgan, and Don Gibson. On balance, this is a representative basic album with a few valleys to make the peaks seem even higher.

ROY ACUFF AND HIS SMOKY MOUNTAIN BOYS: Hand-Clapping Gospel Songs. Somebody Touched Me; Turn Your Radio On; Jesus Died for Me; I Saw the Light; others. HICKORY ® LPM 117.

The personal fortunes of country singers seem to rush to polarities: the short, tragic lives of such style-setters as Hank Williams and Jimmie Rodgers, and the incredible agelessness of such stars as Roy Acuff, Ernest Tubb, Eddy Arnold, and Hank Snow. Acuff's rural fans of twenty years ago are likely still to be devoted today, and his style has remained undiluted. To his publicists Acuff is "the king of country music," and to the musicians' community in Nashville he is a respected elder statesman. Acuff's singing is in the best mainstream country tradition—a believable and identifiable immersion in the sense and emotion of his musical message. His penetrating, slightly nasal tenor frequently drives his exuberant band along with a fervor that begs for hand-clapping accompaniment. Whether you find Acuff's fundamentalist theology to your taste or not, his musical zeal can hardly fail to move you.

CHET ATKINS: The Best of Chet Atkins. Jitterbug Waltz; Peanut Vendor; Django's Castle; Blue Ocean Echo; Yankee Doodle Dixie; Trumbone; Main Street Breakdown; Country Gentleman; others. RCA VICTOR ® LSP 2887, ® LPM 2887.

To those cynics who find the bulk of Nashville music lacking in finesse, technique, or interpretive skill, the only riposte one needs is the name of the guitarist Chet Atkins. This musical jack-of-all styles has become, to many, "Mr. Nashville," representing the triumph of polish over corn in the music coming from this center of commercial country music.

The lean, laconic, gentle Atkins went to Nashville in 1950, rose steadily to become one of RCA Victor's most active a-&-r men, and is now in charge of that company's studios there. Born in the Clinch Mountains of eastern Tennessee, son of a classical musician and singer, Atkins has also become one of the most eclectic and versatile of professional guitarists, playing classical guitar with as much skill as he does traditional or modern jazz, sophisticated pop, and down-home country. Among the influences he acknowledges are an obscure Kentucky Negro country guitarist, Les Paul, and the internationally renowned Django Reinhardt.

This recording is chosen to illustrate Atkins' breadth of range and sure-fingered grasp of styles. Other recordings, such as "Our Man in Nashville" (RCA Victor LSP/LPM 2616), dwell more upon the modern country style, but "The Best of Chet Atkins" displays his great versatility. Keen finger articulation, graceful phras-
ing, ingratiating simplicity of statement—these are some of the hallmarks of the virtuosic Atkins guitar.

ROGER MILLER: Golden Hits, King of the Road; Dang Me; Chug-a-Lug; You Can't Roller-Skate in a Buffalo Herd; England Swings; Kansas City Star; Atta Boy, Girl; others. SMASH ® 67073, ® 27073.

The country singer and song writer who seems to have caught the public fancy most widely in recent years is a whimsical, witty, studiously relaxed young man named Roger Miller. No overnight success, Miller worked as a bellhop in a Nashville hotel while attacking the big country-music center, then languished (on a major label) before breaking through. Most of his songs have a simple, ingratiating melody line coupled with punning, clever words. Part of the tradition of country song-writing is word-play—multiple rhymes and sly jokes—and Miller crowned that tradition with hit after hit.

Miller was hurtled along almost too fast, with the attendant superhuman publicity build-up and a TV series he was clearly not ready to handle. Still, his reputation will undoubtedly survive, and his songs are the pedestal of that reputation. One of his best, King of the Road, seems to embody all that is permanent and valuable in country music. This tale of a footloose, happy-go-lucky drifter rang an emotional bell for anyone cooped up in an office, a jail, or a corral. Miller refutes, with flair and polish, the widespread misconception that country songs are all unsophisticated.

HANK WILLIAMS: Greatest Hits, Volume I. Take These Chains from My Heart; Your Cheatin' Heart; Hey, Good Lookin'; Cold, Cold Heart; Half as Much; others. MGM ® S 3918, ® 3918.

Every creative field has its tempestuous, tragic bard who destroys himself, or is destroyed, on the shoals of life. Country-and-western music has had two such figures, Jimmie Rodgers and Hank Williams. The latter died in 1953, at the age of twenty-nine, but just as the jazz fans proclaim that "Bird lives," the country fan believes that "Hank lives." And so believes MGM, which has issued and reissued many discs by Williams, the man who has been called "the Hillbilly Shakespeare." Williams had, in his brief and turbulent hour, a magic gift for melody and homespun statement. His voice sobbed and cried with a plaintiveness that could touch and hurt. He may well have been one of the greatest white blues singers. Williams was also the first major country singer since the 1930's to have broken out of the country pasture and into the national pop field, attracting millions of new listeners for the country revival of the early 1950's. A listener to these fifteen-year-old tracks will find the instrumental backings somewhat dated, but the keening, penetrating voice of this country giant is ample compensation.

DIESEL SMOKE, DANGEROUS CURVES AND OTHER TRUCK-DRIVER FAVORITES. Six Days on the Road (Red Sovine); Radar Blues (Benny Martin); Truck-Driving Man (Hylo Brown); others. STARDAY ® SLP 250.

ALL ABOARD FOR THE RAILROAD SPECIAL: Sixteen of America's Greatest Railroad Songs. Casey Jones (Jim Glaser); Hobo (Benny Martin); Cannonball Blues (Bill Clifton and band); Wreck of the Old '97 (Lew Childre); others. STARDAY ® SLP 170.

Because country music is rooted in rural realities, even technology affects its content, and country culture-heroes have had to change to keep up with technology. The pony-express rider and mule-skinner first gave way to the railroad engineer, and now in the Diesel-driving teamster we have a new-style hero in an old mold. There is, of course, a common denominator in songs of the cowboy or express rider and the man behind the wheel of a Diesel.
The country-music style owes much to Negro influences, but there are few Negro performers. Ray Charles (right) is an exception: his country albums, indelibly marked with his strong musical personality, have been phenomenally successful.

Virginia's justly famed Carter Family (Maybelle, Sara, and A. P., l. to r. below) were tremendously influential in the development of the country style.

Country music is not all vocal: Kentuckian Bill Monroe (left) is the father of the driving, rhythmic "Bluegrass" instrumental style—guitar, bass, mandolin, fiddle, and banjo. Prominent graduates of his "school" are Earl Scruggs and Lester Flatt (right).

Versatile Johnny Cash (right) is perhaps best known for bridging the gap between commercial country music and the older folk tradition. Singer and song writer Jimmie Rodgers (far right) was the first—some forty years ago—to depart from the early country vocal style (nasal and whining) for a gentler, more crooning approach.
huge semi: the lonely man pitted against a hostile or
dangerous environment. The truck-driver is a romantic
figure, with a girl-friend at every truck-stop, a potential
problem in a lonely wife at home, and a crisis at every
turn of the road. This life has been caught with all its real-
istic flavor in the Starday album "Diesel Smoke." The
set is more than a curio album, however, for good voices
tell of the joys and perils of trucking. Listened to over
against the more familiar songs of railroading (these Star-
day discs may be hard to find, but are worth searching for)
we can see how the latter sired the former.

BUCK OWENS AND HIS BUCKAROOS: I've Got a
Tiger by the Tail. We're Gonna Let the Good Times Roll;
Memphis; Streets of Laredo; Cryin' Time; others. CAPITOL
® ST 2283, @ T 2283.
GEORGE JONES: Sings Country and Western Hits.
Window up Above; Heartaches by the Numbers; Poor
Man's Riches; It's Been So Long; others. MERCURY ® MG
60624, @ MG 20624.

A country super-star has been developing in the last few
years in the person of Buck Owens, a Bakersfield (Cal-
ifornia) singer, band-leader, and song writer. Owens is
one of the ablest of the "honky-tonk singers," a type that
has been traced back to the 1940's and the roadhouse
juke-boxes that required a more extroverted type of sing-
ing and backing than was provided by old-style country
crooning. Owens has a superb voice that is projected
with such vigor and spirit that it seems only a matter
of time before the pop-teens of the cities discover him
en masse. With a stunningly disciplined "rockabillly" (a
fusion of rock-'n'-roll and hillbilly) band pushing and
supporting him, Buck Owens is one of the most captiv-
ing country performers since Elvis Presley, and his
choice of material and dedicated country orientation keep
him from excesses of beat or blare. Another strong
worker in the honky-tonk style is the Texan George
Jones. Jones lacks some of the Owens charm and tends to
drift to material and arrangements not up to his musician-
ship. Yet he is one of the best vocalists in a field pep-
pered with good singers, and as such, commands imme-
Diate attention.

THE CARTER FAMILY: 'Mid the Green Fields of
Virginia. Keep on the Sunny Side; Motherless Children;
Foggy Mountain Top; The Poor Orphan Child; others.
RCA VICTOR ® LPM 2772.
Where does commercial country music end and folk music
begin? This vexing question is often belabored by stu-
dents of folk and popular culture. There is no clear-cut
answer, for the two forms are continually overlapping.
But the family trio, the Carter Family, stood at the
crossroads and straddled the two artistically. The Carter
Family comprised Sara Carter, her husband (the late
A. P. Carter), and her cousin Maybelle. In a historic week
in the summer of 1927, a recording scout, the late Ralph
S. Peer, recorded the Carters and Jimmie Rodgers in
Bristol, a town astride the Tennessee-Virginia border.
Here, in a dozen reissues from the late Twenties on, you
see why the Carters were so influential. Steeped in tra-
tition, their songs nonetheless seem to rise out of per-
sonal experience. The harmonies, the instrumental inter-
play, the yearning and sadness pour out with the simple
beauty of fine homespun. Of the original family, Mother
Maybelle and her daughters are still carrying on the tra-
tition.

RAY CHARLES: Modern Sounds in Country-and-West-
ern Music, Volume I. Bye Bye, Love; You Don't Know
Me; Careless Love; Worried Mind; Hey, Good Lookin';
Half as Much; others. ABC ® ABCS 410, @ ABC 410.
One of the greatest stumbling-blocks to the acceptance of
country-and-western music by city sophisticates is the
widely held view that it is a totally segregated musical
field. It is true that white-Southern attitudes have per-
meated this music and its lyrics, but many of the leading
figures in the history of c-&-w have publicly stated their
gratitude to Negro influences. Some country-music radio
surveys indicate that they have a large Negro listener-
ship, and such emerging stars as RCA Victor's Charley
Pride lend credence to the assumption that one day Ne-
groes will be making this kind of music (as well as listen-
ing to it) in large numbers.

Nothing has made country fans more aware of this
last possibility than two enormously successful albums of
country music the Negro singing star Ray Charles re-
leased in 1962 and 1963, especially when Charles be-
came the biggest seller of country songs since Hank Wil-
liams. Individualist that he is, Charles makes no attempt
to imitate the country manner, but puts the strong stamp
of his own personality on the tunes. Backed by brasses,
saxes, and strings, Ray Charles' voice drifts languorously
over the lyrics almost as if he were recalling to himself
the white country radio he heard in his youth in Albany,
Georgia. When he turns to the songs of Hank Williams,
especially, Charles seems to have found a soul-mate, and
his interpretations are near-classic.

FLATT AND SCRUGGS/DOC WATSON: Strictly
Institutional. Pick Along; Spanish Two-Step; Nothing to
It; Jazzing; others. COLUMBIA ® CS 9443, @ CL 2643.
BILL MONROE: The High Lonesome Sound. Memories
of Mother and Dad; Highway of Sorrow; Whitehouse
Blues; When the Golden Leaves Begin to Fall; others.
DECCA ® DS 74780, ® DL 4780.

Bluegrass, a country ensemble style, has been called rural
jazz and likened to both the village bands of Eastern
Europe and to Irish-Scottish jig and reel music. It is a
bit of all of these, and one of the more fluid forms for
country virtuosity. Lester Flatt, Earl Scruggs, and Doc
Watson, in a country summit meeting, show the as-
tounding heights it is possible to scale with the guitar and

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banjo in this jam session. Scruggs' banjo and Watson's guitar are utterly distinctive as they render variants on rhythm and melody, run through rapid arpeggios, and stress "inner voices."

The Kentucky mandolinist and singer Bill Monroe is generally credited with being the "father of Bluegrass." From his various bands, since the late 1940's, have graduated nearly all the leading figures in Bluegrass, including Flatt and Scruggs. Monroe is a consummate artist whose voice is as clear, as true, and as compelling as any that can be heard anywhere in country music. Behind this clarion tenor plays a tightly disciplined yet freewheeling Bluegrass band.

AUTHENTIC COWBOYS AND THEIR WESTERN FOLK SONGS. The Old Chisholm Trail (Mac McClintock); Following the Cow Trail (Carl T. Sprague); Zebra Dun (Jules Allen); There's a Brown-Skin Girl Down the Road Somewhere (Eck Robertson); Texas Ranger (Carrwright Brothers); others. COLUMBIA ® CS 9109, CL 2309.

WESTERN SWING. Historic Recordings by Bob Wills, Lightcrust Doughboys, Bill Boyd, Milton Brown, Hackberry Ramblers, Harry Choats. Barn Dance Rag; Never No More Blues; Spanish Fandango; The Eyes of Texas; Steel Guitar Stomp; others. OLD TIMEY RECORDS @ 105 (available from Box 9195, Berkeley, California 94719).

The purely western elements of country-and-western music are difficult to keep track of, largely because the "eastern," Nashville-centered musical styles borrowed the westerners' Stetsons, rhinestone-studded costumes, and boots, and superimposed a lot of western musical style on the mountain music of the South. But as country and folk music moved west with the frontier, it gained special qualities of its own, new themes, and new approaches. These two discs survey the entire range of western music in historical fashion up to World War II: the bulk of the cowboy songs edited by Fred Hoeptner for the RCA collection date from the Twenties and the "Western Swing" album centers on the Thirties.

No emotion colors the early album as much as the sense of loneliness in a vast land. The second album, in contrast, shows the emerging lively swing groups that played for dances and get-togethers, as the western string bands began to incorporate city-swing elements as well as Mexican-Spanish qualities.

JOHNNY CASH: Orange Blossom Festival. It Ain't Me, Babe; The Long Black Veil; Don't Think Twice; Mama, You've Been on My Mind; All of God's Children Ain't Free; others. COLUMBIA ® CS 9109, CL 2309.

The Ozark singer and song writer Johnny Cash has impressed many as one of the most electric stage performers in any of the popular arts. He is erratic, and every bit as stormy as the late Hank Williams was, but when he is good he is transcendent. Cash's voice is a big, bold baritone that conveys a story-line and transmits a melody with power and urgency. Whether in a Bob Dylan song such as It Ain't Me, Babe, a country classic such as Long Black Veil, or his own protest song All of God's Children Ain't Free, Cash is bigger than life. His real magic comes through best in person as one watches the strong, almost fierce-looking rambler move about the stage with an animal grace. Yet with sound alone, as on this disc, he can convince the listener that he deserves a special place in the pantheon of country artists.

JIMMIE RODGERS: The Best of the Legendary Jimmie Rodgers. Mule Skinner Blues; T for Texas; Waiting for a Train; Daddy and Home; others. RCA VICTOR © LSP 3315, ® LPM 3315.

Under the loving and careful attention of Brad McCuen, RCA Victor has issued seven long-playing discs of the recordings of "the father of country music," Jimmie Rodgers, a tubercular railroader-turned-minstrel who died in 1933 at the age of thirty-five. From these seven discs, McCuen further culled the dozen tracks for this definitive album (the stereo is electronic, of course). Rodgers was one of the recording industry's first superstars, a man whose recordings sold steadily in the darkest hours of the Depression. He directly influenced such singers as Gene Autry, Cliff Carlisle, Hank Snow, Ernest Tubb, and Elton Britt, and some of his one hundred and ten recorded songs have cropped up in Western Europe as folk songs. His tenor voice was sweet and gentle, a change from the earlier rough-toned folk singing; his debt to Negro blues was strong (and acknowledged). The distinctive form he invented was the "blue yodel," a plaintive cross between the blues and the attention-getting yodeling tricks that delighted audiences of the late Twenties. Rodgers was a working man turned entertainer, and as such he won enormous sympathy from the "little man" of the South, who could cheer his monetary successes and lament the steady erosion of his health almost as if he were a member of the family. Not everything that Jimmie Rodgers sang or recorded was of top quality, but all of it is of interest. He gave form, style, and content to country music, and also proved that it could have an enormous audience in rural America, around the world, and even in the cities. The style he created forty years ago still feels his influence.

* * *

And finally, RCA Victor, out of its bounty, has just given country-music fans a two-disc "keepsake package" of archive performances by stars of Nashville radio station WSM's Grand Ole Opry. This staple album for a country-and-western collection is reviewed by William Flanagan on page 121 of this issue.

Robert Shelton, critic of popular and folk music for the New York Times, is the author of The Country Music Story, a profusely illustrated study which was published (1966) by Bobbs-Merrill.
RECORD PLAYERS, TURNTABLES, AND TONE ARMS
By George Martinson

The function of a turntable—any turntable—is to rotate a disc record at constant speed with a minimum of extraneous vibration and noise. The function of a tone arm—any tone arm—is to carry the cartridge in such a way that it can follow the inward spiral of the record groove with a minimum of frictional drag or other kinds of mechanical interference. That's all. But, as with so many other "very simple things," a considerable amount of technological refinement has been brought to bear on those requirements. Inevitably, different manufacturers find different ways of solving the problems common to them all, and each tends to imply that his is the only—or at least the best—solution. Thus, it is sometimes difficult to sort through the advertising claims for the really relevant items among the "features" offered.

The axiomatically simple objectives of turntables and tone arms have been further complicated by the fact that people enjoy having a turntable-and-arm combination that will play through a stack of records without attention from the user. Hence the "automatic" turntables (which used to be called "record changers") and their more complex mechanisms. And, too, in concord with an idea once expressed succinctly as "Sell the sizzle, not the steak!" manufacturers have found it easier to sell record-playing devices on the basis of special features rather than on such relatively drab (and difficult for the consumer to evaluate) essentials as low rumble, wow,
and flutter, resistance to acoustic feedback and external shock, and the like.

It is a sad fact that there is no generally accepted standard for measuring the performance of high-fidelity turntables. This situation affects most of the rumble figures you read: rumble specifications have for years been a free-for-all, with figures as high (or low, if you like) as —100 db being quoted, despite the fact that the rumble content of the best rumble test records available, measured according to the National Association of Broadcasters' standard for broadcast-station turntables, is somewhere around —45 db. For that reason, I have avoided quoting rumble specifications in the charts accompanying this article. Without implying outright dishonesty in the field, let it be said that the lack of a uniform standard in the industry makes difficult any meaningful comparison between turntables on the basis of quoted rumble ratings.

The purpose of this article is to sift through record-player lore and uncover the essential facts you must have in order to choose a unit for your own needs properly. There are two kinds of help in addition to the text of the article. One is the charts on page 69 and 70—which, however, are not to be taken as the definitive last word, since such a listing can't begin to tell everything of interest about a player, turntable, or tone arm. But they do offer a convenient spread of useful information arranged for quick comparison. The second help is the glossary of technical terms relating to record players on page 73. Now on to some questions about players.

- **Manual or automatic?** Fifteen years ago, everyone agreed that true hi-fi performance (in respect to freedom from wow, flutter, and rumble) was available only from a single-play turntable and a manually operated tone arm. Record changers were clumsy, crude devices, noisy and hard on the records. This is definitely no longer true. Today's record changers—the best ones, at least—are every bit as good as the best manual turntables in respect to lead-in groove of the record and its return to its rest post after the record is finished.

- **What kind of motor?** One of the favorite oversimplifications among pseudo-learned technical writers and audiophiles is that only a hysteresis-synchronous motor can deliver the kind of speed-constancy and freedom from rumble demanded of high-quality playback equipment. This may have been true at one time, but refined versions of other types of motors have found their way into technical respectability. The rugged old four-pole, shaded-pole induction motor is still the standby of the broadcast industry, and not so bad at that. Quality turntables today are found with induction, synchronous, and combined permanent-magnet induction/synchronous motors—and possibly other variations. Sony is using an electronically regulated direct-current motor. The proof of the turntable is in the playing, and no one kind of motor can be singled out as the ideal. It is best to ignore the matter of motor design and concentrate on the turntable's insensitivity to line-voltage variations and whether you can hear any rumble or wow (a matter I will return to later in this article).

- **What kind of drive?** Again, it is unrealistic to single out any one best method of transferring power from motor to turntable platter and then consign the rest to oblivion. Almost any of the systems, if well designed and constructed, can meet NAB specifications. The most common form of drive is inside-rim friction drive, with the drive torque transmitted from motor shaft to the inside rim of the turntable platter by a rubber-tired idler wheel that bears against both. A belt-drive (again, always with the qualifying adjective "well designed") can provide somewhat better motor-vibration isolation, but is not used in record changers partly because it tends to require more space in an already crowded area.

It is possible to draw up lists of advantages and disadvantages of various kinds of drives and, depending on the weight one assigns to the various factors, to come up with a clear choice in favor of one. But someone else's weighting will be different, and in any case good engineering sooner or later eliminates disadvantages that seemed "inherent" in some method or other. Listen with
AUTOMATIC TURNTABLES (CHANGERS)

<table>
<thead>
<tr>
<th>Make and model</th>
<th>Price</th>
<th>Speeds¹</th>
<th>Motor type²</th>
<th>Min. stylus force (g)</th>
<th>Modes of operation</th>
<th>Anti-skate</th>
<th>Dimensions³</th>
<th>Special features and other information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied 919</td>
<td>$49.94</td>
<td>4</td>
<td>I</td>
<td>1</td>
<td>auto, semi-auto, manual</td>
<td>yes</td>
<td>12 x 11 x 4 (2)</td>
<td>Continuous repeat-play option.</td>
</tr>
<tr>
<td>BSR (see McDonald)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual 1010S</td>
<td>69.50</td>
<td>4</td>
<td>I</td>
<td>2</td>
<td>auto, manual</td>
<td>yes</td>
<td>12 1/2 x 10 1/2 x 6 (3)</td>
<td>Cuing device; changer spindle lifts stack off record to be dropped; vernier pitch (speed) control (1019 only).</td>
</tr>
<tr>
<td></td>
<td>1015</td>
<td>89.50</td>
<td>I</td>
<td>1 1/2</td>
<td>auto, manual</td>
<td>yes</td>
<td>same</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1009SK</td>
<td>109.50</td>
<td>I</td>
<td>1 1/2</td>
<td>auto, manual</td>
<td>yes</td>
<td>same</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1019</td>
<td>119.50</td>
<td>I</td>
<td>1 1/2</td>
<td>auto, manual</td>
<td>yes</td>
<td>same</td>
<td></td>
</tr>
<tr>
<td>Garrard 40 MK II</td>
<td>44.50</td>
<td>4</td>
<td>I</td>
<td>2</td>
<td>auto, manual</td>
<td>yes</td>
<td>15 1/2 x 12 1/2 x 4 1/4 (3)</td>
<td>Cuing device.</td>
</tr>
<tr>
<td></td>
<td>SL65</td>
<td>79.50</td>
<td>I</td>
<td>1/2</td>
<td>auto, manual</td>
<td>yes</td>
<td>15 1/8 x 13 1/2 x 4 1/4 (3)</td>
<td>Cuing device.</td>
</tr>
<tr>
<td></td>
<td>SL95</td>
<td>129.50</td>
<td>3</td>
<td>1/2</td>
<td>auto, manual</td>
<td>yes</td>
<td>15 1/4 x 14 1/4 x 4 1/4 (3)</td>
<td>Cuing device.</td>
</tr>
<tr>
<td></td>
<td>SL75</td>
<td>109.50</td>
<td>4</td>
<td>1 1/2</td>
<td>auto, manual</td>
<td>yes</td>
<td>15 1/8 x 12 1/2 x 4 1/4 (3)</td>
<td>Cuing device; ceramic pick-up with diamond stylus.</td>
</tr>
<tr>
<td></td>
<td>SL55</td>
<td>59.50</td>
<td>4</td>
<td>1 1/2</td>
<td>auto, manual</td>
<td>yes</td>
<td>16 x 12 1/2 x 4 1/4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>39.50</td>
<td>4</td>
<td>1</td>
<td>(2-pole)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knight KN-900A</td>
<td>29.88</td>
<td>4</td>
<td>I</td>
<td>1</td>
<td>auto only</td>
<td></td>
<td>14 x 12 x 5</td>
<td></td>
</tr>
<tr>
<td>Lesa Professional 6</td>
<td>149.50</td>
<td>3</td>
<td></td>
<td></td>
<td>auto, manual</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McDonald (BSR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>400A</td>
<td>59.50</td>
<td>4</td>
<td>I</td>
<td>manual</td>
<td>yes</td>
<td>13 1/2 x 11 1/2 x 4 1/4 (2 1/2)</td>
<td>Cuing device.</td>
</tr>
<tr>
<td></td>
<td>500A</td>
<td>74.50</td>
<td>4</td>
<td>I</td>
<td>manual</td>
<td>yes</td>
<td>13 1/2 x 11 1/2 x 4 1/4 (2 1/2)</td>
<td>Cuing device.</td>
</tr>
<tr>
<td>Miracord PW-50H</td>
<td>149.50</td>
<td>4</td>
<td>H</td>
<td>1/2</td>
<td>auto, manual</td>
<td>yes</td>
<td>14 1/4 x 12 1/2 x 5 1/2 (3 1/4)</td>
<td>Stylus overhang adjustment; cuing device.</td>
</tr>
<tr>
<td></td>
<td>PW-40A</td>
<td>94.50</td>
<td>4</td>
<td>I</td>
<td>&lt;1</td>
<td>auto, manual</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>620</td>
<td>89.95</td>
<td>4</td>
<td>I</td>
<td>1</td>
<td>auto, manual</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>630</td>
<td>119.50</td>
<td>R</td>
<td>special</td>
<td></td>
<td></td>
<td>21 1/2 x 22 1/2 x 33 1/2</td>
<td>Stores up to fifty LP albums vertically; provides up to forty hours of continuous music; optional remote control; computer-like memory bank; vertical-play mechanism magazine.</td>
</tr>
<tr>
<td>Perpetuum-Ebner PE-2020</td>
<td>129.95</td>
<td>4</td>
<td>I</td>
<td>1/2</td>
<td>auto, manual</td>
<td>yes</td>
<td>14 1/4 x 12 1/2 x 5 (3 1/4)</td>
<td>Speeds variable ±6%; vertical tracking angle remains constant for up to eight records; single-control operation.</td>
</tr>
<tr>
<td></td>
<td>PE-720</td>
<td>74.95</td>
<td>4</td>
<td>I</td>
<td>1 1/2</td>
<td>auto, manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeburg Audiomation</td>
<td>795.00</td>
<td>1</td>
<td>H</td>
<td>2 1/2</td>
<td>special</td>
<td></td>
<td>21 1/2 x 22 1/2 x 33 1/2</td>
<td>Stores up to fifty LP albums vertically; provides up to forty hours of continuous music; optional remote control; computer-like memory bank; vertical-play mechanism magazine.</td>
</tr>
</tbody>
</table>

NOTES:

1"4" means 1 1/2, 3 1/2, 45, and 78 rpm; "3" means 33 1/2, 45, and 78 rpm; 1 means 33 1/2 only.

I-four-pole induction; I-b combined induction and synchronous; H-hysteresis synchronous.

In inches: width, depth (front-to-back), and height above chassis. Figure in parentheses is required clearance below chassis. All dimensions have been rounded off to nearest higher quarter inch.

Factory set at about 4 grams; player comes with cartridge installed.

Six-pole induction motor.

TURNTABLES WITHOUT ARMS

<table>
<thead>
<tr>
<th>Make and model</th>
<th>Price</th>
<th>Speeds¹</th>
<th>Motor type²</th>
<th>Drive type</th>
<th>Dimensions³</th>
<th>Special features and other information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empire 208</td>
<td>$125.00</td>
<td>3</td>
<td>H</td>
<td>belt</td>
<td>14 1/4 x 16 1/4 x 3 1/2 (3 1/2)</td>
<td>Pop-up 45 rpm adapter.</td>
</tr>
<tr>
<td>Rek-O-Kut B-12H</td>
<td>165.00</td>
<td>3</td>
<td>H</td>
<td>rim</td>
<td>17 1/4 x 16 3/4 (6 1/2)</td>
<td>Pilot light.</td>
</tr>
<tr>
<td>B-12GH B-16H</td>
<td>109.95</td>
<td>3</td>
<td>H</td>
<td>rim</td>
<td>20 x 18 1/4 x 3 1/4 (6 1/2)</td>
<td>Higher rumble.</td>
</tr>
<tr>
<td>Sony TTS-3000</td>
<td>149.50</td>
<td>2</td>
<td>DC</td>
<td>belt</td>
<td>14 1/4 x 15 1/2 (3 1/2)</td>
<td>Servo-controlled d.c. motor; speed control; with base.</td>
</tr>
<tr>
<td>Thorens TD-124 (Series II)</td>
<td>149.50</td>
<td>4</td>
<td>I</td>
<td>belt, rim</td>
<td>15 1/2 x 13 1/4 (2 1/2)</td>
<td>Variable speed control (±3%). Separate mounting base for tone arm; built-in leveling adjustments; spirit level.</td>
</tr>
<tr>
<td>TD-150</td>
<td>85.00</td>
<td>2</td>
<td></td>
<td></td>
<td>15 1/2 x 12 1/4 x 3 1/4 (2 1/2)</td>
<td></td>
</tr>
</tbody>
</table>

NOTES:

1"4" means 1 1/2, 3 1/2, 45, and 78 rpm; "3" means 33 1/2, 45, and 78 rpm; "2" means 33 1/2 and 45 rpm only.

¹DC=servo-controlled d.c. motor; H=hysteresis synchronous; I=four-pole induction.

In inches: width, depth (front-to-back), and height above chassis. Figure in parentheses is required clearance below chassis. All dimensions have been rounded off to nearest higher quarter inch.

Twin low-speed synchronous motors with common rotor shaft.

JANUARY 1968

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## MANUAL TURNTABLES (with arms)

<table>
<thead>
<tr>
<th>Make and model</th>
<th>Price</th>
<th>Speeds</th>
<th>Motor type</th>
<th>Drive type</th>
<th>Min. stylus force (g)</th>
<th>Anti-skate</th>
<th>Dimensions</th>
<th>Special features and other information</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR</td>
<td>$78.00</td>
<td>2</td>
<td>PM</td>
<td>belt</td>
<td>—</td>
<td>—</td>
<td>16 1/4 x 12 1/4 x 15/16</td>
<td>With base, dust cover, stylus-force gauge.</td>
</tr>
<tr>
<td>XA Universal</td>
<td>87.00</td>
<td>Same as XA, but usable on 230-volt 50 Hz power as well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bogen</td>
<td></td>
<td></td>
<td>CV</td>
<td>I rim</td>
<td>1 1/2</td>
<td>—</td>
<td>15 x 13 x 2 1/4</td>
<td>Continuous variable speed, 29 to 86 rpm.</td>
</tr>
<tr>
<td>B62</td>
<td>67.95</td>
<td>1</td>
<td>CV</td>
<td>I rim</td>
<td>1 1/2</td>
<td>—</td>
<td>14 1/2 x 12 1/2 x 2 1/4</td>
<td>Continuous variable speed, 29 to 86 rpm; lighter platter than B62.</td>
</tr>
<tr>
<td>B52-S</td>
<td>49.95</td>
<td>1</td>
<td>CV</td>
<td>I rim</td>
<td>1 1/2</td>
<td>—</td>
<td>14 1/2 x 12 1/2 x 2 1/4</td>
<td>Continuous variable speed, 29 to 86 rpm; lighter platter than B62.</td>
</tr>
<tr>
<td>Empire</td>
<td>39B</td>
<td>190.00</td>
<td>Model 208 turntable</td>
<td>Model 980 arm, see separate listing</td>
<td>16 x 13 3/4 x 7 1/4</td>
<td>With base, With base and 980 tone arm (see separate listing).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49B</td>
<td>180.00</td>
<td></td>
<td>H</td>
<td>belt</td>
<td>2</td>
<td>14 1/2 x 12 1/2 x 3 1/2</td>
<td>Automatic arm-return and shutoff.</td>
<td></td>
</tr>
<tr>
<td>Garrard</td>
<td>SP20</td>
<td>37.50</td>
<td>4</td>
<td>I rim</td>
<td>2</td>
<td>—</td>
<td>18 x 14 x 6 1/2</td>
<td>Straight-line-tracking tone arm with cartridge, Cueing device, With base.</td>
</tr>
<tr>
<td>Marantz</td>
<td>SLT-12</td>
<td>295.00</td>
<td>2</td>
<td>H</td>
<td>1</td>
<td>—</td>
<td>20 x 16 x 7 1/4</td>
<td>With base and cover; cueing device; switchable 50 to 60 Hz, 115/230-volt operation.</td>
</tr>
<tr>
<td>Pioneer</td>
<td>PL-41</td>
<td>199.50</td>
<td>2</td>
<td>H belt, rim</td>
<td>3 1/4</td>
<td>yes</td>
<td>14 3/4 x 15 x 3</td>
<td>Servo-controlled d.c. motor with electronic amplification, strobe disc, speed control, With base and cartridge.</td>
</tr>
<tr>
<td>Sony</td>
<td>PS-2000</td>
<td>329.00</td>
<td>2</td>
<td>DC belt</td>
<td>&lt;1</td>
<td>yes</td>
<td>15 x 15 x 3</td>
<td>Servo-controlled d.c. motor.</td>
</tr>
<tr>
<td>Stanton</td>
<td>800B</td>
<td>105.00</td>
<td>1</td>
<td>S rim</td>
<td>&lt;1</td>
<td>—</td>
<td>16 x 13 x 6</td>
<td>With &quot;Unipoise&quot; arm, base.</td>
</tr>
<tr>
<td>Telefunken</td>
<td>210</td>
<td>99.95</td>
<td>4</td>
<td>I belt</td>
<td>—</td>
<td>—</td>
<td>16 1/2 x 12 3/4 x 7 1/4</td>
<td>With cartridge.</td>
</tr>
<tr>
<td>Thorens</td>
<td>TD-150AB</td>
<td>90.00</td>
<td>2</td>
<td>S belt</td>
<td>&lt;1</td>
<td>—</td>
<td>15 x 13 x 3</td>
<td>With base; cueing device; adjustable vert. tracking angle.</td>
</tr>
</tbody>
</table>

### NOTES:
1. 14" means 16 1/2, 33 3/4, 45, and 78 rpm; 3" means 33 1/2, 45, and 78 rpm; 2" means 33 1/2 and 45 rpm only; 1 means 33 1/4, 45 rpm only.
2. DC = servo-controlled d.c. motor; H = hysteresis synchronous; I = four-pole induction; PM = permanent-magnet synchronous; S = synchronous.
3. For widths, depth (front-to-back), and height above chassis. Figures in parentheses are required clearance below chassis. All dimensions have been rounded off to nearest higher quarter inch.
4. Continuously variable speed, 29 to 86 rpm, with click stops for 33 1/2, 45, and 78 rpm. 16 2/3 rpm speed is fixed.

## ARMS WITHOUT TURNTABLES

<table>
<thead>
<tr>
<th>Make and model</th>
<th>Price</th>
<th>Range of force adj.</th>
<th>Means of force adj.</th>
<th>Anti-skate</th>
<th>Length</th>
<th>Special features and other information</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADC Pritchard</td>
<td>$44.50</td>
<td>0.5</td>
<td>W</td>
<td>yes</td>
<td>10 1/2</td>
<td>Arm made of walnut.</td>
</tr>
<tr>
<td>Dynaco (B&amp;D)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA-12</td>
<td>39.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Similar to TA-12, except for 16-inch records on professional turntables.</td>
</tr>
<tr>
<td>TA-16</td>
<td>49.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Similar to TA-12, except for 16-inch records on professional turntables.</td>
</tr>
<tr>
<td>EMI Castagna</td>
<td>99.50</td>
<td>0.5</td>
<td>S</td>
<td>—</td>
<td>13 7/16</td>
<td>Magnetic suspension; sapphire bearings for vert. and horiz. gimbals; tracking angle adjustable.</td>
</tr>
<tr>
<td>Empire 980</td>
<td>50.00</td>
<td>0.8</td>
<td>W</td>
<td>—</td>
<td>12 1/4</td>
<td>With lift device.</td>
</tr>
<tr>
<td>Euphonic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA-15</td>
<td>32.50</td>
<td>1/2</td>
<td>W</td>
<td>—</td>
<td>11 7/8</td>
<td>Viscous-damped ball-bearing pivots.</td>
</tr>
<tr>
<td>TA-16</td>
<td>42.50</td>
<td>1/2</td>
<td>W</td>
<td>—</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Leak</td>
<td>90.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>With Leak cartridge; preset tracking force of 2 grams; cueing device.</td>
</tr>
<tr>
<td>Ortofon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMG-212</td>
<td>60.00</td>
<td>0.7</td>
<td>W</td>
<td>—</td>
<td>15</td>
<td>Ball-bearing gimbal suspension, tracks at 2 grams with Ortofon cartridge; 16&quot; arm for professional turntables.</td>
</tr>
<tr>
<td>RMG-309</td>
<td>65.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Uniﬁed stylus-force and anti-skate adjustment, turntables.</td>
</tr>
<tr>
<td>RS-212</td>
<td>90.00</td>
<td>0.41</td>
<td>S</td>
<td>yes</td>
<td>11.8</td>
<td>Tracks at 2 grams with Ortofon cartridge; 16&quot; arm for professional turntables.</td>
</tr>
<tr>
<td>RS-212T</td>
<td>95.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Uniﬁed stylus-force and anti-skate adjustment, turntables.</td>
</tr>
<tr>
<td>Rek-O-Kut</td>
<td>S-320</td>
<td>34.95</td>
<td>0.6</td>
<td>W</td>
<td>15</td>
<td>Ball-bearing gimbal suspension.</td>
</tr>
<tr>
<td>S-440</td>
<td>27.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tracks at 2 grams with Ortofon cartridge; 16&quot; arm for professional turntables.</td>
</tr>
<tr>
<td>S-260</td>
<td>39.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Uniﬁed stylus-force and anti-skate adjustment, turntables.</td>
</tr>
<tr>
<td>Shure M232</td>
<td>29.95</td>
<td>1.8</td>
<td>S</td>
<td>yes</td>
<td>12 1/4</td>
<td>Slide adjustment for stylus overhang.</td>
</tr>
<tr>
<td>M236</td>
<td>31.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ball and knife-edge bearings; cueing device.</td>
</tr>
<tr>
<td>Shure/SME</td>
<td>3009</td>
<td>100.50</td>
<td>1/4</td>
<td>W</td>
<td>yes</td>
<td>12 1/4</td>
</tr>
<tr>
<td>3012</td>
<td>110.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tracks at 2 grams with Ortofon cartridge; 16&quot; arm for professional turntables.</td>
</tr>
<tr>
<td>Sony PUA-237</td>
<td>85.00</td>
<td></td>
<td></td>
<td></td>
<td>13%</td>
<td>Designed for Sony VS-8E pickup; cueing device.</td>
</tr>
<tr>
<td>PUA-286</td>
<td>99.50</td>
<td></td>
<td></td>
<td></td>
<td>15 1/2</td>
<td>Tracks at 2 grams with Ortofon cartridge; 16&quot; arm for professional turntables.</td>
</tr>
<tr>
<td>Stanton</td>
<td>200</td>
<td>0.3</td>
<td>W</td>
<td>—</td>
<td>9&quot;</td>
<td>With mounting board for Thorens TD-124 turntable; adjustable vertical tracking angle.</td>
</tr>
<tr>
<td>Thorens TP-14</td>
<td>59.50</td>
<td>0.8</td>
<td>S</td>
<td>yes</td>
<td>12 1/4</td>
<td>Tracks at 2 grams with Ortofon cartridge; 16&quot; arm for professional turntables.</td>
</tr>
</tbody>
</table>

### NOTES:
1. 1" means force adjustment by underbalancing counterweight; S = force adjustment by tensioning spring.
2. W = force adjustment by underbalancing counterweight; S = force adjustment by tensioning spring.
3. In inches; overall length except as otherwise indicated.
skepticism to any dogmatic claims about the absolute superiority of one drive method over all others. Several manufacturers use a combination of methods—such as a belt-driven idler wheel that drives the inside rim of the platter by friction.

- **Is it best to assemble your own player from a separate tone-arm and turntable, or to buy a preassembled unit?** Obviously, if you want an automatic player, you must buy it complete. If you opt for a single-play, manually operated turntable, you can choose among about a dozen ready-made units or over a hundred possible combinations of separate turntables and arms. Are the combinations you can "custom-make" yourself better than the preassembled ones? Not necessarily. With preassembled units, you can be reasonably certain, based on your own observations and the manufacturer's reputation, that the arm and turntable are designed to work together. This may be more than a matter of simple compatibility. Any tone arm will play records on any turntable. But (for example) for minimum acoustic feedback and groove-jumping due to heavy footsteps or other vibrations, arm and turntable should be rigidly linked so that there can be no relative motion between them—or, in other words, so that any motion due to a force applied to the turntable is matched by motion of the tone arm. For home-assembled combinations, this generally requires a massive and rigid mounting board (people have been known to use 1/2-inch steel). In factory-made arm-turntable combinations, the engineers may have solved this problem some other way—as for instance in the AR turntable, where arm, turntable, and drive are joined by a rigid but relatively light cast frame, the whole assembly suspended from comparatively limp springs.

The chief reason for choosing arm and turntable separately is that you may have your heart set on a particular very sophisticated tone arm that is manufactured and sold only as a separate component. All separate turntable manufacturers make tone arms which, it can be assumed, work well with these manufacturers' turntables. But not all makers of arms (for example, ADC/Pritchard, Shure/SME, and others) make turntables.

The separately sold arms will all "work" with any turntable—that is, they will play records; but it is problematic whether an arbitrary pairing of even the best arm and best turntable will be a better combination than the best available preassembled, factory-made combinations. Unless you propose to study the mechanics of turntables and arms seriously or engage in a long trial-and-error process, you may be better off buying a ready-made combination and leaving the separate units for serious experimenters who have the knowledge, money, and patience to try to come up with something better than preassembled combinations.

- **What is anti-skating compensation? How important is it?** Skating force is a lateral force on the stylus which tends to drag the stylus in toward the center of the record. It results from the frictional force between stylus and groove wall acting through the "offset" or bend in the tone arm. Its effect is to make the stylus bear more heavily on the inner groove wall than on the outer, causing potential distortion and uneven wear. Skating force is real and present in all modern tone arms with offset heads. The question is, how important is it?

First of all, skating force, though almost latently present, is not significant in tone arms whose lateral pivot friction is equal to or greater than the skating force. Such arms need no anti-skating compensation. However, almost all current tone arms of recent manufacture, including the ones on the better automatic turntables, have such low bearing friction that the skating force makes itself manifest. It amounts to approximately 10 to 15 per cent of the stylus force.

Anti-skating compensation applies an equal but opposite lateral force to the tone arm, restoring equilibrium. According to the most reliable experimental evidence, in a lightweight, low-friction tone arm fitted with a top-quality cartridge, correct skating-force compensation permits somewhat lower tracking forces for a given amount of distortion than is possible without compensation. The benefits of low tracking force are well-known—primarily reduced record wear, and secondarily, less deformation of the groove walls which in turn should result in cleaner playback.

- **Sixteen-inch or twelve-inch tone arm?** The "professional" cult is with us everywhere, and it is nowhere more apparent than in hi-fi, where almost anything can acquire the label "professional-type" even if a true professional wouldn't be caught dead using it. It is true that "professionals" (people in the recording and broadcast industries) do use extra-long tone arms. The primary reason is that they often have to play 16-inch-diameter transcriptions, and shorter arms just won't reach. It is true that a long arm has less tracking error than a short arm, all other things being equal. But the improvement is insignificant, especially now that there are many, many shorter tone arms designed for extremely low tracking error. Furthermore, the added mass and mounting difficulties posed by the longer arm can be disadvantages that outweigh the dubious benefits of extra length. Don't spend the extra money. Put it into a better-designed arm or a good record-cleaning device.

There are some things you will want to watch for when you shop for a turntable, whether manual or automatic. The charts give the major overall dimensions of each unit, including the clearance required above and below the turntable base or chassis. If you buy the base designed for the player, you won't have to worry about bottom clearance, but if you plan to install the player in some kind of cabinet or pull-out drawer, you must be sure to allow enough depth.

*(Continued overleaf)*
Depending on the design of the unit you buy, there may be another critical dimension that is not listed in the charts. Some turntables require clearance for the tone arm to swing; the counterweight end of the arm actually extends over the back or right side of the base when the arm approaches the center of a record. Naturally, the arm must be unhindered in its swing, so you must allow room in your shelving or cabinet if the tone arm requires it.

Check to make certain that the tone arm or player unit of your choice has a sufficient counterweight range to balance the cartridge you want to use. A few cartridges of your choice have a sufficient counterweight range to achieve balance. Several manufacturers make counterweight-shaft extenders or extra weights for their tone arms for just such a situation. If not, just furtively tape a nickel or a quarter to the counterweight and don't tell anyone. It is not likely to affect the sound. There are a few cases in which a cartridge is too large for the tone-arm shell of a particular player, so you will want to check that possibility also.

Before you commit yourself irrevocably to a particular location and mounting style, try to judge whether you will be able to reach all controls conveniently, see all the control markings, and handle the tone arm without straining or trembling or fumbling. If you expect problems, alter your cabinet or shelf design, or choose a player with a more convenient placement of controls.

The most convenient position and mounting for a record player (though this is a matter or opinion) is probably an open shelf at about chest level when you stand. It is then easy to manipulate the tone arm, controls, and levers without bending or reaching. But considerations of decor often preclude this simple and obvious arrangement. The popular sliding-drawer mounting is risky unless you are prepared to be very gentle in pushing the drawer around. Jolting the player as the drawer is moved can cause the tone arm to skip across the record, producing nasty speaker noises and possibly damaging your stylus and record. Your local audio dealer will be able to show you other ways of placing or mounting a turntable. This magazine, hi-fi guides, and manufacturers' brochures are full of ingenious and handsome installations.

- **Listening for rumble.** The HF/SR Model 211 test record (available for $4.98 from Stereo Test Record, P. O. Box 3110, Church St. Station, New York, N.Y. 10008) includes rumble, wow, and flutter tests and will be of enormous help in setting up your record player and the rest of your system. But if you don’t have a test record available, play a music record, set the volume fairly loud and the bass control either flat or with a small amount of boost. Decide whether the volume level is about typical for your preference with that kind of music. The room should be very quiet. Then, seated in a normal listening area, have someone lift the pickup off the record and gently replace it. Listen for an increase in low-frequency noise when the stylus is in the record groove. Try this on silent grooves and also on a quiet passage of music. Have the tone arm lifted and replaced intermittently. In moderately good turntables, you should hear no more than, at most, a vague, barely discernible low-frequency "presence" in the room when the tone arm is lowered. The best (quietest) turntables will produce almost no sound whatever in the speakers. Try this with several recordings from different manufacturers since it is not unusual to find a substantial amount of rumble recorded into a disc.

- **Listening for wow and flutter.** It is safe to say that no turntable of widely known manufacture that sells for more than $50 will have a disagreeable amount of wow or flutter. Still, should you want to check, listen for wow with sustained organ or orchestral tones. Solo violin or wind tones may be a bit misleading because their pitch is not always perfectly constant anyway. A periodic rising and falling of pitch, typically once per revolution of the turntable, is wow. Flutter can best be heard on solo piano music. If there is a hint of warbling, as though the music is gurgling its way through a liquid, the turntable has flutter.

- **Checking speed regulation.** It should not come as a surprise that the slight drag imposed by the friction between stylus and record can slow a turntable. If this occurs, it is harmless as long as the speed of the record is correct while it is being played. There is only one convenient way to check this: put on a record, set the tone arm down somewhere in the outermost grooves, and slip a printed "strobe disc" (available at most audio shops) over the record. When viewed in 60-Hz fluorescent or neon light, the lines of the strobe disc should appear to stand still. If they drift in the direction of turntable rotation, the turntable is running fast; if they drift the other way, the turntable is slow. You can determine just how fast or how slow. Brace a pencil or some other convenient reference against the turntable base and count the number of lines that drift by in one minute. (Get someone else to do the timing.) Twenty-one lines per minute corresponds to a speed error of 0.3 per cent; thirty-five lines per minute, 0.5 per cent. If you have perfect pitch or plan to play a musical instrument along with recorded music, your turntable speed should be accurate to within 0.3 per cent or better. Some turntables have a vernier speed-adjustment knob which you can use to set the musical pitch of a record to match that of a live instrument.

It is interesting that there is no necessary correlation between motor power and speed accuracy. A powerful motor may slow down by an unacceptable amount when used with a record-cleaning device that rests on the record as it plays.
Further, the drag imposed by the tone arm is greater when it tracks the outer grooves of a record than when it tracks the inner grooves. The difference should be no more than twenty-one lines per minute on the strobe disc; otherwise, the music may sound as though it has gone flat when you start the second side of a long work of music. Practically all turntables will slow down a little with the extra drag, but the change should be within the limits prescribed above.

Some turntables have their speeds affected by changes in power-line voltage, but the top-of-the-line models of the major manufacturers can withstand 20 to 30 volts of a.c.-line variation without going off-speed.

- **Checking for acoustic feedback.** This is difficult to do in an audio shop. At home, though, once your turntable is installed, you will want to run through this test: with the motor off, place a record on the turntable and set the tone arm down on it anywhere. Turn the volume and bass controls up to the maximum settings you are like-ly to use. Switch the loudness compensation on. Then tap the turntable lightly, or stamp on the floor. You should hear nothing more than a good, healthy "whoomp." If the initial whoomp decays gradually, or, worse yet, builds up into a steady howl, you have acoustic feedback. Even in small amounts, it can spoil the clean bass you've paid so much to acquire. Acoustic feedback can usually be reduced by decreasing the mechanical coupling between speakers and turntable. This may be merely a matter of separating them physically, or of mounting the turntable on a foam-rubber mat. Use rubber thick enough and stiff enough that it is not completely compressed by the weight of the player, else the isolation will be lost. Avoid polyurethane foam, which tends to be compressed permanently under loads.

George Martinson, an enthusiastic and long-time follower of the audio scene, obtained his information on record players, tone arms, and motors through interviews with the equipment designers.

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GLOSSARY OF RECORD-PLAYER TERMS

**Acoustic feedback:** Transfer of mechanical or acoustical energy from speaker(s) to cartridge, usually through the turntable mounting. This transfer sets up regeneration, which at worst can produce a sustained howl or shudder in the speakers. In milder cases, it may increase distortion or cause bass muddiness.

**Phono cartridge (or pickup):** The device fitted at the "business end" of the tone arm. It contains the stylus, or needle. Its function is to transform the wiggles of the stylus driven by the record groove into electrical signals that are a replica of the original recorded sound.

**Cueing:** A term rather loosely used in hi-fi circles, but usually the setting of the stylus into a particular record groove, generally by means of some assisting mechanism built in as part of the tone-arm mechanism.

**Flutter:** Fairly rapid periodic changes in turntable speed, named for the fluttering or warbling effect produced in the sound. It is usually caused by irregularities in some fairly fast-rotating part of the turntable drive. Specified as a percentage of the turntable's nominal speed.

**Platter:** The round disc, driven by the motor, that actually supports the record being played.

**Rumble:** Low-frequency noise generated by turntable rotation and transferred via the pickup into the amplifier and speaker. Rumble caused by motor vibration tends to be of relatively higher frequency (30 to 120 Hz) than that due to turntable-bearing irregularities (generally 30 Hz and lower). It is normally specified as being some number of decibels (dB) below a standard level of recorded sound, but the standard levels and methods of measurement differ widely. Rumble levels measured by different standards cannot be compared directly.

**Skating force (or lateral bias):** A lateral force, created by a component of the frictional drag between the stylus and the record groove (in an offset-head tone arm), which tends to pull the stylus toward the center of the record and thus makes it bear more heavily on the inner groove wall than on the outer wall. This increases wear and distortion slightly, but the effect is often cancelled out by excessive lateral pivot friction in the tone arm.

**Stylus:** The "point" or "needle" (usually diamond) which follows record-groove variations and transmits the resulting vibrations to the voltage-generating mechanism in the phono cartridge.

**Stylus force:** Also called needle force, tracking force, or (erroneously) tracking pressure, this is the net downward force that scats the stylus in the record groove. Proper stylus force for most modern cartridges usually lies between 1 and 4 grams. There is usually one optimum value (for most recorded material) for a particular tone-arm/cartridge combination—seldom the lowest possible force setting available.

**Stylus overhang:** Distance from stylus tip to an imaginary vertical center line through the turntable spindle when the tone arm is swung to meet the spindle. It is critical, for it has a significant effect on tracking error.

**Tone arm:** The device which supports the phono cartridge and guides it as it follows the spiral record groove. Ideally it should do nothing to impede the lateral or vertical movement of the cartridge. It is usually adjustable to accommodate different cartridges and stylus-force requirements.

**Tracking error:** Angular deviation from perfect tangency to the record groove. Record grooves are cut by a stylus-and-cutter-head assembly that rides in a straight line across the blank master disc on a rotating leadscrew above the disc. The leadscrew in effect defines a radius of the disc. In playing a recording, however, the playback stylus describes an arc because it is carried by an arm pivoted at one end. As the stylus moves inward toward the center of the disc, its angular relationship to the groove changes. At best it can be perfectly tangent to the groove at only two points on the record surface. Proper arm design, however, can reduce tracking error to practically insignificant amounts. Tracking error has a significant effect on distortion. So-called "straightline tracking" designs (of which the Marantz turntable is the only current example) have virtually zero tracking error because they duplicate the radial motion of the cutter assembly. They tend to be extremely expensive because of the moving mass and friction problems that have to be overcome.

**Tripping:** Initiation of the record-change or turn-off cycles by the movement or position of the tone arm in automatic turntables.

**Wow:** Fairly slow periodic changes in turntable speed, named for the slow changes in musical pitch produced in the sound. It is particularly obvious in sustained notes. Generally caused by irregularities in the turntable platter or the recording (such as warp or an off-center hole in the record). Specified as a percentage of the turntable's nominal speed.
EDDY ARNOLD, once affectionately known as the "Tennessee Plowboy," won't run for governor of Tennessee—not for the next couple of elections, anyway. As he puts it, "I'm not through makin' money yet. Besides, after I was governor I couldn't go back and be an entertainer. The dignity of the office wouldn't allow it. Reagan couldn't go back now and be an actor."

Arnold's possible candidacy was first proposed by former Tennessee Governor Frank Clement, an old friend who simply picked Arnold to succeed him (in Tennessee governors are prohibited consecutive terms). Arnold had done television spots for Clement and made speeches for him in two campaigns, and he is honorary chairman of the Young Democrats in his home state. (Essentially conservative, he voted for Barry Goldwater in 1964, but having accepted President Johnson's hospitality at the ranch in Texas and at the White House, Arnold refused to work for Goldwater in the election.) When he does run for governor, it will definitely be as a Southern Democrat.

But no matter what his political future may be, Eddy Arnold is now the chief reason why more than 40 per cent of the records sold in America are country-and-western. He is also the wealthiest of country-and-western singers, having sold forty-five million singles and four million albums during his career. The Nashville sound has brought him a four-hundred-unit apartment building, a prestressed concrete business, a well and crane company, an automobile dealership, a music-publishing house, and land all over the south and west. He, in turn, has brought the Nashville sound into the mainstream of American music.

At the age of forty-seven, with twenty-six years as a professional singer behind him, Arnold is still cutting four albums and four or five singles a year. He was the first country singer to crack Carnegie Hall in New York (in 1966) and the famous Cocoanut Grove in Los Angeles (late 1967). He sings with small-city symphonies and at large state fairs—for about $10,000 per evening.
With an annual income estimated at $500,000, Arnold just doesn’t want to be a governor. "They tell me I would win," he says, "but then I wouldn’t be able to sing, and if that happened, I just wouldn’t be me anymore."

Arnold comes by his country flavor honestly (he was born in Henderson, Chester County, Tennessee, the son of a sharecropper), but just as honestly he has survived—indeed led—every change in country-and-western music until today, when he and Dean Martin and Nancy Sinatra all share the same sound.

In his youth Arnold worked in a sawmill and "plowed with mules." "I began singing at high school dances and candy pulls," he says, "My first professional job was on a radio station in Jackson, Tennessee. I was workin’ as an ambulance extra at the same time. I got paid twenty-five cents a call and a free room in a funeral home. It took me eight years to make the first record and two more before I had a hit, That’s How Much I Love You, in 1946."

Arnold had signed with RCA Victor, and he has been with them ever since. Like almost every other country singer, he appeared on the Grand Ole Opry at various times during his early years as a star, but he doesn’t feel that he really got his start there. At first, his superior material (something he has in common with Elvis Presley) kept him on top of the country heap. Songs like Anytime, Bouquet of Roses, Cattle Call, and The Tennessee Waltz were enough to set him apart from his contemporaries, in spite of his rather ordinary voice and the same twangy approach that everyone else used in country music until fairly recently.

"Suddenly I went cold," Arnold says. "There weren’t enough of the old-time country fans to keep me up there, singing that way." So he returned to the 107 -acre ranch in Brentwood, Tennessee, near Nashville, where he lives with his wife of twenty-five years and an eighteen-year-old son (his twenty-one-year-old daughter is married). "That’s a lot of acres, and I did a lot of walkin’—you’d be surprised how much thinkin’ you can do when there’s nothin’ but the birds singin’ and the crickets chirpin’. I decided I would have to be a universal performer, where you just walk out and perform, and not just be tied to pop or country or even just singin’."

Out went the checkered shirts and other western paraphernalia—today he wears western costume only for rodeos. "I didn’t dig rhinestone suits either," he says. He now wears a plain black suit—or a tuxedo for special occasions like the Grove and Carnegie Hall. He changed his arrangements, softening the strings ("the fiddlers read the music now, that’s the difference"). He still sang sentimental songs, but otherwise the plowboy was plowed under.

Arnold modestly volunteers: "I will tell you quick I..."
arnold is equally at home with neighbors on the farmhouse back porch or as a guest in the governor’s mansion. At right he is shown with Frank G. Clement, former Governor of Tennessee, on the occasion of his proclamation of Eddy Arnold Month.

Robert Windeler, based in Los Angeles, is a roving reporter on cultural events in the West for the New York Times. He is currently at work on a biography of the British star Julie Andrews.
Dr. Barry N. Shaklan, a Captain in the U.S. Air Force Medical Corps presently stationed in San Antonio, Texas, was faced with the same problem that troubles most audiophile military men: how to achieve high-quality sound with high reliability and at the same time maintain reasonable portability in his system. Dr. Shaklan's solution was to employ a standard free-standing pole-and-cabinet system manufactured by Omni and modified to the demands of his equipment. The four spring-loaded poles run from floor to ceiling and are quite stable with the cabinets and equipment installed.

The McIntosh equipment visible in the upper right and left cabinets consists of an MR 71 FM stereo tuner and a C22 stereo preamplifier. The power amplifier, also a McIntosh unit, is the MC240. A Crown SS-824 four-track stereo tape recorder has been used for the past three years to transfer all of Dr. Shaklan's discs to 10½-inch tape reels—which now number about fifty. The record player is a Thorens TD-124 turntable equipped with a Shure-SME tone arm and an ADC 10/E phono cartridge.

There are two main sets of speakers: a pair of JBL Olympus systems in the living room (one of them is visible at the lower left of the photo) and a pair of Acoustic Research AR-3's to serve the upstairs area. Accessories, some of which are visible, include a Fairchild Compander (above the preamplifier), a pair of SupereX ST-M headphones that work from a Jensen CC-1 headphone control center, a remote-control switching system designed and constructed by Dr. Shaklan, and a Yale Audio Timer installed below the tape recorder.

Dr. Shaklan writes, "My wife and I enjoy going to live concerts, and while in Europe we traveled to as many of the music centers as possible. I'm not at all disappointed with the sound of my system in contrast, and there is something to be said for being able to select the program and sit back with one's shoes off to enjoy it."
THE SECRET (C-&-W)

SINCE MY secret is out around my house, I guess I might as well make a clean and public breast of it: I enjoy country music. I don't know when I first began to realize this. Certainly I fooled myself as long as I could. But in this effort to be honestly objective, it is perhaps best simply to report the facts. My job often requires that I drive late at night. On one of these nocturnal jaunts some time ago, as I idly scanned the radio dial, my car was suddenly filled with "the Nashville sound," coming, I discovered later, from Des Moines radio station WHO's all-night Country Music, U.S.A. program. I date my ruin from that moment. Gradually the habit grew: I found myself tuning in the program first occasionally, then regularly, and now consistently. I am hooked.

It is fashionable in some circles nowadays to admit to liking country music, but not in my circle. I have a reputation in my neighborhood as "the man who likes Bartók," a taste born of hardship (my father was a fiddler for barn dances in Kentucky) and nurtured slowly and painfully. The last time I moved, one of the moving men glanced at my record collection, and, seeing Beethoven upon Beethoven and Bach upon Bach, said involuntarily, "Oh, you're one of them."

I have been one of them for several years, and during that time I acquired a sympathetic wife and a record collection to match, along with the necessary assortment of electronic components. So it is with considerable pain that I make this revelation. But it is wise to know just where the chinks in one's armor are.

When I first became aware of my deterioration—if deterioration it is—I fought against it, enlivening parties by making fun of those standard c-&-w phrases about "honky-tonks," the people "out there in radioland," and "the old clock on the wall," and quoting Max Shulman (who quoted Ernest Tubb) telling a young country singer to "sang from the hort" if he wanted to be a "stor." So far as the car radio went, I vowed to undergo complete withdrawal. But my fingers, as if they had a will of their own, repeatedly tuned in some Nashville voice on those trips late at night. The flesh is weak, as many a country song writer has admonished us in many a country song.

Although, in guarding my secret, I had long since become a psychological wreck, I felt I had betrayed little sign of my condition until a stormy night a few weeks ago when my wife waited up for me. As I pulled the family Porsche into the garage, WHO was broadcasting a record eulogizing Mr. Hank Snow (a very popular country singer, in case you are one of the benighted). A word about the radios in Porsches is helpful here: the car comes with two speakers already "custom-installed,"
and some acoustical quirk of the hood and fenders, I guess, results in the phenomenon that, when you are getting sufficient volume inside the car, you get a lot more outside—even with doors and windows shut.

So my wife heard it all. The cat was out of the bag, as they say in Nashville. She was kind about it, although I could tell she was quite shaken. WHO by now had changed to a twangy version of Steel Guitar Rag. "Hearing that sound coming out of that car," my wife said over the din, "is like hearing Artur Rubinstein playing the ukulele."

I explained (or tried to) what I believed to be the reason for my backsliding. Basically, it is a growing abhorrence for the bland, washed-out stuff called "popular music" and a disenchantment with radio programming that relies on such shopworn goods. Most of the time, a listener to AM radio has only two choices. He can listen to popular music—in which case he is almost certain to hear, no matter what the station, some square male singer nasally intoning an "old favorite" that everyone is tired of, a girl singer bellowing her head off, or one of those teenage groups that all sound alike. Or he can listen to hillbilly music.

The strains of a song called Somewhere East of West Berlin wafted out of my radio speaker on some lonely road recently, and it brought to mind two things: (1) the distress call of a banshee with adenoids, and (2) the fact that country-and-western music keeps abreast of current events while popular music still wallows in corner-drugstore adventures and hot-rod, surfing, skateboarding teen-age romances. The Berlin song was recorded by hillbilly singer Stonewall (how's that for point?) Jackson, who sings as if he'd been breached. But whatever its musical failings, the song is one of a long line of country ditties that spring straight from the headlines—and the "hort."

When the Supreme Court made the decision that states were not to require daily prayer or Bible readings in schools, country-and-western responded with a song that pleaded: "Don't let them take prayer out of our classrooms." The song apparently was not very successful—I heard it only once. But it was a bona fide record, done by a group called, as near as I can remember, Claude Snodgrass and the Possum Stompers.

Even in wartime, the few pop songs that have reflected an awareness of the real world have, alas, usually been the pawns of propaganda, as exemplified by such World War I numbers as Over There. But country music really comes to grips with things as war. During the Second World War, c-&-w songs with such titles as My Filipino Baby depicted the sociological
anomalies that result when you put farm boys in exotic surroundings. And it was only hillbilly music that captured the realistic, heartbreaking side of war in such a song as *A Dear John Letter*, wailed and talked, respectively, by Jean Shepard and Ferlin Husky during the Korean conflict. The contemporary equivalent, of course, is *Keep Those Cards and Letters Coming In*, by George Hamilton IV.

The gulf between hillbilly and popular music is even wider when it comes to dealing with the thousands of minor peacetime crises. One of the hottest of country songs not long ago was *The Little Brown Shack Out Back*, which title needs no explanation (I hope) except that it resulted from our cities' tightening up of their health codes and zoning regulations. Such day-to-day milestones of social and cultural change, chronicled in all their painful detail by hillbilly song writers, have been ignored by popular music.

One sometimes gets the idea that the new country songs are being written by a joint committee of the Ku Klux Klan and the John Birch Society. Country singers often have names like Johnny Freedom, and sing songs about how the flag is being trampled (one starts with a long recitation to this effect and goes into the tune of *America, the Beautiful* for a finale), about modern-day carpetbaggers in the South, about the errant ways of the U. S. Supreme Court, which "banned the Bible." as some song writers put it, and about high taxes. Of course, country song writers are not above a little name-dropping now and then, even if it involves identifying with a political outcast: "Everything's OK at the LBJ," one song tells us. Mostly, though, country songs extol the Good Old Virtues, many times using a cliché that Edgar A. Guest wouldn't touch: "To me you're an angel./ But folks think you are cheap./ Well, you're known by the company you keep."

The most endearing quality of country music is its sense of humor. Roger Miller, the country song writer and performer who is so popular he is also claimed by the pop field, eschews right-wing philosophy in favor of some good mainstream joshing (*Atta Boy, Girl; You Can't Roller Skate in a Buffalo Herd*; etc.) and social satire ("I'm the number one attraction/ At the supermarket parking lot./ I'm the king of Kansas City./ No, thanks, Omaha. Thanks a lot.").

Homer and Jethro have made a fortune satirizing country music, which proves the field and its fans can take a joke—they didn't sell all those records to over-civilized city types. Homer and Jethro were at it again recently when others in the field were singing songs lambasting demonstrators against the Vietnam war. The two did a parody of the country song *All I Have to Do is Act Naturally*, in which they threw a broadside at the prevailing philosophy by singing, "They're gonna put me on a troop ship./ And send me where the fighting is the worst./ They're gonna put me in the Army./ But they're gonna have to catch me first."

The humor in country music is sometimes unintentional. The industry's penchant for sequels to best-selling tunes can be downright amusing even to the folks out here in radioland. It was inevitable that Miller's *King of the Road* would spawn *Queen of the House*, set to the same melody, and that *Six Days on the Road*, a truck-driving song suitable only for a male singer, should prompt the answering *Six Days of Watin'* to the same tune for girls. Years ago, the song *I Didn't Know God Made Honky-Tonk Angels* was answered by a feminine version advising naïve menfolk that *It Wasn't God Who Made Honky-Tonk Angels*. In this case, both songs stole their melody: it originally was the tune for *The Great Speckled Bird*, a multi-million seller for Roy Acuff. (Incidentally, the country musicians are missing a bet by not reviving *The Great Speckled Bird* more frequently, with the present political situation being what it is. The song might sell even better now, if properly sung from the hort.)

I realize as well as the next man how bad musically some country music is. But it is never bland. The difference between popular and country music is like the difference between professional and high-school basketball. The one is technically flawless, and unbelievably dull. The other is ragamuffin, helter-skelter, replete with wild shots and double dribbles, but it is always alive. Where in popular music is there anything to match the lament of the country boy who has just discovered the perfidy of city women and divorce-court judges: "I really got the business doing pleasure with you"? What does popular music have to set against Jimmy Dickens' *She Ain't a Country-Music Lover*, in which he describes for us flabbergasted listeners a young lady who "thought Ernest Tubb was a sincere place to take a bath"? Then there's the country plaint entitled simply *The Hurts Put Me in the Driver's Seat*. Now, I ask you, neighbors: when has Buddy Greco ever done anything to equal *that*?

So, as I told the wife, if it has to be one or the other on those long trips late at night, give me the Nashville boys every time. Besides having vitality, some of them—Marty Robbins and Eddy Arnold, for example—can even *sing*. Of course, it would be a different situation if some radio station would play classical records at that hour. But as I said it, I was a bit glad that I was never going to be put to the test. Would I, I wondered guiltily, switch over to *Country Music, U.S.A.* for a change of pace from Bartók when I was out there miles from home—where nobody would ever know?

Noel Coppage, newspaperman and humorist, has reported the news from the various parts of Radioland, U.S.A. He is at present a staff writer on The Daily Sentinel in Grand Junction, Colorado.
BUCK OWENS

"A good song is a good song, no matter what field of music it's in."

By John DeVoe

Bakersfield, California, a city of 68,000 inhabitants in the San Joaquin Valley of central California, is often called Buckersfield, Nashville West, or Country Music's Second Home. The appellations are quite serious, and all are in tribute to the city's third-largest industry: country-and-western singer Buck Owens. Agriculture ranks first in this, the largest farming area in the United States, and is losing no ground whatsoever; oil, the second largest export, just keeps gushing. But Buck Owens may yet catch up.

As the most popular country singer for the last three years, he is well into his second million dollars. And most of the first million is wisely invested. He owns two country-music radio stations, KUZZ in Bakersfield and
If the country-western flavor has yet to titillate the palate of the general American public, it still has success abroad—as in Japan.

KTUF in Phoenix, the only 50,000-watt station in all of Arizona. He has a record store, a talent booking agency, a music-publishing firm, his own printing company, and two ranches with about eighty head of prize Angus cattle between them.

He has lived in Bakersfield since 1951, when he arrived—broke but determined—from his boyhood home in Mesa, Arizona. He sang and wrote songs for several years (he spent seven of them in the same tacky nightclub, the Blackboard) before anything much happened. When it finally did, Buck took a lot of people along with him.

"All my people are here with me," he says, meaning not only that he has installed his parents on one of the two ranches and that his sister is his general manager, but that a quarter of the active performers in country music have followed his example and settled in or near Bakersfield. Tommy Collins, Red Simpson, Merle Haggard, Bonnie Owens, Fay Hardin, Bob Morris, Kay Adams, Dick Curless, and Joe and Rose Lee Maphis are near neighbors. Rose Maddox lives in Pomona, 140 miles south, and visits a lot.

Owens spent one hundred and six working days away from Bakersfield last year, however, touring with his four-man band, the Buckaroos, and promoting his own big-beat brand of country-and-western, with emphasis on the western. Thirty of the one hundred and six days were spent in Japan ("extremely west," as he puts it) playing two live concerts a day for fans in Osaka, Kyoto, Nagasaki, and Tokyo. "I've been an entertainer for eighteen years, and for the first time I was scared to death," he says. "The Japanese are ardent fans, but they just sit on their straw mats and listen."

Listening is something much of the general public in the United States doesn't do when it comes to country music, according to Owens. "It's changed in the last five years; we're making progress all the time." He appeared on the Dean Martin television show recently and observed that "every song Dean did was a country song."

His own record sales are the best testimony to the phenomenally increasing acceptance of country music. Since 1963, his first big year, Owens has accounted for $10,000,000 in record sales and has had fifteen number-one hits on the country-and-western song charts. All of his nineteen albums are in the Capitol Records catalog, and even his recordings of hymns are snapped up by eager fans.

In personal appearances, still the staple of country-music performers, he does just as well. Last August 12, his thirty-eighth birthday, he played to 22,000 people at the Illinois State Fair. Just recently he and his Buckaroos received $10,000 for a single appearance, a figure rarely reached by pop-music stars.

"There's no way of slowing down, much as I might like to," he says, ticking off his other enterprises: a syndicated television show out of Oklahoma City, producing records for other artists, and his own song-writing, which is where the really big money is.

Owens wrote Cryin' Time, Together Again, Act Naturally, and I've Got a Tiger by the Tail. He recorded all of them, of course, and did very well with them indeed. But he did even better when Ray Charles made Cryin' Time a standard and the Beatles sold three million copies of Act Naturally on which they used Buck's arrangement. Ray Charles later recorded six Buck Owens songs on one album. According to Owens, "The big secret is to write a song, then control it [hence the music publishing company]. When other artists perform it, you get all the royalties."

"A lot of pop people are going country with our music," he says, "and they're making fantastic records of them." He explains that one reason his music is country-and-western may yet find the broader audiences it deserves—Dean Martin (below), Perry Como, Andy Williams, and others all sing it.
Radio stations are sort of like land—both are somethin’ they’re not gonna make any more of.” Canny Owens owns two of them. So readily adaptable for pop-music audiences is that everything he does—fast or slow—has a driving beat. The beat is essential in the Southwestern brand of country music heard anywhere west of Texas. Owens is the chief practitioner of country with a beat, also known as Western Swing. It’s highly danceable, and teen-age combos in the West play it for dancing as readily as rock-and-roll.

“Most people picture country music as sung by the tobacco-chewing, banjo-pickin’ singers of twenty years ago,” Owens says. “We’re taking out that old Bluegrass and all those fiddles.” The Nashville sound, on the contrary, is stringy, with lots of fiddles. “Ours is a different feel, with much more rhythm. Here we’re motivated to dance. I grew up with drums, but it wasn’t until just recently that they allowed drummers into the Grand Ole Opry. Back home, when we went to high school dances as kids, we danced to a country band. And now I just don’t like music without a beat.”

“Back home” for Owens is Texas and Arizona. He was born Alvis Edgar Owens, Jr., August 12, 1929, in Sherman, Texas, near the Oklahoma border. His father, a farmer, moved his wife, two sons, and two daughters to Mesa, Arizona (near Phoenix) in 1937. Buck, who one day just asked everyone to call him that, says “I remember being a dirt farmer’s son and what it meant: wearin’ Bibb overalls to school, havin’ a biscuit or some salt pork for lunch. If we were lucky we got an orange.”

On his thirteenth birthday his parents gave him a mandolin, which he taught himself to play. Later he mastered the guitar and half a dozen other instruments. When he was sixteen Owens had a nightly radio show on KTYL in Mesa; he played the eight-string mandolin, and a partner played guitar. KTYL was advertised as the first drive-in radio station in the country, and fans could drive into the parking lot next to the station and watch the performers through a large glass window.

In 1951 the whole Owens family moved to Bakersfield. Buck became a featured guitarist on the records of other country artists and toured central and southern California with his own band, the Schoolhouse Playboys. “Our group played country, but we could slow it down and play Latin music, Tea for Two, or Sweet Georgia Brown,” he recalls. He doubled on saxophone and trumpet, and played guitar as well. In 1958 he landed on the same bill with Loretta Lynn, who is the current top female country-and-western singer, at the Club Britannia in Seattle.

“When I was about twenty-two or twenty-three, I wanted to get to be somethin’ in the country-music business, and it looked like the best way was as a song writer. I’d knocked on many doors in attempts to make records myself, and people always asked ‘Got any songs?’ They said they had a lot of singers, but they needed material. So I started writing.” (Continued overleaf)
He had his first hit in 1956, a song called *Down on the Corner of Love*. It was made famous by Red Sovine, but recorded by several other artists (including Buck Owens, who did it for the obscure and now defunct Pep label). A year later he signed with Capitol Records in Hollywood; he had his first hit as a singer in 1960, *Under Your Spell Again*. His own personal favorite, *Together Again*, has been recorded by forty different performers. He still writes 80 per cent of his own material, usually with Buckaroos Don Rich.

"I get these songs just as I go along," he says. "For example, I kept seein' those Enco gas-station signs, and I thought up the tune *I've Got a Tiger by the Tail*. I never write words down; I just formulate them and sing the song over in my mind several times. If I still remember it four days later, I record it. Heck, if I forget it after four days the public will too." His themes are uncomplicated country: "I pick ideas that everyone would like. We leave the protests and the messages to others."

Owens regards his success with pop singers and pop fans as "just another tribute to country music. We no longer have to live with being called hillbillies. This has got to be attributed to getting a lot of the flames out, taking out the overalls and the outhouses." But he himself has never considered country music "hillbilly" music. "Country music is American music. It comes right from the soul, right from the people. Country music didn't come from overseas. Country music came from right here, now, today, yesterday, last week, last year."

He has pledged to his fans, in writing, that he will sing "no song that is not a country song, make no record that is not a country record." Although he refuses to be known as anything but a country singer, he has done as much as anyone else to "popularize" country-and-western music—anyone, that is, except Ray Charles, who according to Owens has "sold enough country songs to burn a wet dog."

In the popular market, Owens feels, "country-and-western'll have a good run, and then something else will catch on." He is even prepared to bow out of the pop scene: "With the drawing together of pop, rock, and modern country-and-western, I think we're going to lose it to smart people—like Dean Martin, for instance."

Buck did the liner notes for a Lovin' Spoonful album, and he is an unabashed Beatles fan: "I have been since the inception of the Beatles, and I come by it honestly because it was before they did *Act Naturally*." He rarely listens to country music on the radio. "I listen to the other stations to see what's goin' on. A good song is a good song, no matter what field of music it's in."

Buck Owens looks, dresses, and talks like a cowboy, and he even rides herd in rare moments. He is tall (6' 1'') and medium husky (185 pounds). He is given to bright orange or gold-spangled western suits that have to be hand tailored because they are too outrageous for any store, even in California. He has dark blond hair, blue eyes, and a wide, ready smile.

He is suspicious of the fans who come to see him in Carnegie Hall and "other big places." "You never know if they're coming out of curiosity or not." He is devoted to his hard-core country-and-western fans: "They're clanish; if you're one of them, they'll stick with you for life. They have great pride in being a minority. I wouldn't trade 'em."

His biggest fans are in his family, and his own mother is literally the president of his fan club. Maisie Owens, or "Mother Owens" as she is known to the club members, has been on a leave of absence for illness. She has been temporarily replaced by "Tex," a pretty blonde given to lavender levis and exclamation points after every sentence—spoken or written. Dorothy Owens, Buck's sister, is general manager of all his enterprises and is in complete charge when he is on the road. She runs a staff of forty-one, including the employees of the two radio stations.

He bought the radio stations because he saw them as the best kind of investment. "Radio stations are sort of like land—both are somethin' they're not gonna make any more of. I never could see how a radio station could go broke. I wanted to try my luck at it."

His parents live on the larger (107-acre) ranch in Paso Robles, California, where most of the cattle are kept. Owens, his wife of twenty years, and his four sons and one daughter live on a 30-acre spread just on the outskirts of Bakersfield. His oldest son, who is nineteen, sings, plays guitar, and is a disc jockey under the name of Buddy Allen.

Owens' travels take him in excess of 100,000 miles a year, and he is trying to cut back by going only to "places that can be got to in one day." In the jet-age that includes the Netherlands, where he and the Buckaroos will appear this spring (they had a highly successful European tour in 1965), and Hawaii, where he and his band performed in December.

When he is at home, he loves to play golf, smoke pipes and cigars, and eat steaks, black-eyed peas, and cornbread. He doesn't drink but doesn't condemn those who do. He is square, but beneath the down-home exterior there beats an ambitious heart that long ago determined "to be a big success" in his folksy field.

The real secret of that success, however, seems to be the grateful, gushing Buck Owens motto (and title of one of his hits of last year): "It Takes People Like You to Make People Like Me." That seems true enough.

John De'Poe, a freelance writer on American popular culture, is well known for his perceptive reporting of new trends in music. This is his first appearance in the pages of *HiFi/Stereo Review*. 
BENJAMIN BRITTEN'S A MIDSUMMER NIGHT'S DREAM

Shakespeare's fairyland is brought richly and poetically alive in a brilliant operatic treatment

Benjamin Britten's operatic treatment of Shakespeare's A Midsummer Night's Dream (1960), just now available in a joyous, brilliant recorded performance by London, was produced a few years back in New York with but wan approval from either press or public. The New York City Opera Company's production, to the best of my recollection, was an impressive one and, hearing the score again in this new recording, I am more baffled than I was at the time by its admittedly respectful but tepid reception.

It is a truism that the Italians or the French—indeed, composers of just about any country—will tackle Shakespeare as operatic subject matter, sometimes, as in Verdi's case, with significant international success, but that British and American composers are wary of the playwright. They have good reason to be, Heaven knows: since Shakespeare's language is music—the supremely musical use of English—the composer who tries to heighten it had better be awfully good if his courage is not to be interpreted as sheer gall. The audiences of English-speaking countries, when they go to hear such a masterpiece as Othello sung in Italian, suffer no pain; but the same audiences hearing, say, Antony and Cleopatra, sung in an adaptation of Shakespeare's original English text, might well flee the theater in embarrassed panic.

Combining my recollections of the work on the stage with a careful perusal (with score) of London's new recording of Britten's A Midsummer Night's Dream, I will not damn the work with faint praise by suggesting that it is the best English-language operatic setting of Shakespeare I know of. (Some of the others one could compare it to might still lead a reader to the conclusion that Britten's opera is a mess.) I will, instead, simply suggest that Britten has succeeded in an all-but-impossible task with an all-but-exasperating brilliance.

When the work was produced in New York, there was some critical complaint that the opera lacked coherent, idiomatic lyricism; lacked, in fact, much of any lyricism at all. To a degree, the statement is accurate. But it occurs to me that it is less an indictment of the work than it is testimony to Britten's shrewdness. Since he has never been celebrated for his lyric invention for the human voice anyway, one can safely assume that the plainness of much of the opera's vocal style is a strategy of underplaying the words rather than making any attempt to "out-sing" them. Even so, when the moment is right, Britten intersperses his lyrical declamation with exquisitely "melodic" vocal episodes. Not arias; there isn't a proper "aria" in the entire opera—any more than there is in Pelléas or most of Falstaff. But short, song-like passages—rather like the musical settings used in legitimate productions of a play like The Tempest—turn up with a consistency and a frequency that together suggest that the composer thought of them, collectively, as a binding structural device for the opera. Oberon's...
"I know a bank . . ." and Tytania's "Come now, a roundel . . ." (both in Act I) are lovely examples.

The composer’s treatment of those lines from the play that have gone into the language as commonplaces is canny. "The course of true love never did run smooth," for example, would tempt a more naïve composer to do something "special" musically. Britten just throws the line away, lets it pass in a bare, unremarkable setting. And with his treatment of the third-act scene in Theseus' Palace, Britten walks the fine line between wit and vulgarity with astonishing steadiness in a quick-change caricature of celebrated operatic styles that jars at everyone from Mozart to Rossini to Verdi to the verismo boys. It's possible that the scene stresses the composer's ingenuity at the expense of the text, but it is too irrevocably funny for me to carp about.

Obviously, if Britten has treated the text with the simplicity I have described, his orchestra must bear the heavy burden of evoking the aura of magic and mystery the play demands. It does, and we know from the first pages of the orchestral prelude that Shakespeare's fairyland will be brought richly and poetically alive. I can think of no composer alive today who can surpass Britten's inventiveness in using small orchestral forces, and he does it again here. Some of the opera's most beautiful moments—I am thinking particularly of the rigidly diatonic, vaguely Coplandesque prelude to Act III—exist in the orchestral writing. But if this is a shortcoming, as has been suggested, then the majority of important 'serious' lyric theater pieces since (and including) Wagner will have to take the same rap.

The performance itself is glittering. Britten's conducting produces sounds from the London Symphony that are crackingly alive, delicately colored, expressive. The singers are all one could hope for: countertenor Alfred Deller is an extraordinary Oberon, Elizabeth Harwood sings radiantly as Tytania, and how Peter Pears (Lysander) still manages to sing as fluently and prettily as he did years ago is my own particular puzzle for the month.

The recorded sound is spacious and clear and the stereo treatment, as it too rarely does in recorded opera, makes fine dramatic and musical sense. William Flanagan

BRITTEN: A Midsummer Night's Dream. Alfred Deller (countertenor), Oberon; Elizabeth Harwood (coloratura soprano), Tytania; Peter Pears (tenor), Lysander; Thomas Hemsley (baritone), Demetrius; Josephine Veasey (mezzo-soprano), Hermia; Heather Harper (soprano), Helena; Stephen Terry (acrobat-speaking role), Puck; John Shirley-Quirk (bass), Theseus; Helen Watts (contralto), Hypolyta; Owen Brannigan (bass-baritone), Bottom; Norman Lumsden (bass), Quince; Kenneth MacDonald (tenor), Flute; David Kelly (bass), Snug; Robert Tear (tenor), Snout; Keith Raggett (baritone), Starveling; Richard Dakin (treble), Cobweb; John Prior (treble), Peach Blossom; Ian Wodehouse (treble), Mustardseed; Gordon Clark (treble), Moth; Eric Adler (treble), a Fairy. Choirs of Downside and Emanuel Schools; London Symphony Orchestra, Benjamin Britten cond. LONDON ® OSA 1385, @ AM 4385® three discs $17.37.

LEONTYNE PRICE: A PRIMA DONNA REVISITED

Her second volume of operatic repertoire for RCA Victor is magnificent from start to finish

The elaborate album presentation RCA Victor contrived last year to showcase the art of Leontyne Price ("Prima Donna," LSC/LM 2898, reviewed in these pages in January of 1967) was highly successful—and completely justified by the musical content. The follow-up album ("Prima Donna, Volume 2"), just released, is even better. Again, the repertoire ranges over a generous expanse of eras and styles, and the selections have been made with intelligent care. The program is varied, provocative, and congenial, and Miss Price's work is awe-inspiring in its versatility and artistic penetration. Her voice has never sounded more radiant—here is a recital to bathe the listener's ears in lustrous streams of soprano sound from start to finish.

To cite specifics, the long-spun phrases of "Care selve" are marvels of legato control, and "Or sai chi l'onore" (the recitative is breathlessly convincing) is delivered with vengeful fury yet with fastidious accuracy. The lovely Der Freischütz aria floats some beautiful piano phrases in its opening andante, while each phrase of the allegro is cleanly articulated, tense without being rushed. (Francesco Molinari-Pradelli, by the way, whose conductorial support is admirable throughout, belongs to that minority of current operatic conductors who know that haste does not automatically guarantee excitement.)

The grand Sleepwalking Scene from Macbeth is not only beautifully sung—it is capped by a flawless D-flat—but has an eerie, altogether believable atmosphere about it. The artist moves from one role to another with an unfailing sense of characterization, always portraying the part from within, and employing a rich palette of expressive vocal coloration. Only in the first, semi-recitative half of "La mamma morta" does she deliver her phrases with something less than absolute poise; but once the broad cantilena is reached with "Vivi ancora! Io son la vita!", the rest is all it should be. The voice is magnificently sustained in the higher reaches throughout the recital. It is somewhat breathy and insufficiently
supported at the low extreme of the range, but when Miss Price is in top form—as she is here—this deficiency must be judged insignificant.

The orchestral playing is sumptuous, and Richard Mohr has again outdone himself with an outstanding technical production. Bravo, bravi, and, above all, brava!

George Jellinek


Masters of Jazz: Pee Wee Russell and Red Allen

Impulse's new recording of a concert at M.I.T. is a fundamental disc of "modern traditionalism"

Although their backgrounds and styles were obviously different, Pee Wee Russell and the late Henry "Red" Allen were alike in the depth and delicacy of their lyricism. (Allen, to be sure, was a showboater as an M. C., but when the time came in each set to be serious about the music, he played with a fiery grace and a disciplined passion that were real extensions of the shy, proud Allen off the stand.) Their careers were somewhat similar too, in that for many years they were categorized as "traditional" jazzmen—that meant When the Saints Go Marching In at least once a night and no stature among those of the young who thought jazz was born with Charlie Parker.

In recent years, however, there has been a gradual realization that Pee Wee and Red had kept their ears open all those decades and that they had, moreover, presaged several modern developments in some of their early recordings. Therefore, by the time of their M.I.T. concert in October, 1966—now available in Impulse's "The College Concert of Pee Wee Russell and Henry Red Allen"—it was no longer a surprise to find such pieces as Thelonious Monk's Blue Monk and John Lewis' 2 Degrees East, 3 Degrees West on the program. Red and Pee Wee were at M.I.T. to illustrate a lecture by Whitney Balliett, jazz critic for the New Yorker.

Balliett's comments are not included, but the album certainly does illustrate a number of the basic verities of jazz.

Here, for instance, Russell and Allen are masters of phrasing—the shaping of line and time into a coherent personal perspective which, in Russell's case, produces a penetratingly original Pee Wee's Blues that is nonetheless thoroughly grounded in blues tradition. For although the phrasing of each is distinctive and modern, Russell and Allen do demonstrate traditionalism, a traditionalism that is broader than the narrow cult in which many of their older admirers have tried to encapsulate them. The commitment of Russell and Allen was always to the basic concept of the first jazz that horns should sing: that each man must find and develop his own sound, and that once the foundation has been laid, there is no point in being a jazzman unless you can change your music as your experiences change.

It is this sense of constant searching, of concentrating on how to tell it exactly the way it is now, that gives this album its special intensity. It is also characteristic of the
empathic support by a younger-generation rhythm section—Steve Kuhn, Charlie Haden, and Marty Morell. In addition to the commentary on Monk and John Lewis there are blues and standards. On one of the latter, *Body and Soul*, Red Allen proves again that he was a "soul" singer long before that term had acquired its current status.

This is not an album that is likely to have large sales, for "modern traditionalism" of the Allen-Russell bent is not in the forefront of current jazz interest. I would advise, therefore, that you get it while it's still available. It is a fundamental jazz record.

*Pee Wee Russell/Red Allen: The College Concert of Pee Wee Russell and Henry Red Allen.* Pee Wee Russell (clarinet), Red Allen (trumpet, vocals), Steve Kuhn (piano), Charlie Haden (bass), Marty Morell (drums). *Blue Monk; I Want a Little Girl; Body and Soul; Pee Wee's Blues; 2 Degrees East, 3 Degrees West; Graduation Blues.* IMPULSE ® AS 9137, ® A 9137 $5.79.

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**BOBBY HACKETT'S TASTEFUL "CREOLE COOKIN'"**

*The sounds of old New Orleans are deftly recreated in the trumpeter's latest release for Verve*

*Every* release by Bobby Hackett is for me a thing to cherish—like a drawer full of old woolen mufflers—but his latest on the Verve label ("Creole Cookin'") is just about the best he's ever done. I will try to contain my exuberance and sound intelligent about it, but underneath I have to admit that there is simply nothing I can say that might dissuade you from buying it. It is simply the greatest.

I'll never cease to wonder how Bobby manages to recreate the old New Orleans back-street sounds so completely and make them as deft and breezy as a Richard Lester movie, but proof that he can lies in this disc. The first cut, *High Society*, sent me whirling into the growing-up days I spent in New Orleans, listening to Bix Beiderbecke records and following Negro funerals up and down Rampart Street. *Muskrat Ramble* voices the reed section together under Bobby's horn à la Ellington. Dave McKenna tap dances all over the *Original Dixieland One Step* with his fractious piano. *Lazy Mood* is taken at the best-arranged tempo since June Christy's great vocal a few years back, and to hear the wonderfully misty, wet-cobblestone French Quarter mood evoked on *Do You Know What It Means to Miss New Orleans?* is to die.

*Bobby has assembled musicians unfamiliar with New Orleans music (such progressive-jazz geniuses as Zoot Sims and Bob Brookmeyer) for these sessions, but they perform as if their names were really Bechet and Robichaux. I guess it has something to do with the universal happiness of the idiom—they've never before played with so much humor and taste.*

I could go on and on, but don't ask questions. Just buy this one and *live*. If you never hung around New Orleans in the days when it was still swinging, I'll never be able, in a million words, to convince you how much you've missed. But this brilliant disc will, I believe, help to ease the pain.

*BOBBY HACKETT: Creole Cookin'.* Bobby Hackett (trumpet and cornet); arrangements by Bob Wilber. *High Society; Basin Street Blues; Muskrat Ramble; New Orleans; Do You Know What It Means to Miss New Orleans?; Lazy Mood; When the Saints Go Marching In;* and four others. VERVE ® V6-8698 $5.79, ® 6-8698 $4.79.

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*BOBBY HACKETT: Creole Cookin'.* Bobby Hackett (trumpet and cornet); arrangements by Bob Wilber. *High Society; Basin Street Blues; Muskrat Ramble; New Orleans; Do You Know What It Means to Miss New Orleans?; Lazy Mood; When the Saints Go Marching In;* and four others. VERVE ® V6-8698 $5.79, ® 6-8698 $4.79.
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RECORDING OF SPECIAL MERIT

BACH: Cantata No. 13, "Meine Seufzer, meine Tränen"; Cantata No. 166, "Wo gebeist du hin?"; Hami Wendlandt (soprano); Lotte Wolf-Matthäus (contralto); Helmut Krebs (tenor); Roland Kunz (bass); Choir of St. Nicholas, Berlin-Spandau; Berlin Bach Orchestra, Helmut Barbe cond. **VANGUARD EVERYMAN** ® SRV 2445, ® SRV 244 $2.50.

**Performance:** Very fine

**Recording:** Excellent

**Stereo Quality:** Excellent

Both of these cantatas are splendid pieces and don't seem to have been available domestically before. Number 13, written for the second Sunday after Epiphany (not Trinity, as stated in the liner notes), is perhaps the finer of the two, with its great sighing and weeping phrases; its bass aria was once recorded for Angel by Dietrich Fischer-Dieskau. The performances here are extremely satisfying in all respects, with first-rate solo singers (Krebs is a little worn-sounding but, as always, spiritually convincing), a fine choir, and solid, well-paced conducting. The recording, derived from a Cantate original, is excellent.

I. K.

BACH: Keyboard Concertos: No. 3, in D Major (BWV 1054); No. 5, in F Minor (BWV 1056); No. 7, in G Minor (BWV 1058). Glenn Gould (piano); Columbia Symphony Orchestra, Vladimir Golschmann cond. **COLUMBIA** ® MS 7001, ® ML 6401 $5.79.

**Performance:** À la Gould

**Recording:** Very good

**Stereo Quality:** Fine

This disc adds two more of the Bach keyboard concertos to Glenn Gould's discography (No. 5, in F Minor, was previously released backed with the Beethoven First Concerto). The pianist is in excellent form throughout, though as usual there are some curious mannerisms, as well as a plethora of Gould's usual detaché touch with Bach. The most impressive performance for me here is that of No. 7, which has a splendidly evocative slow movement in spite of its being quite Romantic in treatment, with octave doublings in the left hand and such, and a finale of great fervor and vividness. Gould's vocal contributions are held well in check, the orchestral accompaniments are quite satisfactory, and the recording is full and clear. I. K.

BARTOK: Piano Concerto No. 3, RAVEL: Piano Concerto in G Major, Julius Katchen (piano); London Symphony Orchestra, István Kertész cond. **LONDON** ® SC 6487, ® SM 9487 $5.79.

**Performance:** Musicianly

**Recording:** Good

**Stereo Quality:** Nice

This release has one unqualified thing going for it: the coupling of two highly attractive recordings, derived from a Cantate original, is excellent.

I. K.

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**Performance:** Musicianly

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This release has one unqualified thing going for it: the coupling of two highly attractive recordings, derived from a Cantate original, is excellent.

I. K.

Although the first two movements are taken extremely slowly in this performance, I found myself being persuaded by much of the interpretation, which emphasizes the lyricism rather than the dynamism of the score, and I noticed details that are sometimes glossed over in the faster, more standard performances of this concerto. The young German Christoph Eschenbach, some of whose previous recordings I have commented on quite favorably, plays this score with distinction; it may not be to everyone's taste (mainly because of the tempos), but his interpretation has many valid and original ideas. He displays a polished, smooth technique and a great deal of sensitivity (the slow movement and the last movements-I presume they are his own additions.). The orchestral accompaniments are splendidly handled, and the recording features a slightly distant but rich-sounding orchestra with excellent perspective vis-à-vis the solo instrument. I. K.

RECORDING OF SPECIAL MERIT

BEETHOVEN: Piano Concerto No. 1, in C Major, Op. 15. Christoph Eschenbach (piano); Berlin Philharmonic Orchestra, Herbert von Karajan cond. **DEUTSCHE GRAMMOPHON** ® DGG 139023 $5.79.

**Performance:** Lyrical, slow, impressive

**Recording:** Excellent

**Stereo Quality:** Fine

Although the first two movements are taken extremely slowly in this performance, I found myself being persuaded by much of the interpretation, which emphasizes the lyricism rather than the dynamism of the score, and I noticed details that are sometimes glossed over in the faster, more standard performances of this concerto. The young German Christoph Eschenbach, some of whose previous recordings I have commented on quite favorably, plays this score with distinction; it may not be to everyone's taste (mainly because of the tempos), but his interpretation has many valid and original ideas. He displays a polished, smooth technique and a great deal of sensitivity (the slow movement and the last movements-I presume they are his own additions.). The orchestral accompaniments are splendidly handled, and the recording features a slightly distant but rich-sounding orchestra with excellent perspective vis-à-vis the solo instrument. I. K.

RECORDING OF SPECIAL MERIT

BELLINI: Beatrice di Tenda. Cornelius Oelbof (baritone), Filippo Visconti; Joan Sutherland (soprano), Beatrice di Tenda; Josephine Veasey (mezzo-soprano), Agnese del Maimo; Luciano Pavarotti (tenor), Christoph Eschenbach (piano); Berlin Philharmonic Orchestra, Herbert von Karajan cond. **DEUTSCHE GRAMMOPHON** ® DGG 139023 $5.79.

**Performance:** Lyrical, slow, impressive

**Recording:** Excellent

**Stereo Quality:** Fine

Although the first two movements are taken extremely slowly in this performance, I found myself being persuaded by much of the interpretation, which emphasizes the lyricism rather than the dynamism of the score, and I noticed details that are sometimes glossed over in the faster, more standard performances of this concerto. The young German Christoph Eschenbach, some of whose previous recordings I have commented on quite favorably, plays this score with distinction; it may not be to everyone's taste (mainly because of the tempos), but his interpretation has many valid and original ideas. He displays a polished, smooth technique and a great deal of sensitivity (the slow movement and the last movements-I presume they are his own additions.). The orchestral accompaniments are splendidly handled, and the recording features a slightly distant but rich-sounding orchestra with excellent perspective vis-à-vis the solo instrument. I. K.
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PERFORMANCE: Enjoyable
RECORDING: Very good
STEREO QUALITY: Very good

Beatrice di Tenda, Bellini's ninth and penultimate opera, was virtually unknown in this century until Joan Sutherland's arrival on the musical scene about eight years ago. How could a work contemporaneous with Bellini's best creations, Norma and I Puritani, remain so long in obscurity? Having listened to the present recording and read William Weaver's informative annotations, I have gathered some pertinent facts, but the question remains unanswered. This is a flawed work, to be sure, but its lengthy stay in limbo was inexcusable.

Apparently, Bellini and his long-time librettist, Felice Romani, had serious disagreements while working on this opera—which may explain why, for all its surface fluency and professionalism, the end result fails to generate conviction. The story of the opera may or may not have historical basis, but it would not surprise me one bit to learn some day that Romani's inspiration came from Schiller's Don Carlos. Just change Philip of Spain into Filippo Visconti, duke of Milan in 1418, and you have the central figure. For the rest, substitute Beatrice di Tenda for Elisabetta, Agnese for Eboli, and Orombello for Carlo, and you have Bellini's plot. Instead of the Inquisition there is the kangaroo court of Milan. Other elements of the Schiller play are missing, particularly the added piquancy of the "mother-son" romance, but the conflicts are identical, though far less penetratingly motivated than they are in Schiller's drama as adapted for Verdi.

Nonetheless, there are pages which measure up to Bellini's best: several effective arias, a passionate duet between Beatrice and Filippo, and some excellent ensembles, particularly the finale of Act I. Although never a remarkable orchestral technician, Bellini uses the device of the Rossinian crescendo rather effectively at various junctures, and there is a choral passage for the courtiers in Act I which must have provided Verdi with the inspiration for a similar scene in Rigoletto's second act. (Beatrice di Tenda was a repertoire piece in Verdi's younger years and in fact his wife, Giuseppina Strepponi, was one of its early stars.) As in the opera itself, virtues outnumber flaws in the performance. In top vocal form here, Joan Sutherland stunningly commands the externals of the role, tossing off roulades with amazing fluency, hitting high E-flats and E-naturals with effortless accuracy. If only she could articulate the text intelligibly, and cease the distressing habit of forming vowels with an arbitrary disregard of the printed page! Josephine Veasey is exceptionally fine in the high-lying part of Agnese; Luciano Pavarotti as Orombello is a shade hard-toned and unsubtle, but quite satisfactory. The Dutch baritone Cornelius Ophof is gifted with a brilliant top register, but he produces dry and tremulous tones and fails to make Filippo a commanding figure. Joseph Ward performs both roles—confidants to Filippo and Orombello, the arch-enemies—and he is adequate in both.

(Continued on page 94)
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Bonyngé’s leadership is vital if somewhat short on elegance, but the choral work could do with more polish. I would not call Beatrice di Tenda an essential item for an opera library, but bel canto enthusiasts will find the set very enjoyable, and we are in London’s debt for restoring to us an unjustly neglected work.

G. J.

BLOCH: Schelomo (see ELGAR)

BOCCHERINI: Cello Concerto in B-flat (see HAYDN, Cello Concerto)

RECORDING OF SPECIAL MERIT

BORODIN: Prince Igor. Constantin Chetverikov (baritone), Prince Igor; Boris Christoff (bass), Prince Galitzky and Khan Konchak; Todor Todorov (tenor), Vladimir; Julia Wiener (soprano), Yaroslavna; René Penkova (contralto), Konchakova; Cyril Dulguerov (tenor), Eroshka; Alexei Milmovsky (bass), Skula; Lubomir Mihailov (tenor), Olafur; others. Orchestra and Chorus of the National Opera Theater of Sofia, Jerzy Semkow cond. ANGEL SCL 3714 three discs $17.37.

Performance: Highly enjoyable
Recording: Very good
Stereo Quality: Very good

It is a fairly well-known fact that Prince Igor was left unfinished at the time of Alexander Borodin’s untimely death in 1887, and that it fell to the composer’s colleagues, Nikolai Rimsky-Korsakov and Alexandre Glazounov, to complete the orchestration and to give final shape to the theatrical presentation. Since the end result was a stage work of a somewhat impractical length, a “performing version” soon evolved by the expedient elimination of Act Three, which was composed almost entirely by Glazounov. In the interesting essay which accompanies the present recording, Boris Christoff attempts to justify the procedure by claiming that the music “should be concentrated within the greatest limits of the original source.” I cannot accept this view, because (a) the libretto was completed at the time of Borodin’s death; (b) it was the work of Borodin himself (and his collaborator V. Stassov) and thus its authenticity was beyond question; (c) the removal of an act seriously damages the opera’s structure and cannot help doing a disservice to Borodin’s original vision; and (d) granted that Prince Igor is enormously long, so are Parsifal and Die Meistersinger.

Be that as it may, Act Three is generally omitted in performance (even by the Bolshoi Opera), and it is not given in Angel’s new recording; but a cut Prince Igor is better than none at all. This is, in fact, a quite remarkable performance. It radiates Slavic authenticity, and offers singing that surpasses the Bolshoi presentation recently offered in Montreal. EMI-Angel’s enterprising decision to surround Boris Christoff with members of the Sofia Opera has brought rich dividends.

Prince Igor lacks a central character of the prominence of Boris Godunov or Eugene Onegin. The opera, particularly in its shortened version, is a series of episodes in which certain characters assume a predominant role within a particular scene. The powerfully drawn personalities of Prince Galitzky and Khan Konchak never meet face to face (Continued on page 96)
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face during the course of the opera; the dual impersonation has been a traditional challenge to Russian basses, and Christoff brings it off here with particular brilliance. The characteristically brassy contralto; Galilevsky is dissolute and totally unprincipled. Konchak is savage yet endearing human. Both roles are endowed with bursting vitality in Christoff's dynamic interpretation, though his voice is neither as finely centered nor as ef- formance as it was in his recording of Boris Godunov a few years ago.

Since Cheklerlish's vocal timbre is quite different from that of Christoff, the Igor-Konchak confrontation makes a good dramatic effect. He is a smoother vocalist than Christoff, a dark bass-baritone with an Italianate vibrancy to his round, resonant mid-range. This is a voice of impressive power and sonority, but the upper third of his scale is negotiated by dint of sheer power and with a noticeable lack of refinement. This results in an effortful rendering of Igor's important aria, but the overall performance is quite impressive, uneven spots notwithstanding.

Equally impressive and similarly uneven is Julia Wiener, a strong dramatic soprano whose tones are sometimes afflicted with the perfect legato phrases and floated pianissimos. The Konc- akova of Rosa Penkova is rich and sensuous, the Vladimir of Todor Todorov is a shade delicate but more than adequate. The colorful supporting singers are excellent, the chorus laudable in sonority and spirit if occasionally weak in its sopranos.

Semkow's direction is, in the main, admirable: most effective in the lyrical episodes, somewhat understated in the wilder pages, such as the familiar Polovtsian Dances. In general, voices are heavily favored in Angel's sonic perspective, but the overall sound is rich enough. This is a memorable presentation of an incomplete, dramatically flawed, but engrossing work. G. J.

BRITTEN: A Midsummer Night's Dream (see Best of the Month, Page 85)

RECORDING OF SPECIAL MERIT


Performance: Powerfully compelling and often appealing

Recording: Excellent

Stereo Quality: Good

Martha Argerich is the young South-American-born pianist who won first prize in the 1965 International Chopin Competition in Warsaw. In 1967, after second disc for DGG (the first, an excellent miscellaneous recital, was released in 1961), she impresses me enormously with her superb technique and temperament. It is playing in the big manner—no mi- niatuism—and she thumbs through climaxes with the assurance of a power-house veteran. Miss Argerich is not only cap- 

Any group undertaking a recorded coupling of these pieces is asking for trouble in the "available-competition" game. With modern stereo versions by the Budapest, Fine Arts, and Juilliard quartets, the ground would seem to be well covered.

But although I am not prepared to sug- gest that this new version by the Quartetto Italiano is the winner (by any standard, it's Juilliard hands down), it has some uncommonly winning things about it. To get the worst over with first: technically, it is no great shakes. Among many other things, the triplet figuration that gives the opening theme of the Debussy work its profile and character—which in various metamorphoses is so germane to the overall structure of the work—is often quite shoddily executed. Sim- ilarly, throughout both the Debussy and the Ravel, what musicians used to call the "passage work" is not as clearly articulated as it might be. Still, there is here an oddly origi- nal, touching sense of the feeling of the music—expressive—that I find quite haunting: a delicacy of lyricism, a tendency to underscore that is far from common. Fur- thermore, on a more technical level, these musicians seem to have a very precise under- standing of the area in which these works—especially the Ravel—were innovative. For the Germans in general, and Beethoven in particular, had not only said the last word in the string-quartet medium, but had virtu- ally defined it as quintessentially linear and contrapuntal. In tackling the medium, both Debussy and Ravel faced a problem not too generally understood by most listen- ers who dismiss their quartets on a comparative basis. This was the task of applying the more homophonic, "coloristic," relatively static techniques of Impressionism to a medium that by tradition would be hostile to them. Debussy solved the problem only partially; he frequently reverts to a self-consciously linear texture that is uncharacter- istic of his style. Ravel met the problem head on and with stunning success by imagining a stylistically integrated, instrumentally idio- matic figuration, invention to replace poly- 

Along with their memorable sensitivity, then, these performances by the Quartetto Italiano are unusually intelligent in project- ing the intellectual sense of the music. The recorded sound is clear if perhaps a bit "small," and the stereo effects are discreet. W. F.

RECORDING OF SPECIAL MERIT

ELGAR: Concerto in E Minor, Op 85, for Cello and Orchestra. BLOCH: Schelomo, Pierre Fournier (cello); Berlin Philharmonic, Alfred Wallenstein cond. Deutsche Grammophon ® 139128 $5.79.

Performance: First-rate

Recording: Excellent

Stereo Quality: Ideal

I think that, along with the "Enigma" Variations, Elgar's Cello Concerto is perhaps his strongest work. When I come to know it bet- ter, I might even prefer it to the earlier piece. Certainly, much of what I associate with El- gar's music (and take a dim view of) is ab- sent from the Concerto, its textures are eco- nomic, its formal plans adventurous and personal; its entire concept is surprisingly free of the post-Brahmsian academicism that pervades most of his work. It is also warm- ly, convincingly, and very insistently lyrical, beautiful idiomatically in its use of the cello, and lighter and more melodic than any re- creation than anything by Elgar I've yet to hear. This performance of it is absolutely ravishing. It is entirely possible that there are avail- able here better recorded performances of Bloch's Schelomo but the performer's effortlessly romantic but attractively undertaken per- formance—I'll not pretend familiarity with them all—but I should be very much sur- prised if there were. It's a refreshing plea- sure in any case to hear the piece performed as if it were something other than a pro- tracted sob. The recorded sound is uncom- monly live and spacious. W. F.

(Continued on page 98)
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RECORDING OF SPECIAL MERIT

HAYDN: Cello Concerto in C Major (Hoboken VIIb:1). BOCCHERINI: Cello Concerto in B-flat (arr. F. Grützmacher). Jacqueline du Pré (cello); English Chamber Orchestra, Daniel Barenboim cond. ANGEL 36495 $5.79.

Performance: Full-bodied
Recording: Good
Stereo Quality: Good

Despite the fact that in 1961 Maurice Gendron, with Pablo Casals conducting, recorded in Paris an authentic version of the Boccherini B-flat Cello Concerto (it was once available as Epic BC 1152, LC 3817—and I would like to see a Phillips reissue with the least possible delay!), cellists of the stature of Pierre Fournier (DGG) and the gifted young Jacqueline du Pré still insist on recording the discredited Friedrich Grützmacher arrangement, which was stuck together to form the end of the last century from a sketchy manuscript in the Dresden State Library, with a G-minor slow movement thrown in from an altogether different Boccherini work.

Having got that off my chest, let me say to all Haydn enthusiasts that Miss du Pré, ably aided and abetted by her gifted pianist-husband (now turned conductor) Daniel Barenboim, turns in rich and detailed performances issued on the Turnabout disc are unpretentious, airy, and pleasant to the ear, though the choral enunciation seems to be obscured by somewhat distant miking. At $2.50, the record is worth buying for the Haydn selection alone.

The DGG disc is a recoupling of performances issued originally in the early 1960's. Intense drive and nervous energy characterize Markévitch's reading of the Mass. The recording is bright and closely miked. A softer ambience in both interpretations and sound mark the solo side featuring Maria Stader, who does a fine job with the Et incarnatus from the mature C Minor and in the youthful Exsultate, jubilate.

One hearing of these four sides makes it apparent which of these two composers was a believer and which was not. Within the limited span of the Missa brevis format, using the most modest of string forces with organ backing, Haydn tells us touchingly and beautifully just where he stands. The Credo and Sanctus in particular are full of wonderful things. Mozart for his part had little use for institutionalized religion, an attitude that must have been strengthened by his Salzburg surroundings, where ecclesiastical and temporal power were one and the same.

So, whether it be the fifteen-minute Missa brevis, K. 259, or the "symphonic" "Coronation" Mass, Mozart wrote music essentially for ecclesiastical display purposes. As a matter of fact, his best writing for the church seems to be obscured by somewhat distant miking. At $2.50, the record is worth buying for the Haydn selection alone.

The recorded performances on the Turnabout disc are unpretentious, airy, and pleasant to the ear, though the choral enunciation seems to be obscured by somewhat distant miking. At $2.50, the record is worth buying for the Haydn selection alone.

CONTINUED ON PAGE 100

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ELOY: Equivalences (see SCHONBERG)

RECORDINGS OF SPECIAL MERIT

HAYDN: Mass No. 5, in B-flat ("Little Organ"). MOZART: Missa Brevis, in C Major (K. 259, "Organ Solo"). Eiko Katonańska (soprano); Kurt Equiluz (tenor); Elfriede Jahn (alto); Leo Heppe (bass). Vienna Chamber Choir; Hans Haselbock (organ); Vienna Volksoper Orchestra, Hans Gillesberger cond. TURNABOUT 3 TV 34132 S $2.50.

Performance: Generally good
Recording: Airy
Stereo Quality: Good

MOZART: Missa in C Major (K. 317, "Coronation"); Missa in C Minor (K. 427): Et incarnatus est; Exsultate, jubilate (K. 165). Maria Stader (soprano); Oralia Domínguez (alto); Ernst Häßiger (tenor); Michel Roux (bass); Elisabeth Brasseur Chorale; Lamoureux Concerts Orchestra, Igor Markevitch cond, Berlin Radio Symphony Orchestra, Ferenc Fricsay cond. DEUTSCHE GRAMMOPHON 3 SLP 136511 $5.79.

Performance: Festive
Recording: Bright
Stereo Quality: Good

(Continued on page 100)
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The Lortzing millennium seems to have reached its peak: this composer's four best-known operas have all been recorded complete by Odeon, EMI's German affiliate, and Zar und Zimmermann is now available in domestic pressings as well. What with high-quality recordings on DG and London, I have been listening to lots of Lortzing lately, and with considerable enjoyment, too. I grant that his operas do not export well—they are emphatically German, with long stretches of spoken dialogue; nonetheless, the music is charming, unconventional, and tuneful, and it is put together with solid craftsmanship.

In Germany Lortzing is enormously popular, and his operas are considered worthy of top-grade productions, as is shown by the casting of the two sets at hand. Veteran maestro Robert Heger, according to the detailed liner notes, is devoted to Lortzing whose association with these operas spans sixty years. His performances bespeak loving care throughout: he secures the utmost clarity, perfect balances, and a glowing tone from the excellent Berlin and Dresden orchestras.

Of the two operas, Zar und Zimmermann (1837) is undeniably the more appealing. Its entertaining story—about an incognito adventure of Peter the Great—is based on a real incident. Though Lortzing occasionally allows sentimentality to dim the work's high spirits, there are many moments of inspired comic invention, and the ensembles of this opera show Lortzing at his representative best. In the gratifying buffo role of the humbling Burgenmeister van Bett, Gottlob Frick displays immense gusto and expertise to compensate for his fading vocal resources; Hermann Prey sings the Tsar's famous air "Sonst spiel ich nicht mit Ziegeln" affecting, but much of the rest of his singing is over-intense. Both tenors are good: Schreier has displays immense gusto and expertise to compensate for his fading vocal resources; Hermann Prey sings the Tsar's famous air "Sonst spiel ich nicht mit Ziegeln" affecting, but much of the rest of his singing is over-intense. Both tenors are good: Schreier has...
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The orchestra consists of trumpets, woodwinds, and a battery of keyboard and percussion instruments, capable of striking effects, but frequently reduced to underlining and punctuating the vocal line with assorted smashes and bangs. It is employed, as stated in the excellent accompanying notes, "merely as a bearer of sound, neither as a rival to the vocal lines nor for tone painting." The music is a composite of elemental rhythm and brief melodic patterns—color abounds when called for, but harmonic movement is absent.

Does it work? My feeling is that in the theater it has a certain fascination. After all, the opera faithfully follows Sophocles' powerful and ageless tragedy. Without the visual element, however, even though it is served by uncommonly gifted singing actors, Oedipus is a fatiguing experience. For all the impressive intellectual justification that Orff has marshalled in support of his treatment, the nagging impression remains that the medium has gotten in the way of the message. Surely if Gerhard Stolze were allowed to recite the eloquent Sophocles/Holderlin lines instead of producing the god-awful sounds of Orff's contrivance, the overall effect would be far more powerful—and never ludicrous. Nonetheless, Stolze rates high praise for performing an impossibly demanding role with unbelievable endurance. The same goes for his colleagues, who go about their extraordinary and frequently unrewarding assignments with intelligence and dedication, and enunciate their lines with absolute clarity. Only Astrid Varnay's tremulous tone quality is distinctly inappropriate.

It is hard to appraise Kubelik's contribution in such an unconventional musical work, but Orff himself supervised the recording, and we can be certain that we have a performance here of total authenticity. DGG has captured it in brilliant sonority and with startling clarity. The complete Hölderlin text is enclosed, together with an English translation of the Sophocles original.

Orff has a considerable following here and abroad, and this recording will doubtless make them very proud. At the present time, however, their ranks do not include me.

G. J.


I expect that before I get to the heart of this commentary on Pathé's anthology of old recordings of the late Francis Poulenc as a performer—in piano music of his own invention and voice-and-piano music by himself and Debussy—I had better state bluntly that the performances are pretty bad. Poulenc concertized and recorded performances of his own music throughout his life, particularly with Pierre Bernac, but he seems, even in his youth, to have been an uneven pianist. In one of his last public performances with Bernac in New York, he played so badly that admirable critics chose discreetly to overlook it in coverage of the recital. His playing here is only passable. Some quick passages are blurred, he and the singer are not always of one mind as to where they are in a bar, and there is something curiously perfunctory about his approach to his own music. And it is with this last observation that one can move on to what any review of a release of this sort should properly concern itself with.

Sleeve annotator Henri Hell remarks, if I am translating his French justly, that 'Poulenc energetically rejected the hypnotic sonorities of Debussy's piano music as well as the transcendental lyricism of Électron. The last statement, I expect, is accurate enough, but I would question the accuracy of the former. Plainer though Poulenc's style may have been during the Twenties, he helped himself generously to the lush chordal combinations of Impressionism. The difference lies rather more in formal approach: while Debussy worked with uncanny intuition in forms that generally defy analysis, Poulenc used similar harmonic techniques in highly simplistic classical formal molds.

It seems obvious from the recordings in this release that Poulenc, as a performer, was often inclined to simply throw pieces away. La Carpe, the closing one-page masterpiece from Le Bestiaire, owes its effect of haunting (Continued on page 106)
A closer look at the KLH Receiver.

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January 1968
understatement to a strangely immobile vocal line and a quasi-Gummédi accompaniment. But although the song (in current edition, at least) is marked Très triste—très lente, both the composer and Claire Croiza run through it so casually that it makes no effect whatever.

The present release, then, is curiosa—for those who would study. The singing is no great shakes, and the fact that the recordings were made between 1928 and 1943 speaks for itself where sonics are concerned.

W. F.

POUSSEUR: Madrigal III (see Schoenberg)

RECORDING OF SPECIAL MERIT

PROKOFIEV: Chout (The Buffoon), Suite from the Ballet, Op. 21a; Romeo and Juliet, Suite, Op. 61a. London Symphony Orchestra, Claudio Abbado cond. LONDON 5 CS 6322, @ CM 9322 $5.79.

Performance: Top-drawer
Recording: Superb
Stereo Quality: Uncommonly good

This is the second recording of a suite from Prokofiev’s early (c. 1915) ballet Chout that I’ve reviewed recently—the other was by Rozhdestvensky and the Moscow Radio Orchestra—and this new one seems to me superior. For one thing, the London Symphony Orchestra (is it just my imagination, or is this organization getting better and better with each release?) quite outdoes the Moscow group in performance. At the same time, conductor Abbado seems to have a better sense of the raw energy of the early Prokofiev than his Russian colleague.

And for that matter, I know of no available recorded performance of the Romeo and Juliet Suite—even Ansermet’s—that is an improvement over this one. The performance is straightforward, vigorous, cleanly lyrical, and expressive.

The recorded sound is sumptuous, the stereo treatment ideal.

W. F.

RAVEL: Piano Concerto in G Major (see Bartók); String Quartet in F (see Debussy)


Performance: Glossy and shallow
Recording: Bright
Stereo Quality: Good

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This lead from Capitol's sleeve blurb, along with the overall title of the release ("The Carnival of the Animals and other Good-Time Classics for Two Pianos"), pretty much set the tone for what you'll hear on this record. The playing is generally broad, overstated, and lacking in refinement. And while Ravel's Mother Goose Suite exists in two authentic forms—one for one piano, four-hands, and another orchestrated by the composer—turning it into a duo-piano work merely expands it without untoward variation of the composer's intention. On the other hand, anyone prepared to live with a two-piano, souped-up version of the Prelude to the Afternoon of a Faun has a far stronger stomach than I.

The performances are accurate enough as far as the notes go; the recorded sound is distinctly on the Good-Time Classics side.

W. F.


Performance: Good
Recording: Okay
Stereo Quality: Compressed

The Domaine Musical is a Paris concert series founded a number of years ago by Pierre Boulez to bring new music to France. This recording represents two aspects of the Domaine's activities: the presentation of music by young—or younger—composers, and the performance of major works by the older generation of twentieth-century pioneers, many of them unplayed and little-known in

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France. Even though music by the Founding Fathers is not unusual on Domaine programs, Verklärte Nacht must surely be the only nineteenth-century piece to have ever turned up on the series. The work is heard here in the original sextet version of 1899; while the string-orchestra version is still the more familiar one, performances of the original are not all that rare, and there are three already in the catalogue. It is interesting to hear this elegant and measured French version, but one misses a certain intensity that the music seems to require.

This late-Romantic work makes an odd match for the two contemporary pieces on the opposite page. Eloy, who is a Boulez disciple and his successor as director of the Domaine, has written an attractive piece in what one might call the French coloristic-constructivist tradition with the true individuality that comes from the abandonment of every personal caprice. Such rare pianists were Artur Schnabel, Myra Hess, Dinu Lipatti. In this noble line, we feel, is 

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San Francisco Examiner & Chronicle

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FOUR BALLADS, OP. 10

LISZT: Paganini Etude No. 2

Earl Wild, pianist

VSC 10006

"... Wild has a colossal technique ... almost superhuman mastery ... incredibly smooth pianism in works that dare obviously derive from Schoenberg and Berg but leaves no doubt as to its own distinct quality. The Variations on a Greek Folk Tune are the most accessible and, in a way, the most original. The folk—ever oriental—character of the tune is skillfully developed in a highly individual, dissonant, atonal manner. The Octet and the Quartet are closely related to "classical" twelve-tone procedures, treated with a superb ear for sonority and dissonant, non-tonal harmonic motion. To me the most striking quality of this music is its sensuousness, a quality never in conflict with the intellectual integrity of the music. It is astonishing to realize that this music was, for its composer, purely an inner thing."

—David Hall, Hi Fi Stereo Review

The Greek composer Nikos Skalkottas was born in 1904 and died in 1949. He studied the violin at the Athens Conservatory and went to Germany with the intention of pursuing a career as a violin virtuoso. Instead, he decided to become a composer, and studied with Philipp Jarnach, Kurt Weill, and—due to Arnold Schoenberg. When the Nazis came to power, Skalkottas went back to Greece, where he remained until his death, turning out composition after composition—many of them atonal or twelve-tone—for his desk drawer. Schoenberg always listed Skalkottas among his most gifted pupils, but most of the rest of the world had never even heard of him until, a number of years after his death, a Skalkottas Society was formed to publish and perform a quite astonishing oeuvre by this utterly neglected Greek composer. As has been the case for a number of recent musical rediscoveries, the center for the Skalkottas revival was England, and thus it is not surprising that this major Skalkottas disc should come to us in the excellent Music Today series being produced by EMI under the auspices of the Calouste Gulbenkian Foundation. The sleeve promises "a leaflet containing analytical notes and documentation," but, as has been the case with review copies of many of these albums, no such notes were enclosed. Nevertheless, the aural information is quite enough. Here are three rich and extraordinarily expressive pieces written in a kind of Mediterranean atonality that obviously derives from Schoenberg and Berg but leaves no doubt as to its own distinct quality. The Variations on a Greek Folk Tune are the most accessible and, in a way, the most original. The folk—ever oriental—character of the tune is skillfully developed in a highly individual, dissonant, atonal manner. The Octet and the Quartet are closely related to "classical" twelve-tone procedures, treated with a superb ear for sonority and dissonant, non-tonal harmonic motion. To me the most striking quality of this music is its sensuousness, a quality never in conflict with the intellectual integrity of the music. It is astonishing to realize that this music was, for its composer, purely an inner thing."

—David Hall, Hi Fi Stereo Review

(Continued on page 110)
At one time, the function of a preamplifier was simply to increase the level of a signal. Then, as the art of sound reproduction has become more sophisticated, additional functions have been added. First came tone controls, then equalization, filtering, tape monitoring, blending, and so on.

What was once a simple amplifying circuit and a volume control is now a control center, handling a variety of sources with input signals ranging from a few millivolts to several volts (a range of 1000 to 1), and which must impress special response characteristics on some of these signals. Requirements for distortion now are far more stringent than in the past. Distortion levels which were once significant laboratory achievements are now common in commercial equipment.

The resultant increase in complexity of the preamplifier has caused some confusion. The knobs and switches which the audio hobbyist considers mandatory for proper reproduction bewilder and dismay family and friends.

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You may save a power amplifier in another way, too. If you need a remote speaker system, or a center or third stereo channel, the PAT-4’s exclusive “blended-mono” mode is all set to provide this from your regular stereo amplifier, where other preamps having center channel outputs require an additional power amplifier.

A sharp 3-position high frequency filter cuts the scratch with minimal effect on the music, and there’s a low frequency filter, too. The “Special” low level input can provide for a second phonograph input, or for a special equalization position when you want to listen to older discs. Dynaco’s patented “X” type tone controls provide smooth continuous tonal adjustments with the precise “center-off” assurance of step-type controls, without the complication of separate switches.

The overall quality of parts, ease of construction for the kit builder, accessibility for service, and audio performance are in the Dynaco tradition of acceptability to the perfectionist. On every performance count, the PAT-4 is exceptional. Noise and distortion are almost non-existent. Equalization is precise. Frequency response is superb, resulting in outstanding square wave and transient characteristics. There is not a trace of so-called “transistor sound”. And finally, there is the undeniable virtue of complete independence from the power amplifier, so that you can choose the power, price, and tube or transistor design as your requirements dictate.

The PAT-4 is of the quality standard set by the world-famous PAS-3X. That preamplifier has been widely accepted and acclaimed for many years as the finest quality and reasonably priced. How does the PAT-4 compare with the PAS-3X? Well, the quality of both is fully comparable. It is doubtful that it would be possible to hear any difference between them on careful listening tests. The PAT-4 does have some extra features which justify its slightly higher cost for many users.

The PAT-4 is very much in demand, and it will be many months before it is in ready supply. If you are willing to forego its extreme flexibility, the PAS-3X will match its quality, with the added virtues of economy and availability. If you want the ultimate in flexibility along with quality, please wait for the PAT-4. It is worth waiting for.

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RECORDING OF SPECIAL MERIT

R. STRAUSS: Also sprach Zarathustra
Op. 30, Chicago Symphony Orchestra, Fritz Reiner cond. RCA Victor @ VICS 1265, @ VIC 1265 $2.50.

Performance: Top-drawer Reiner
Recording: Still stands up
Stereo Quality: Good

This first budget-price issue of Strauss' great orchestral showpiece may stem from an early (1954) stereo tape master, but for me it is rivaled in the catalog only by Reiner's own full-price RCA Victor Red Seal version of eight years later. It is interesting to note that Reiner's view of the score in 1956 was somewhat more expansive in tempo than it was in 1954—34'15" as against 31'49". Presence and stereo directionality are more pronounced in the 1966 recording, but the more generalized sonority emanating from the earlier taping is effective in its own way, too, and the performance is in some ways more virtuosic. At the $2.50 price, you can't lose with this disc.

D. H.

VERDI: La Traviata. Montserrat Caballé (soprano), Violetta Valéry; Carlo Bergonzi (tenor); Alfredo Germont; Sherrill Milnes (bass); Gunther Groiss (baritone), Giorgio Germont; Dorothy Krehbiel (mez-soprano), Flora; Fernando Iacopucci (tenor), Gustone; Gene Boucher (timpani), Barena Daphnol; Thomas Jameson (bass). Marquis D'Oghibay; Harold Ennis (bass), Doctor Grenvil; Nancy Stokes (soprano), Annina; others. RCA Italiana Opera Orchestra and Chorus, Georges Prêtre cond. RCA Victor @ LSC 6180, @ LM 6180@ three discs $17.37.

Performance: Fine singing, misplaced conductor
Recording: Very good
Stereo Quality: Very good

Georges Prêtre's conducting of La Traviata during the Metropolitan Opera's 1966/1967 season received a considerable amount of adverse comment. "Chocitically non-stylistic" was the word critic Irving Kolodin described it, and I am afraid that the same devastating phrase may be applied to much of the present recording. The conducting of Verdi operas has indeed reached a lamentable state. We live in an age of fast-moving and photogenic maestri who can memorize scores of incredible complexity, but fail to come to grips with the seemingly simple demands the works of Verdi impose upon them. And what is even more disturbing is that their stylistically improper, uncomprehending interpretations are given enormous circulation via recordings, overshadowing earlier and superior, but not so easily marketable, achievements.

Georges Prêtre is a brilliant musician whose work, particularly in the French repertoire, has been praiseworthy, and whose rather unconventional Gallia Paralyse at the Metropolitan two seasons ago I admired. In La Traviata, however, it seems to me that he mistakes clarity for intensity. His allegros are invariably taken at such a frantic pace that the singers' phrasing becomes inartistic and their articulation often impossible. There are also damaging instances of dynamic miscalculation and rhythmic insecurity, as well as episodes that are graceless, mechanical, or disproportionately projected—the slack and shapeless "Dite alla giovine," for example. From the point of view of conducting, this may be the least satisfactory Traviata in the catalog.

And it is a great pity, because the singing is on a very high level. Montserrat Caballé is an ideal Violetta; her voice is luxuriant in quality, her phrasing is sensitive and artistic, and her technique, though not bedazzling, is never less than admirable. She responds to the different challenges posed by the opera's three acts with secure artistry. Her intonation is not always absolutely perfect; still, all in all Miss Caballé's Violetta must be rated with the very best on records. Carlo Bergonzi's Alfredo is another triumph for this stylish, ever dependable artist—excellent, without reservation. Sherrill Milnes, in his first major recorded role, displays a resonant voice and a good sense of style. In all likelihood, his Germont will have become a more mature characterization, rendered with a higher degree of vocal polish, a few years hence. There are several new names among the interpreters of the opera's minor roles; all are at least adequate, though none outstanding.

The orchestra and chorus deliver everything the conductor asks of them. On the credit side of the enterprise, the opera is recorded uncut, with Alfredo's "O mio rimorso," Germont's Act II cabaletta, the second stanza of "Addio del passato," and other seldom-heard pages restored. Technically, the recording is above reproach. But overall, the performance falls short of the standard set by RCA Victor's previous version with Anna Moffo, Richard Tucker, Robert Merrill, and the fine Italian conductorial hand of Fernando Previtali.

G. J.
subtle spoof of cocktail-hour music, a blended mixture of smooth jazz style and an arch twelve-tone asymmetry, a vaguely erotic tone poem, and a kind of intense, inward, mystical experience. Charles Wuorinen's Variations, written several years ago by a young composer who has yet to turn thirty, is an equally brilliant piece of work, an early major achievement by a prolific, exuberant, and wild young man.

Burge's own Eclipse II is short and neat, a quick, imaginative flicker of piano invention and color. George Crumb's Piano Pieces are also based on varieties of piano color—not only keyboard color but sounds plucked, brushed, and otherwise extracted directly from the insides of the instrument, the whole cleanly organized into a kind of big symmetrical arch. George Rochberg's Beethoven, written in 1952, is little twelve-tone improvisations sharing, with the other pieces here, an inventive wit and elegance.

Some shortcomings: the rather dull monophonic sound, clear but not doing full justice to the tremendous range of sonorities; one or two awkward tape splices; the lack of a clear listing of works on the sleeve, making it necessary to check the label to find out what comes where. Otherwise this is a disc of major interest and it proves, if nothing else, that the piano is far from finished as a creative medium.

E. S.

**RECORDING OF SPECIAL MERIT**

**BORIS CHRISTOFF:** Russian Opera Aria


**Performance:** Absorbing

**Recording:** Good

These are not new recordings: the Glinka aria and the Boris Godunov excerpts are taken from complete sets, and most of the others were once available on LHMV 1033, a disc withdrawn about ten years ago. But the program embodies some of the most effective vocal music in Russian opera, and it is hard to imagine a more compelling and authoritative interpreter. Christoff is in great form throughout and, as always, he offers not only sonorous singing but full and memorable characterizations: the hell-raising Galitzky, the jovial Koutschak, the stern fanatic Dostoevsky—they all make an indelible impact. The character of Boris is, of course, a mainstay of the Christoff gallery, and it is good to have this souvenir of his first complete recording of the work. The orchestral accompaniments are excellent, the recorded sound is full-bodied and effective. Very highly recommended. G. J.

**RECORDING OF SPECIAL MERIT**

**IGOR KIPNIS:** German Music for Harpsichord and Clavichord. Telemann: Overtures No. 1, to G Minor. Buxtehude: Variations.

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Stereo Quality: Good enough
Igor Kipnis has put together another one of his entertaining and illuminating Baroque anthologies—extending the time span in this instance to include the quaint *Zauberflöte* harpsichord variations by Beethoven's older and all-but-unknown contemporary, Friedrich Joseph Kirmair.

For me the highlights of this disc were the harpsichord pieces—the richly varied C.P.E. Bach Fantasia, the lovely Pachelbel work based on the same melody used by Bach in "Jesu, joy of Man's Desiring" from Cantata 147, and the vastly entertaining program piece by Bach's predecessor at the Leipzig Thomaskirche, Johann Kuhnau. The Kipnis clavichord, unlike most that have been recorded thus far, has enough tonal body so that one can properly appreciate the subtleties of touch and "finger-vibrato" (*Bäuerl*) that go into well-styled performance on this intimate keyboard instrument.

The harpsichord pieces are brought off by Mr. Kipnis with surpassing brilliance and verve—the Buxtehude Variations and the scintillating Telemann overture being my special favorites.

The recorded sound is very bright, perhaps a bit too much so on the harpsichord tracks, but this can be alleviated with a touch of treble cut.

D. H.

LEONTYNE PRICE: Prima Donna, Volume Two (see Best of the Month, page 86)

VILAYAT KHAN AND BISMILLAH KHAN: Duets from India. Vilayat Khan (sitar); Bismillah Khan (shehnai); Shanta Prasad (tabla). Duettio (Jugalbandi); Charrette-Duets; Bismillah-Tarun; Capitol. ST 10483, T 10483 $1.79.

Performance: Hypnotic
Recording: Very good
Stereo Quality: First-rate

Now that the sitar, sarod, and tabla are household words in more households than you would believe, the country is being indoctrinated in the acrid aural pleasures of the shehnai, an oboe-like, but keyless, instrument. Its pre-eminent practitioner, Bismillah Khan, has toured here recently, and a program showing him at home in India has been programmed on many educational television stations. In this set of duets, he is joined by Vilayat Khan, who is an accomplished player of the sitar; but the main interest of the program is in Bismillah Khan because the shehnai is still rather new to most Western ears. It is astonishing how virtuosic Bismillah Khan is on what appears to be a rather limited instrument. He achieves extraordinary gradations of timbre and seemingly limitless pliability of line. Bismillah Khan should be able to continue to tour here with a success as predictable as the quality of his performances. Nat Hentoff
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LIZ ANDERSON: *Cookin' Up Hits*. Liz Anderson (vocals). *Grandma's House; The Spirit of Christmas; Come Walk in My Shoes; Tiny Tears; Ride, Ride, Ride*; and seven others. RCA Victor ® LSP 3852®; ® LPM 3852 $4.79.

- Performance: Support your local Liz
- Recording: Real nice

NORMA JEAN: *Jackson Ain't a Very Big Town*. Norma Jean (vocals). *Conscience Keep an Eye on Me; From the Church to the Bar Room; Pursuing Happiness; Your Alibi Called Today; Ride, Ride, Ride;* and seven others. RCA Victor ® LSP 3836®, ® LPM 3836 $4.79.

- Performance: Wanton
- Recording: Bold

Well, things have come to a pretty pass indeed when RCA Victor starts releasing Liz Anderson and Norma Jean in the same month. (I'll bet that that husky Norma Jean has latched on to some influential person there.) Anyway, after all the suffering that Norma Jean has put Liz through, you'd at least think Victor would have the decency to keep their records separated from each other. Of course, I knew right away that there was something funny up when I saw the pictures on the album covers. Now Liz has a real nice cover and she has on a pretty yellow dress and a frilly apron and it shows her looking straight into the camera and smiling, just as Jean's cover! Well, she's sitting out in a real nice kitchen with ruffled curtains on the window. But as for Norma Jean's cover! Well, she's sitting in a field, for all the world to see, dressed in one of those pants suits and she is looking straight into the camera and smiling, just as bold as brass, I played Liz's album clear through and it certainly was nice to hear such lovely songs as *The Spirit of Christmas* and *Grandma's House*, many of which Liz herself wrote. My favorite was *Ride, Ride, Ride*, which Liz wrote for her daughter Lynn who made it really popular as a single. *Cookin' Up Hits* is a fine album of fine songs by a fine woman. I wasn't even going to listen to Norma Jean's album, but I told myself you always have to give a person a second chance. I had already heard *Pursuing Happiness* (it was on the "Triangles Trio" album, in which we first heard how Norma Jean had done her dirty work on Liz's marriage), so I wasn't surprised to hear her do such things as *Your Alibi Called Today* and *Now It's Every Night* (!), but you could have knocked me over with a feather when, on the last band of the first side, Norma Jean has the nerve to sing *Ride, Ride, Ride*, that song which Liz composed and her daughter sings. Let me tell you, I took that record right off and I haven't let it be brought into the house again.

I know that, more's the pity, hussies like Norma Jean sometimes make it very big in show business and end up as top stars who get to say "No, no, no", but you could have knocked me over with a feather when, on the last band of the first side, Norma Jean has the nerve to sing *Ride, Ride, Ride*, that song which Liz composed and her daughter sings. Let me tell you, I took that record right off and I haven't let it be brought into the house again.

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Got a Woman is performed with great good-humored bawdiness. This is a nice album, and a very nice display by Cash of his talent for lighter material. Miss Carter assists him more than ably.

P. R.

BILL COSBY: Bill Cosby Sings. Bill Cosby (vocals); chorus and orchestra. Bright Lights, Big City; Big Boss Man; Hush Hush Baby; What You Want Me to Do?; Tell Me You Love Me; Am Shy; Hush Your Mouth; and five others. WARNER BROTHERS ® WS 1709, ® W 1709 $4.79.

Performance: Ill-advised
Recording: Fair
Stereo Quality: Aggressive

The engineers and arrangers of this disaster have used every trick in the box—from an echo chamber to a chorus surrounding Mr. Cosby in close harmony—to help keep him in tune, but this affable and talented fellow, who has already proved himself as an actor and a comedian, cannot sing at all, and I wish he wouldn't try. The numbers in this "soul album" vaguely suggest the atone and atmosphere of Harlem, but the tunes are so thin and the words so random it would take at least a Louis Armstrong to put them over.

Armstrong he ain't!

P. K.

ANITA KERR AND ROD MCKUEN: The Earth. Rod McKuen (writer and narrator); Anita Kerr (composer, arranger, and conductor); The San Sebastian Strings. WARNER BROS. ® WS 1705, ® W 1705 $4.79.

Performance: Kerr fine, McKuen per usual
Recording: Good
Stereo Quality: Good

(Written, with apologies to T. S. Eliot, on the occasion of the release of "The Earth," a companion recording to the previously released "The Sea.")

THE WASTE BAND(S)

January is the cruellest month, breeding
Albums out of the dead "Sea," stirring
Dull verse with stringed schmaltz.
His words are cold and "Earth" in forgettable slush, filling
A tiny theme with sluggish tunes.
So little surprised us, coming after these
send-ups of Mario Pei,
And burlesque of Crane; we stopped at band
And went for a walk, right up to Yorkville,
And drank Koffee, and thought for an hour.
Bir nicht messangeschieden, stimmn' aus New York, echi hip.
For how long is patience, to hear such arch pap.
Those triple-told tales of McKuen, whispered
In a voice of burlap. And I thought, Anita,
Anita, get out quick, or you'll smother.
You are, in your music, much better than this.
I yawn, much of the night, and throw out
"Earth" in the morning.

P. R.

RECORDING OF SPECIAL MERIT

PEGGY LEE: Somethin' Groovy. Peggy Lee (vocals); Toots Thielemans (guitar, harmonica); orchestra, Ralph Carmichael cond. and arr. Makin' Whoopee; It Might as Well Be Spring; Two for the Road; Sing a Rainbow; No Fool Like an Old Fool; Re- lease Me; You Must Have Been a Beautiful Baby; and four others. CAPITOL ® ST 2781, ® T 2781 $4.79.

Performance: Velvety
Recording: Good
Stereo Quality: Good

Honey-drippin', honey-sippin' Peggy Lee seems to turn out almost as many discs as Nancy Wilson, so many it is difficult to keep track of them all. But for my taste, they're all a welcome relief from the slush that piles up at my door every month. A long time ago I came to an affirmative decision that she is one of the greatest magicians a good song could ever wish for, and the intervening years have not altered that opinion.

Have you ever seen her perform? The lights have to be just right, the gowns designed just right, the hair coiffed just right, the orchestra tuned just right, the mikes adjusted just right, the air-conditioning turned up just right (she generates a lot of heat), or she just doesn't go on. This does not mean she is temperament; it simply means she is a perfectionist, one of the few performers who care. That perfection is the key to why she is just about the best singer in the business today, and why, like brandy in the cask, she gets better every year.

The marvelous thing, of course, is that—unlike most female song stylists—you don't really have to see Peggy Lee to get her message. While most of the girl singers her age
The woofer that lost its whistle

The woofer cone in a very small enclosure must move a long way to provide all the bass you want to hear. In the new E-V EIGHT, for instance, the 6-inch cone moves back and forth over one-half inch. But in most woofers something strange happens as it moves. It whistles!

You see, the air trapped inside the speaker is literally "pumped" in and out past the voice coil. The whistle is almost inevitable. Except, that is, in the E-V EIGHT.

We did two things almost nobody else bothers to do. First, we vented the woofer. Air can't be trapped inside. Then we punched six big holes in the voice coil form. Air can't be pumped back and forth. And that's how the E-V EIGHT lost its whistle (and gained almost 2 db extra efficiency in the low bass in the bargain)!

The E-V EIGHT tweeter was another story. We aimed to eliminate the "buzz" and "fuzz" so typical of modestly priced speaker systems. What was needed was a better way to control cone motion at very high frequencies. And it literally took years of testing to solve the problem.

The answer looks deceptively simple. We put a ring of short-fiber polyester felt behind the cone, and a precisely measured amount of viscous vinyl damping compound under the edge. Plus a light-weight aluminum voice coil to extend the range to the limits of your hearing. Highs are remarkably uniform and as clean as a (oops!) whistle!

Even the E-V EIGHT enclosure is unusual. Examine the walnut grain carefully, especially at the corners. It's a perfect match because we use one long piece of wood, folded to form the cabinet! And we add a clear vinyl shield on every finished surface, to protect the E-V EIGHT from the mars and scratches of day-to-day living.

There are so many good ideas inside the tiny new E-V EIGHT, you may wonder how we found room for them all. Chalk it up to top-notch engineering talent and facilities, plus a very real dedication to the ideal of better value in every product.

Listen to the E-V EIGHT with the whistle-free woofer at your nearby Electro-Voice high fidelity showroom today. Then ask the price. At no more than $44.00 it's the best story of all.
Stars of the
GRAND OLE OPRY
Reviewed by William Flanagan

SINCE I’ve just finished for this publication a scrupulous study and (hopefully) a thoughtful review of the new recording of Benjamin Britten’s opera based on William Shakespeare’s A Midsummer Night’s Dream, it seems to me entirely reasonable that I should now turn my critical attentions to RCA Victor’s “keepsake package” of archive performances by stars of radio station WSM’s Grand Ole Opry in Nashville, Tennessee. As it happens, the experience has been both rewarding and refreshing; I wouldn’t have missed it for the world.

The cross-section of American popularism encompassed in this two-disc set falls largely into the country-and-western category. The lyrical derivation of the more or less straight hillbilly stuff is American folk song, which, to a substantial degree, itself derives from American immigrant personalization of old English folk materials. Some of the more suavely arranged and subtly performed country numbers—such as Abilene and Detroit City—combine traces of the same Anglo-Saxon folk inclusions with a strong hypo of American Negro “rhythm and blues.” They don’t seem to me to be a far cry from the sort of thing Elvis Presley began with and out of which developed rock-and-roll.

Perhaps you, like me, have from time to time heard jazz buffs bemoan, in despair and bewilderment, the popular appeal and the staying power of both this music and rock-and-roll. Given the low estate of jazz today, it seems to me entirely reasonable that you, Grand Ole Opry.

Among the newer performers, the boys seem to have chosen the better musical materials and, in general, present it more convincingly (the big stars in c&w tend to be the men anyway). Bobby Bare’s Detroit City is a hauntingly lonely episode; George Hamilton IV’s performance of the lovely Abilene (it sounds a little like the old standard Georgia) is the album’s most appealing moment. Young Love is appropriately described as “ordinary,” but Sunny James, in his Presleysque way, sings it with smooth understatement and clean musicianship. John Loudmiller’s bouncy treatment of Roadside is also one of my favorites. Don Bowman’s Chit Atkins, Make Me a Star is a funny, good-natured put-on of the man who in fact did help to make him one—an RCA Victor executive, Chet Atkins (also a good guitarist), who does his own turn on the program in an instrumental number featuring himself as soloist.

Maybe I’m not properly tuned in to the style, but the country, country-girl vocalists here give me the pip. They all sound as if they derive from Patti Page, but without that lady’s home-spun elegance and easy musicality. The deliveries of Connie Smith (Once a Day) and Norma Jean (Let’s Go All the Way) are interchangeable as my ears perceive them. And besides, both girls sound as if they’re half asleep. The less-than-novel Martha Carson, in a husky, straightforward delivery of her own song Satisfied, makes a far more honest impression.

The album has its moments of tearing up the pea-patch hillbilly-style, and some of it—inadvertently or otherwise (I suspect the latter)—is subject to the current definition of “camp.” Archie Campbell’s The Cockfight, Lonzo and Oscar’s I’m My Own Grandpa, and (inadvertently, I’m sure) Bradley Kincaid’s wailing of The Letter Edged in Black are all, in a somewhat special way, quite unforgettable.

Oops—I almost forgot to mention the formidable Minnie Pearl, self-confessed and shameless “man-catcher.” Her contribution to this release brings back memories of radio and my childhood: the life goals of Brenda and Cobina, the tramp of Judith Canova, the rasp of Tizzie Lish. But mention of all forty bands, even on a release as memorable as this one, would require more space than I could reasonably request.

Thank you, Benjamin Britten; and thank you, Grand Ole Opry.

STARS OF THE GRAND OLE OPRY.
Bobby Bare, Don Bowman, The Browns, Archie Campbell, Martha Carson, The Carter Family, Skeeter Davis, Delmore Brothers, Jimmie Driftwood, Don Gibson, George Hamilton IV, Sonny James, Johnnie and Jack, Grandpa Jones, Bradley Kincaid, Pee Wee King, Hank Locklin, Lonzo and Oscar, John D. Loudmiller, Uncle Dave Macon, Roger Miller, Bill Monroe, Willie Nelson, Norma Jean, Leon Payne, Minnie Pearl, Wade Ray, Jim Reeves, Connie Smith, Hank Snow, Ernest Stomeman, Justin Tubb, Porter Wagoner, Kitty Wells, Dottie West, Slim Whitman, Willis Brothers (vocals); Chet Atkins (guitar); Boots Randolph (saxophone); Del Wood (piano). RCA VICTOR 45 3016 two discs $9.58.

MINNIE PEARL
Nostalgic contribution to a c&w treasury

Facing page: Roy Acuff (center) and his group with "Stringbean" Akeman (right) on stage at the Grand Ole Opry, Nashville, Tenn. (Station WSM photo: Les Leverett)

C LPM 6016 two discs 59.58.
JBL SA600: Superlative sound in all respects—any way you measure it

The JBL SA600 may be the most perfect inanimate object you will ever bring into your dwelling. It is a complete 80 watt stereophonic amplifier-preamplifier that has no peer. Without exception, all who have worked with it, tested it, and lived with it agree that the SA600 is the finest unit of its kind ever made.

Cleanest Sound Ever—Distortion is so low that it becomes next to impossible to measure; it is masked by the distortion inherent in the finest test instruments available. The SA600 must be driven to overload before meaningful distortion figures can be derived.

"Lowest Noise ever measured on an integrated amplifier," one testing laboratory reported. With the finest program material available—low noise records or tapes, even masters—the only audible noise and distortion will be in the program material itself, not the amplifier.

Design Philosophy—The SA600 began with the premise that an amplifier should be as good as the state of the art permits, with wide bandwidth and low distortion, before inverse feedback is introduced. This is exactly what you find in the SA600. Without feedback it meets NAB specifications. Negative feedback is used to eliminate relatively minor aberrations rather than to buck out gross imperfections. The feedback loop in the SA600 extends all the way from the output back to the input terminals; no stage or any part of one is left out.

The JBL T-Circuit—The power amplifier section of the SA600 incorporates the JBL T-circuit, on which a patent is pending. It is an operational DC amplifier, the type used in analog computers. Performance is phenomenal.

Technically speaking, the output circuit consists of three cascaded complementary symmetry emitter-follower stages. It is stable even under overload conditions and recovers instantly from transient overloads at any frequency. Dynamic loudspeaker systems with almost any impedance rating can be connected without degradation in signal quality. All stages are direct coupled, and the loudspeakers are connected directly to the output transistors, maintaining control all the way down to DC.

Power to Spare—The T-Circuit provides 80 watts (40 watts per channel) of continuous sine-wave power into 8-ohm loads with both channels operating simultaneously, with power-line voltages as low as 110 volts, with less than 0.2% harmonic distortion at any frequency from 20 to 20,000 Hz. With 4-ohm loads the SA600 can put out 65 watts per channel for brief periods of time.

Perfect Taste—The SA600 looks every bit as good as it sounds. Knobs fit your fingers. Controls are as smooth-acting as the nuts on a studio mixing console. The SA600 has a clean, professional air, yet—with its warm satin-gold finish and optional walnut side panels is readily assimilated into domestic decor.

Guaranteed—A two year guarantee covers the SA600 for both parts and labor. JBL knows its product. The SA600 was designed by JBL's vice president in charge of engineering. It is manufactured in JBL's own electronics facility. Production is not simply spot checked. Each SA600 is thoroughly tested and life cycled for 25 hours before it is released for sale. Specifications are extremely conservative, and actual performance of any given unit will fall well within these figures. The priceless performance of the SA600 is yours for $429. Make a date with your Franchised JBL Audio Specialist for an in-depth demonstration.

Consensus: the finest audio amplifier you can buy
Specifications for the SA600

Power Output 80 watts continuous RMS power, 40 watts per channel, at any frequency from 10 cps to 30,000 cps.

Frequency Response +0.75 db 20 to 20,000 cps; ±1.5 db 10 to 130,000 cps.

Harmonic Distortion Less than 0.2% from 20 to 20,000 cps at one watt.

Intermodulation Distortion Less than 0.2% at 20 watts or any lower power level.

Signal required for rated output Phonon input at 1,000 c/s reference—4 millivolts, 8 millivolts, or 16 millivolts into 47,000 ohms; switch selected. High level inputs—0.25 volts into 30,000 ohms.

Maximum Phone Signal 250 millivolts at 1,000 c/s with less than 0.1% harmonic distortion.

Hum and Noise Level Low level inputs (1,000 ohm termination)—72 db below rated output; equivalent to one-microvolt at input terminals or 80 db below 10 millivolts.

These specifications are measured with the phone switch set at LOW, giving rated output with 4 millivolts signal, with switch set at MED or HIGH noise is further reduced to 75 db or 78 db below rated output, respectively. High level inputs—85 db below rated output.

Transient Response Rise time measured at high level inputs is 2.5 microseconds from 10% to 90% of square wave signal at 160 watts peak power or any lower power level.

Overload Recovery Less than 1/10 of one cycle for signal from 0.1 to 100% single cycle overload at any frequency from 25 to 20,000 cps.

Output Impedance 8 ohms rated impedance, 4 to 16 ohms nominal impedance. When driving a 16-ohm load, the SA600 meets all published specifications. When driving an 8-ohm load, the SA600 meets all published specifications at 80 watts or any lower power level.

Stability The SA600 is completely stable when connected to any loudspeaker system or even to a capacitive load. AC line surges do not affect the stability of the circuit.

Short Circuit Protection Absolute. The SA600 cannot be damaged by short or open circuit at any frequency from 20 to 20,000 cps.

Performance: Very good Recording: Good Stereo Quality: Good

Pore of Tammy Wynette. She jes' can't seem to resist temptation. She's always meanin' these good-fer-nuthins in them hillbilly bars, see, and you'ns all know what them hillbilly bars c'n lead to. Why they c'n lead to crud an' corruption, sure as shootin'. So to wash herself in the blood of the lamb, so to speak, ol' Tammy sings her pretty li'l head off. Course she's got a chance of a voice, but that's no hill for a stepper, so to speak, so ol' Tammy jes' ignores that ugly li'l fact and hopes folks'll buy her records anyway. And maybe they will. Specially folks who give lots of parties, 'cause this record is so bad it will make things happier and make the party a success. I mean, all anybody has to do is jes' set the victrola needle on Tammy's first song, called Your Good Girl's Gonna Go Bad. It's about this plain ol' housewife whose husband is always gettin' drunk and hangin' around bars, see, so this gal decides to put on lipstick an' some of them high-falutin' clothes like Raquel Welch wears that show almost everything in the display case, so to speak, and jes' plum 'go bad.' Pretty funny.

Then she accepts her barroom fate by sing-in' 'a lil' dirty called I Wouldn't Easy (But I Heal Fast). It's about a bad girl who wounds easy but heals fast. In Almost Persuaded, our Tammy meets some drunk on a bar-room and fights with him about whether she should go home with him, but finally she sees her weddin' band reflected in his watery eyes, so she resists the primrose path. Boy, they don't write songs like that no more, 'cept for ol' Tammy. By this time she is really sinkin' pretty low, so she slides into a medley of tunes designed to jerk the tears right out of the rustiest souls (and not from cryin', neither), beginnin' with Apartment #9, in which ol' Tammy sends us all an invite to come right up the stairs to her pad, where all hell promises to break loose. But liquor and love don't mix, so ol' Tammy wakes up from her sordid life long enough to sing Don't Come Home a Drinkin' (With Lovin' On Your Mind). "You come in a-kissin' an' happens that time 'jes stay out there and see what you c'n find!" wails ol' Tammy, but obviously the message don't sink in, 'cause she turns right around and sings Don't Touch Me, There Goes My Everything, and then Send Me No Roses.

Boy, I shore hope none ol' barroom critters ever get wise and put ol' Tammy out of her misery forever. But if'n they do, Epic could re-release her albums as comedy songs and make a lotta dough, sure as there's a cow left in Texas. It jes' a lil' suggestion. So to speak.

(Continued on next page)
RECORDING OF SPECIAL MERIT

STAN GETZ AND ARTHUR FIEDLER:
At Tanglewood. Stan Getz (tenor saxophone), Gary Burton (vibraphone), Steve Swallow (bass), Roy Haynes (drums), Boston Pops Orchestra, Arthur Fiedler cond. Tanglewood Concerto: Love Is for the Very Young; Three Ballads for Stan; Where Do You Go? and two others. RCA Victor ® LSC 2925, ® LM 2925 $5.79.

Performance: Graceful and virile
Performance: Excellent
Stereo Quality: Very good

There has been a tendency—certainly by this reviewer—to underestimate Stan Getz. His fluent, easily assimilable lyricism is unfashionable in a time when Ornette Coleman, Albert Ayler, and others have broken through to new and often abrasive possibilities of sound and form. But this recording, made during a Pension Fund concert at Tanglewood, is a forceful reminder of Getz’s prodigious musicianship, notably his melodic resourcefulness and his total command of his instrument. Getz is particularly impressive here because he has been challenged by the quality of the writing for this special occasion. Manny Albam has rescued The Girl from Ipanema from many bosa-nova clichés with which she has been encumbered. David Raskin provides exactly apposite settings, for the orchestra as well as for Getz, of two of his songs (Love is for the Very Young, A Song After Sundown).

Alec Wilder’s Three Ballads for Stan and Where Do You Go? force Getz into contemplation, thereby making him explore his feelings more carefully than is often the case. And the most ambitious work of the concert, Eddie Sauter’s Tanglewood Concerto, is a delightfully crafted, supple, multi-colored structure which allows Getz a considerable range of expressive roles: the light-hearted swinger, the dramatic protagonist, the introspective romanticist. All the composers wisely avoided the temptation to make the strings “jazzy,” and they gave Getz not only the space in which to improvise but also the stimulation to go beyond mere fluency.

N. H.

GRANT GREEN: Street of Dreams, Grant Green (guitar), Bobby Hutcherson (vibes), Larry Young (organ), Elvin Jones (drums). I Wish You Love; Lazy Afternoon; Street of Dreams; Somewhere in the Night. Blue Note ® 84255, ® 84256 $5.79.

Performance: Relaxed but not florid
Recording: Very good
Stereo Quality: Excellent

The term “mood music” need not necessarily be pejorative. In this set, for example, Grant Green and his colleagues are, as Leonard Feather aptly says in the notes,
"cooking on a slow burner." The swinging is easy, the sound is mellow. In current argot, the album might have been titled "rapping on a Sunday afternoon." The four instrumentalists are well met. Although Hutcherson and Jones are generally regarded as among the jazz avant-garde, they fit naturally into Green's relatively uncomplicated, melody-based, leanly structured frame. And Larry Young is an organist who is content to be part of a whole.

BOBBY HACKETT: Creole Cookin' (see Best of the Month, page 88)

PEE WEE RUSSELL AND HENRY RED ALLEN: College Concert (see Best of the Month, page 87)

RECORDING OF SPECIAL MERIT

CHARLES TYLER: Charles Tyler Ensemble, Charles Tyler (alto saxophone), Joe Friedman (cello), Henry Grimes (bass), Ronald Jackson (drums), Charles Moffett (orchestra vibes), Strange Uhuru; Three Spirits; Black Mysticism. ESP-Disk 1029 $4.98.

Performance: Forceful
Recording: Good

This is the kind of jazz that did not exist before Ornette Coleman. Melody is free; the music's textures are not chordal, but rather are made up of changes in pitch and density, and of the shifting intersections of the various instrumental timbres as each player operates within an improvisatory frame.

T-BONE WALKER: Stormy Monday Blues. T-Bone Walker (vocals, guitar), Preston Love and Mel Moore (trumpets), John Ewing (trombone), Mel Jernigan, McKinley Johnson, and John Williams (reeds), Lloyd Glenn (piano), Mel Brown (guitar). Paul Humphrey (drums), Ron Brown (Fender bass), I'm Gonna Stop This Nite Life; Cold Hearted Woman; Confusion Blues; Flower Blues; and six others. BLUESWAY® BLS 6008, BL 6008* $4.79.

Performance: Powerful and disciplined
Recording: Good
Stereo Quality: Very good

Aaron Walker, a Texas-born blues minstrel now in his mid-fifties, has been an important influence in the blues field, having helped shape B.B. King and Lowell Fulson, among others. He is an unusually accomplished guitarist, and is able to make the instrument a second voice, as flexible and incisive a narrative tool as the voice that uses words to tell the story. Judging from this session, T-Bone has lost none of his fire and uncannily exact rhythmic placement—even his pauses pulsate. He is also a singer who knows how to make excitement mount. This disc is a thoroughly satisfying celebration of the blues.

N. H.

(Continued on next page)
The show people love...

"HENRY SWEET HENRY"

Broadway original cast recording on ABC Records

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BUNRATTY SINGERS: Music and Song From the Medieval Banquet at Bunratty Castle, Bunratty Singers (vocals), The Black Bird; I Have a Bonnet; I Will Walk With My Love; and fifteen others. CORAL ® CRL 757-897, ® CRL 57-897 $4.79.

Performance: Beguiling
Recording: Fair
Stereo Quality: Helpful

The title of this album comes from Nehru's description of Bali as "the morning of the world." He meant it as a tribute to what appeared to be the harmoniously gentle civilization of Bali, where art and life were not separated, nature and man were still intimate. Yet Bali is not immune to the feral instincts of man, as was made evident by its participation in the murderous blood-lust which followed the unsuccessful Communist coup in Indonesia in 1966. However, the music here reflects Bali in a time of serenity, and it is a particularly instructive cross-section of that.

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area's musical culture. Not only are there examples of the full Balinese orchestral style, with its plangent gongs and rustling bells, but there are also more informal musical situations, as well as accompaniments to various forms of Balinese drama. Of special interest are the a cappella lullaby and an epic chant—two tracks which made me wish for an album devoted entirely to the little-known vocal music of Bali.

N. H.

**RECORDING OF SPECIAL MERIT**

CARL SANDBURG: Sings His American Songbag. Carl Sandburg (vocals, guitar). What Was Your Name in the States?; The Horse Named Bill; Sucking Cider through a Straw; and forty-seven others. CAEDMON © TC 2033 two discs $11.90.

Performance: Intimate and absorbing Recording: Competent

In 1952 and 1953, Mari Jinishian taped a series of informal sessions with Carl Sandburg. The tapes were put in storage until early 1967, when Miss Jinishian brought them to Caedmon. They constitute the best singing performances by Sandburg on record. Though hardly a professional vocalist, Sandburg was more artful than he admitted. Ord. Though hardly a professional vocalist, he knew and loved these songs, and knew them to Caedmon. They constitute the best singing performances by Sandburg on record.

Considering the kind of story coming in from the Near East recently, these tales out of Turkish and Persian folklore might provide a welcome interlude not only for toddlers but for adults satiated with news of war and international anger. Sixty at a Blow is a Turkish story about how to succeed as a giant-killer without having to kill a single giant—if you can develop a reputation for bravery by slaying a few flies. The Serpent Fairy and the Magic Mirror, also from Turkey, is another success story about a young man who uses the properties of an enchanted mirror to win the girl of his heart, and a whole realm that comes with her. The Slippers of Misfortune, an import from ancient Persia, has to do with a pair of shabby slippers whose wearer comes to learn the high price of miserliness. Miss Price, who is an author and illustrator of children's books, reads them all (in English) in a pleasant tone of voice.


Performance: You're kidding, Kate! Recording: Fair

Wisely, the producer of this album has emphasized Richard Burton's performance in the movie version of the Shakespeare play. Elizabeth Taylor is kept to a minimum, which is just as well, not only because her reading of Kate's lines is as flat as a prairie, but also because her voice is surely the most unengaging of any professional actress within memory.

Burton is, naturally, a better than acceptable Petruchio, but not as good a one as might be expected from so gifted an actor. His voice often sounds thick and gritty and a bit sloppy, as if he were trying to chew the last bit of hi-ho out of his lines. What poetry there is in his speeches—and there is not a great deal—is kept to a minimum, but also because her voice is surely the most unengaging of any professional actress within memory.

I'm afraid this super-star version of what I have always found to be one of the more tiresome Shakespearean comedies is an almost complete fiasco. Sixty at a Blow is a Turkish story about how to succeed as a giant-killer without having to kill a single giant—if you can develop a reputation for bravery by slaying a few flies. The Serpent Fairy and the Magic Mirror, also from Turkey, is another success story about a young man who uses the properties of an enchanted mirror to win the girl of his heart, and a whole realm that comes with her. The Slippers of Misfortune, an import from ancient Persia, has to do with a pair of shabby slippers whose wearer comes to learn the high price of miserliness.

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This is an attractive package of Romantic and post-Romantic violin concertos for the tape collector. I'm particularly delighted by Milstein's work in the Prokofiev First Concerto. This is ordinarily one of the most alluring baits of the contemporary repertoire for the virtuoso violinist to run amok with so far as the "big throbbing tone" goes. Milstein, however, is subdued, elegant, yet warm and expressive. The Prokofiev Second Concerto yields its secrets rather less readily, being one of the composer's big pieces (like the Sixth Symphony) that act like all the most accessible of the composer's work but somehow won't succumb to casual listening. But the violinist rises to the occasion, and carries this more knotty work off quite impeccably.

It is further to Milstein's credit that he brings just the right gesture to the rather glib, attractive sentiments of the Glazounov Concerto. And there is no hint of Brahmsian overweight to his performance of the enchanting Dvorák piece. The orchestral support is absolutely tops in each case and, although I haven't the slightest notion whether Angel so intended, the pieces have been juxtaposed to set each other off with good effect.

The praise is ended. The recorded sound and stereo strike me as being a little more lively in the Prokofiev. First than in the other pieces, but they are of high quality throughout.

NATHAN MILSTEIN
An attractive package of violin concertos

For many years the Rachmaninoff First Symphony, written in 1885 when the composer was twenty-two, was little more than a rumor. The young Rachmaninoff was so depressed by the first performance of the work under Alexander Glazounov in St. Petersburg in 1897 that he wouldn't allow the manuscript to be published, finally tore it up, and refused to write another note for three years. Fifty years later, after the composer's death (1943), somebody found the orchestral parts in the archives of the Leningrad Conservatory. The symphony got a performance in Moscow and Soviet critics cheered, but the musical world in general was not set on its ear. The verdict of British musicologist Robin Hull was typical: "a dis- aser of youthful pride." Earlier recordings of the work, of which one by the Leningrad Philharmonic still survives in the catalog, did little to enhance its reputation as a mean- dering, murkyly orchestrated piece of bad musical tailoring.

Under Ormandy's sympathetic and imagin- ative direction, it still meanders at times, and still echoes the influences of Tchaikovsky and Rimsky-Korsakov in its self-indulgent romanticism, but it also flowers luxuriantly and reveals its outlines as a dramatically structured and orderly effort rather than a mere amorphous excursion in self-pity and melancholy. And there are hints of the haunting melodies, the peremptory outcries, and the long, lyrical flow of the songful passages that mark his later works and make lovers of his Second and Third Symphonies (like myself) return again and again for refreshment at their musical streams. It is a pleasure to be led through this terrain by Ormandy, a guide who has made himself thoroughly familiar with its geography, and the shimmer- ing, sensuous sound of the Philadelphia, which can drown some works in sonic whipped cream, is entirely appropriate in this performance.

NATHAN MILSTEIN
An attractive package of violin concertos

SCHUBERT: Sonata in A Major, Op. 120 (D. 664); Hungarian Melody (D. 187); Sonata in A Minor, Op. 145 (D. 784); Twelve Waltzes, Op. 18 (D. 155); Vladimir
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It was a good idea for RCA Victor to assemble a reel of this type, demonstrating the unique abilities of the Horowitz of over a decade ago. The first sequence is all Chopin, and if there is a highlight, it certainly is the Liszt-Horowitz: Hungarian Rhapsody No. 2, in C-sharp Minor. Moussorgsky: Pictures at an Exhibition. Vladimir Horowitz (piano), RCA Victor @ TR 5 5007 $10.95.


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UES to sound glassy, unlike Columbia’s recent recordings of the pianist. On the other hand, there is a degree less distortion present in some cases; the ending of the Pictures is an obvious case in point. I don’t think that Victor has been entirely successful in transferring this material to tape, especially at the slower speed, for there is some obvious flutter (for instance, in the second of the Pictures). But those who are willing to put up with some of these disadvantages (particularly those who don’t own the discs) will find the reel extremely rewarding. The tape box should by all rights have had something more extensive for program notes than just a one-paragraph puff piece.

I. K.

ENTERTAINMENT

ELLA FITZGERALD AND DUKE ELLINGTON: Ella and Duke at the Cote D’Azur. Ella Fitzgerald (vocals), Jimmy Jones (piano), Grady Tate (drums), Jim Hughart (bass); the Duke Ellington orchestra. Lullaby of Birdland; It Don’t Mean a Thing; Rose of the Rio Grande; The Matador; Old Circus Turn-Around Blues; and ten others. VERVE FV6 4072-2 $9.95.

Performance: Polished but seldom seizing
Recording: Very good
Stereo Quality: Good
Speed and Playing Time: 3⅜ ips; 75'57"

Recorded at the 1966 International Festival of Jazz in the French cities of Antibes and Juan-les-Pins, this program will also be part of the sound-track of a film Norman Granz is producing with the title “Duke Ellington at the Cote D’Azur.” Musically, this tape—the equivalent of two twelve-inch discs—is insubstantial. Miss Fitzgerald, a singer of undeniable technical skill, is effervescently charming on such buoyant excursions as Jazz Samba and It Don’t Mean a Thing, but these are essentially exercises in merry virtuosity rather than the kind of jazz singing that raises performer and audience to exultation. On ballads, Miss Fitzgerald is appealing, but in an oddly girlish way, in contrast, let us say, to the incisive maturity of Carmen McRae. With the exception of All Too Soon, on which tenor saxophonist Ben Webster is a guest performer, the instrumental numbers are not optimum Ellington. The band sounds loose, too loose, and the soloists somewhat distracted—perhaps by the scenery?

N. H.

CLAUDINE LONGET: Claudine. Claudine Longet (vocals); orchestra, Nick De Caro arr. A Man and a Woman; Here, There and Everywhere; Meditation; Hello, Hello; My Guy; and five others. A & M AM 121 $5.95.

Performance: Nice
Recording: Good
Stereo Quality: Very good
Speed and Playing Time: 7⅞ ips; 26'08"

Claudine Longet is a vastly pleasant-sounding young lady who sings a collection of French, English, and Brazilian songs here. She sounds best in the French songs such as Tu as beau sourire and the theme song from A Man and a Woman. Savezie, Swayz founders in her interpretation, as does My Guy. Considering the price asked for less than thirty minutes of music, Mlle. Longet’s rather standard performances, and a repertoire

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COLLECTIONS


As might be expected, Oscar Peterson's foray into Latin jazz is smooth, polished, and of no substantial interest either intellectually or emotionally. He is, to be sure, a formidable technician, but his ideas are ordinary and he seldom generates the depth of feeling which separates the artist from the audience. On two tracks, Marha de Carnaval and How Insensitive, he does get somewhat beneath the surface into the delicate, bittersweet core of bossa-nova rue. But the rest is glib.

P. K.

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CIRCLE NO. 43 ON READER SERVICE CARD

that could hardly be called adventurous, I think you can safely pass this one by.

TOM PAXTON: Outward Bound. Tom Paxton (vocals and accompaniment). Learning London; The King of My Backyard; This Any Way To Run An Airline?; Talking Pop Art and nine others. ELECTRA 8 EKX 7317 $5.95.

Performance: Desultory
Recording: Good
Stereo Quality: Who needs it?
Speed and Playing Time: 7½ ips; 37'47"

Some note of protest seems to be lurking behind the pseudo-folk lyrics of these vaguely topical songs, but I was unable to figure out quite what it is, since so much of Mr. Paxton's life seems to be taken up by such boring experiences as waiting around for airplanes, attending auctions of pop art, and standing in line for the mail at the London office of American Express. Actually, his comments about airplanes and art make up the livelier and more original numbers in a dispirited set, sung in the kind of voice a clothespin would affect if it could be taught to play a guitar.

P. K.

OSCAR PETERSON: Soul Español. Oscar Peterson (piano), Sam Jones (bass), Louis Hayes (drums), Marshall Thompson (timbales), Haliday Jones (percussion), Henley Gibson (conga drum). Manha de Carnaval; Corea; Soulville; Samba Sensitiva; and six others. LIMELIGHT 7 LGC 86044 $7.95.

Performance: Largely bland
Recording: Very good
Stereo Quality: Excellent
Speed and Playing Time: 7½ ips; 38'18"

As might be expected, Oscar Peterson's foray into Latin jazz is smooth, polished, and of no substantial interest either intellectually or emotionally. He is, to be sure, a formidable technician, but his ideas are ordinary and he seldom generates the depth of feeling which separates the artist from the audience. On two tracks, Manha de Carnaval and How Insensitive, he does get somewhat beneath the surface into the delicate, bittersweet core of bossa-nova rue. But the rest is glib.

N. H.
TAPES IN THEATRICALS

HOW OFTEN have you attended a play performed by an amateur or semi-professional group and cringed when a sound-effects record, scheduled to be heard at a particularly dramatic moment, turned out to be either inaudible or scratchy or marred because the stylus skipped about in the grooves? Besides embarrassing the sound-effects man, such a boo-boo certainly has a bad effect on the actors. If you’re an active tape recordist, you could be the solution to a drama group’s sound-effects problems—and also help in a number of other ways.

For example, rehearsals can be recorded and duplicated for distribution to understudies or others who were not present. The director, with a tape recording, can listen at home for correct delivery, enunciation, and other problems of comprehensibility that may have escaped his attention at a live rehearsal. And many an actor, after hearing a tape of his voice for the first time, will concede (after he recovers from the shock) that a little more work on his part might be in order.

If the drama group is presenting a musical or operetta, the tape recordist becomes even more valuable. He can supply the cast with tape recordings of the songs from previous performances or from a disc. Often the director will decide that the “original-cast” recording of a show is not what he had in mind and will make up a tape of the songs the way he wants them done, drawing on several different records and inserting his own pianist’s rendition when no commercial disc is available. Or if the rehearsal pianist announces the possibility of future absences, the director will simply ask him to record a tape of the music for use during those absences; he can then shuttle the tape back and forth to the various sections as needed. Missing, of course, will be the tempo changes and modifications a “live” pianist could carry off at will, but often such a stand-by tape can make a rehearsal possible at times when otherwise there would be none. The dance scenes, with the music recorded on tape, could be rehearsed independently in another hall without disturbing the dramatic work. If the script calls for sound effects, they can be put on tape, thus saving the disc from the wear and tear of rehearsals. And if the necessary sound effect is not available on a disc, it can be recorded especially for the performance. With the sound effects on tape, and in proper sequence, the sound-effects problem is made easy. Leader tape is inserted between the portions of tape containing the effects, and if needed, you can write on the leader tape identifying the next effect. If any script changes come up, adding or subtracting sound effects becomes as easy as making two splices.

You may be asked to record a sequence or two from the production which can be played on a local radio station when the director takes to the air to publicize his forthcoming performances. If well recorded, one such brief sequence could even be used by your local station as part of a one-minute “spot” public-service announcement to be broadcast again and again.

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WORD COUNT: Include name and address. Name of city (Des Moines) or of state (New York) counts as one word. Zip Code numbers not counted. (Publisher reserves right to omit Zip Code if space does not permit.) Count each abbreviation, initial, single figure or group of figures or letters as a word. Symbols such as $35mm. COD. PO, AC, etc., count as one word. Hyphenated words count as two words.

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The X in the new Pickering XV-15 stands for the numerical solution for correct "Engineered Application." We call it the Dynamic Coupling Factor (DCF). DCF is an index of maximum stylus performance when a cartridge is related to a particular type of playback equipment. This resultant number is derived from a Dimensional Analysis of all the parameters involved.

For an ordinary record changer, the DCF is 100. For a transcription quality tonearm the DCF is 400. Like other complex engineering problems, such as the egg, the end result can be presented quite simply. So can the superior performance of the XV-15 series. Its linear response assures 100% music power at all frequencies.

Lab measurements aside, this means all your favorite records, not just test records, will sound much cleaner and more open than ever before.

All five DCF-rated XV-15 models include the patented V-Guard stylus assembly and the Dustamatic brush.

For free literature, write to Pickering & Co., Plainview, L.I., N.Y.
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at the new shape of progress  
from Electro-Voice.

At E-V we’ll go to unusual lengths to make better sound products. For instance, we created a microphone seven feet long. It solves long distance sound pickup problems for radio and TV. On the other hand, we needed less than 3-1/2” of height to design a 65 watt FM stereo receiver. And we keep putting bigger and bigger sound in smaller and smaller speaker systems.

And even the products that don’t look radically different, sound different. That difference is what high fidelity is all about. Hear it today at leading soundrooms everywhere. Or send coupon below for free literature. It’s full of progressive sound ideas for you.

A. Model 643 highly directional “shotgun” microphone. Widely used at football games, news conferences, motion pictures. $1,560.00 list.
B. Model E-V 1277 65-watt* FM stereo receiver, complete with cabinet, yet just 3-3/8” high. Solid state, of course. $280.00
C. Model E-V 1179 55-watt* FM stereo receiver. Tuning meter, full-time stereo light, many extras. Just $210.00.
D. Model E-V FIVE-A two-way speaker system. With four-layer voice coil for better bass at lower cost. $88.00.
E. Model E-V SEVEN-A two-way speaker system. Takes up just 19” of shelf space, yet delivers sound rivalling a much larger system. $66.50.
F. Model SP12B An old favorite that has been kept up to date with scores of detail changes through the years. $39.00
G. Model LT8 3-way speaker. The modern way to provide full-range sound in every room of your house. $33.00.

*IH0 output at 4 ohms.